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# THE FUTURE OF OCEAN GOVERNANCE: BUILDING OUR NATIONAL OCEAN POLICY

### **HEARING**

BEFORE THE

SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES, AND COAST GUARD

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

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

NOVEMBER 4, 2009

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#### SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

#### ONE HUNDRED ELEVENTH CONGRESS

#### FIRST SESSION

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#### THE FUTURE OF OCEAN GOVERNANCE: BUILDING OUR NATIONAL OCEAN POLICY

#### WEDNESDAY, NOVEMBER 4, 2009

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

The Subcommittee met, pursuant to notice, at 10:02 a.m. in room SR-253, Russell Senate Office Building, Hon. Maria Cantwell, Chairman of the Subcommittee, presiding.

#### OPENING STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator Cantwell. Good morning. This Commerce Sub-committee on Oceans, Fisheries, Atmosphere, and Coast Guard will come to order. This morning we are having a hearing on the future of the ocean governance and building our national ocean policy.

So, thank you, to the witnesses, for being here this morning, and for your testimony. And thanks, to my colleagues. I know Senator Snowe is going to be joining us. And I thank my colleague from

Alaska for being here, as well.

Before we begin, this morning, I'd like to briefly mention a very tragic event that recently impacted our government agencies. Last Thursday evening, an accident—midair collision occurred between a Coast Guard C-130 plane and a Marine Corps helicopter, off the coast of California. Tragically, nine servicemembers were killed, two from the Marine Corps and seven from the Coast Guard. Admiral Allen, I want you to know that our hearts and prayers go out to the Coast Guard—the entire Coast Guard and Marine Corps the families of the proud nine men and women who lost their lives in service to our country. And they are in our thoughts and prayers today.

Our oceans are responsible for so many things in our daily lives, from the air we breathe to the food we eat. And this subcommittee has heard, in many previous hearings, the oceans and Coast Guard economies of the U.S. provide over 50 million jobs for Americans and contribute 60 percent to our GDP. Our economy depends on a healthy ocean environment. But, most people don't realize that our oceans are in crisis and that we must take action now.

Today's hearing is about building a national policy to sustain our oceans and to make improvements for the future. We will have the ments of the proposed National Ocean Policy and Framework for Spatial Planning and how it will impact Federal stewardship.

Our second panel of witnesses will present the perspectives on how to improve stewardship, management and the use of oceans, coasts, and the Great Lakes.

I hope that by hearing from these panelists, this subcommittee will better understand the magnitude of this problem facing the ocean environment and what are the best management practices we should be using to confront these problems.

One example of the trouble facing our oceans has emerged in my state, the State of Washington, in recent weeks. Since Labor Day, a deadly toxic algae bloom has killed over 8,000 seabirds; the largest seabird kill ever on a Washington coastline.

Our oceans also face major threats from climate change and ocean acidification. Since the start of the industrial revolution, 200 years ago, humans have released more than 1.5 trillion tons of carbon dioxide into the atmosphere. And one-third of those emissions, more than half a trillion tons, have been absorbed by the oceans. We know that this is actually changing the very chemistry of the oceans. As seawater becomes more acidic, it begins to withhold the basic chemical building blocks needed by many marine organisms. And acidification is threatening the existence of the world's coral reefs and starting to dissolve the shells of organisms that make up the base of the ocean's food chain. When it comes to ocean acidification, we cannot just continue; we need to make sure that we are working forward and understanding the foundation that we need.

Unfortunately, oceans are too often an afterthought in our decisions and our discussions about climate change. As the climate debate moves forward, it is going to be a major priority of mine to make sure that the oceans are a major part of that discussion.

There are continued threats: toxic substances, new diseases are showing up in marine mammals, ocean dead zones plague vast parts of the marine environment, toxic algae bloom poison various coastal wildlife and threaten shellfish, oil spills remain an everpresent threat, and, more and more, our ocean species are becoming endangered, like our iconic southern resident orca population in the Pacific Northwest.

Over 40 years ago, Senator Warren Magnuson championed legislation that established the Stratton Commission. Some of my witnesses may remember that. The Commission had a substantial impact on marine science and policy in the United States, including the creation of NOAA.

Today, we are here to heed another call to action. It's time to move forward on a national ocean policy. A lot of discussion has already happened in the last several years. But, words on paper are meaningless unless they are put into action and we change how the Federal Government does business. It is NOAA's mission to conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs. The Administration should acknowledge and strengthen NOAA's role, and literally give them a seat at the table of the National Ocean Council.

One of the many Ocean Commission recommendations left unfinished is enacting an organic act for NOAA. I hope that the Admin-

istration will work with this committee on the effort to improve the

stewardship of our oceans by implementing this.

Senator Snowe and I have called on the Administration to increase funding for ocean conservation, management, and science, and we cannot expect success in implementing a national ocean policy, or look at ideas like spatial planning, if we do not provide tribes, States, scientists, and managers with the resources they need. The success of a national policy will depend on broad support. And it is my hope that this hearing will be the first of a series to better understand how we collectively move forward to determine actions needed and what should be done to sustain our ocean's coasts and our Great Lakes.

And before we turn to our panel of witnesses, I would like to turn it over to the ranking member of this committee, Senator Snowe, for an opening statement.

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

Senator SNOWE. Thank you, Madam Chair. And thank you for calling this hearing.

And very pleased to be here today to discuss the future of our

Nation's ocean resource management.

Before we proceed with the business of the Committee, I do want to take a moment to express to you, Admiral Allen and the entire Coast Guard community, my deepest condolences in the loss of seven of your shipmates along with two U.S. marines in a tragic accident that took place last Thursday night off the coast of California. I understand, from my discussion with Admiral Pekoske, that this was the worst incident in terms of loss of life since 1947 in the Coast Guard. So, my thoughts and prayers remain with our families, fallen heroes, their their friends, and servicemembers at this most difficult time. We're profoundly grateful for their service, and we will be eternally grateful. So, I just appreciate the fact that you're here today under some very difficult circumstances.

I also want to thank our other witnesses, as well: Dr. Sutley, Dr. Lubchenco, and Ms. Davis. Your presence here today speaks volume about the Administration's commitment to improving the management of our oceans.

I also want to welcome those who will speak on the second panel: Mr. Frank, Mr. Paxton, Mr. Takahashi-Kelso, and Mr. O'Neill.

From fisheries to energy to tourism, industries thrive along and beyond our Nation's shores, and we must find an appropriate balance of sustainability to frame the ever-expanding number of potential uses of our more than 3.4 million square miles of ocean space.

According to a report of the Joint Ocean Commission Initiative, ocean-dependent industries generate approximately \$138 billion annually. Factor in tourism, transportation, and utilities that rely heavily on oceans, and that amount increases by a factor of ten, to nearly a trillion and a half dollars a year. So, I applaud the efforts of all involved in the Ocean Policy Task Force, as you attempt to untangle and reorganize the web of piecemeal policies that manage individual activities in areas off our shores.

I also have concerns about the process and some of the early recommendations that have emerged in the interim report. Specifically, the interim report proposes three major objectives and nine overarching principles that will guide ocean management decisions. Of those, none specifically prioritizes safe, economic development of ocean resources. I certainly understand the need for environmental protection called for in this report. Much of the inherent monetary and intrinsic value of our oceans would be compromised or destroyed without strong safeguards. At the same time, we must allow sustainable economic activity to continue as we provide managers and industry members with adequate rationale for the restrictions they must impose and adhere to.

The interim report calls for decision-making consistent with the best available science. Unfortunately, "best available" is often just not good enough. As we've seen in the Northeast, our fisheries are being subjected to increasingly tight catch limits while scientists themselves too often admit that they must establish those restrictions based on insufficient data. I have always supported management based on sound science, but as we develop policies that directly impact livelihoods, and indeed entire cultures, we must invest in research that provides a strong foundation; otherwise, we risk making decisions that have unnecessarily drastic impacts

without achieving definitive environmental benefits.

That's why Senator Cantwell and I have called for increasing the budget for NOAA to \$8 billion for Fiscal Year 2011, and a commitment to double that by 2013. This investment will pave the way to a future in which our resource managers can develop policies and regulations based on indisputable and not simply best-available science.

Further, while I recognize many agencies have critical parts to play in determining how best to use and protect our ocean resources, NOAA must remain our Nation's leader in researching, developing, and implementing our ocean policy, and it must be strengthened to reflect the Administration's commitment to ocean issues.

The National Ocean Council, proposed in the interim report, does not appear to carve out a sufficient leadership role for NOAA. I look forward to hearing comments from our witnesses explaining how this comprehensive ocean policy body was proposed without a specific role for our Nation's preeminent ocean agency. The recommended structure of the shared leadership between the Council on Environmental Quality and the Office of Science and Technology policy lacks the ocean-specific perspective that NOAA can and must provide. Particularly as the work of the Task Force and the National Ocean Council expands to encompass emerging and yet still nebulous concept of marine spatial planning, NOAA's efforts must be at the fore.

Our oceans comprise a dynamic environment that sustains myriad life forms, natural phenomena, and human activities, each with a vital role to play in our environmental and social and economic climate. While a holistic look at these diverse elements can provide great efficiency and streamline future management, we must move methodically down that path. In a climate where the best available science is already insufficient, additional layers of complexity must

come with additional resources to ensure they don't simply provide additional layers of uncertainty.

Again, I want to express my gratitude to the Chair and to our witnesses for promises to be an enlightening and productive discussion here today. Improving and coordinating ocean policy is vital to the future of our coastal national economy today and for future generations.

So, I want to thank you, Chair Cantwell.

Senator Cantwell. Thank you, Senator Snowe. And thank you for your leadership on this issue. I don't want to say exactly how many years you've been involved in—

[Laughter.]

Senator Cantwell.—ocean policies, but I think you have seen these reports come and go, safe to say. And so, I look forward to your input on how we take action on a ocean policy that is concrete action, moving forward, and the discussion that we're going to have about what kind of leadership we need, to make sure that it's not just ocean policy by committee, but ocean policy with strict and forceful leadership.

Senator Begich, would you like to make an opening statement?

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

Senator Begich. Thank you, Madam Chair. And usually I don't, but this is one of those issues that is pretty important to Alaska. So, thank you, for having the hearing.

And also, I want to share, Admiral, my condolences to the families, as the Chair and the Ranking Member have expressed also. So, thank you for your service.

Let me—anytime I get a moment, it's always important to kind of bring, at least my view, Alaskan perspective to what it means, in the sense of fisheries. And let me start by saying Alaska, which is 47,000 miles of shoreline, more than the rest of the country combined. You know, we have 70 percent of the Outer Continental Shelf. We produce and harvest over half the seafood of the country, with—about 4 billion pounds annually—with about 2 billion-plus in value. Just to give kind of a perception—or a perspective of where we are, three-quarters of our state—or three sides of our state are bordered by water. So, we understand the business and have been understanding the waters around us and how to ensure that they are protected.

We also understand, besides the importance of fishing, but also shipping and the cruise industry, oil and gas, which also is in our waters. Again, we're a very diverse economy, with our oceans and our waters that border Alaska.

I want to thank Dr. Lubchenco and Ms. Sutley—Nancy, good to see you—and Admiral Allen, for hosting a listening session in Alaska. You probably have a good sense of the diversity of opinions of Alaskans. And you are still standing, and that's a good sign. And I appreciate your willingness to go there and listen to the very diverse ideas and concerns we have when you think of fisheries and the sustainable models that we have—when you think of pollock and salmon and halibut and cod, we do have—of those four fisheries, sustainable fisheries—and noted sustainable.

But, I'll just mention two quick things, and then I'll look forward to the questions. I do have several questions. But, to follow up on the Ranking Member's comment regarding the economic component. And, Dr. Lubchenco, you and I have had a conversation briefly about this. But, the important piece of the oceans not only is the preservation and the long-term environmentally sound condition of the oceans, but also the economic components. As I've mentioned, Alaska and how that fits into the equation, two recommendations I'll just point out that I thought were—I was glad to see it in there—the Law of the Sea and the recommendation of the Law of the Sea. We—I've been a personal supporter of that. Our House and Senate members in Alaska have just made a joint effort to try to move that forward as a resolution, supporting it. So, Alaska is interested in supporting this.

But, also the mention of the Arctic in climate change, which, again, I want to thank you for that and the recommendations re-

lated to the Arctic.

I'll end there and just really look forward to your testimony, and then I have some questions I would love to ask you all.

Thank you very much.

Senator Cantwell. Thank you, Senator Begich.

Senator Nelson, would you like to make an opening statement?

#### STATEMENT OF HON. BILL NELSON, U.S. SENATOR FROM FLORIDA

Senator Nelson. Madam Chairman, I want to add my thoughts to the loss of lives, Admiral. And thank you all for you constant surveillance in my State. You are a very big part, and you're a very big part as your Admiral down there heads that Task Force, with so much that's happening in the Caribbean and in and around the Straits of Florida. So, thank you very much.

I also want to call attention that our astronaut crew from our latest Space Shuttle are here to meet with me, and I'll excuse myself after these comments. Thank them for your extraordinary success and service to our country as you have continued to build and equip the International Space Station where the nations of the world come together for science and for exploration.

So, thank you very much.

And I——

Senator Cantwell. Gentlemen, would you like to stand up—and let's recognize them? Is that OK?

Senator Nelson. Certainly.

[Applause.]

Senator NELSON. And I want to thank Dr. Lubchenco, because we're bringing science to the question of the oceans. And sometimes it has been kind of lonely down in the southeastern United States, battling those who want to go out and, "Drill, baby, drill." I've had national security on my side, because that's the largest training and testing area for the United States military in the world. And people who say that, "Well, we ought to have a mixture of drilling and preservation," I'm all for that, because I was the author of working out, in 2006, to give the oil industry an additional 8.3 million acres, over the 37 million acres that they already have leased in the Gulf—an additional 8.3 million acres, and to keep it out from

crossing the military mission line, which is the demarcation line that sets aside the eastern Gulf of Mexico for the United States

military testing and training.

The reason I'm saying all this, I want to thank you that you are now bringing the scientific perspective to this. I mean, I can rail all day about protecting Florida's coastline and our \$65-billion-a-year tourism industry that depends on beaches that don't have tar balls on them. Or I can talk until I'm blue in the face about protecting the delicate estuaries, where so much of marine life is spawned. But, now you bring, Dr. Lubchenco, another perspective, in your draft proposed Outer Continental Shelf and Gas Leasing Program for 2010–2015 analysis, where you point out—and I'm quoting from page 17, "There are numerous sensitive, hard-bottom habitats along the west Florida shelf, from Panama City to Dry Tortugas, important habitats for fisheries, species"—and you go on to cite deepwater coral mounds. And NOAA recommended the exclusion of those areas designated by the Gulf of Mexico Fishery Management Council.

So, I want to thank you for bringing science to this. It will help me in my otherwise—and, by the way, I mean, you know, I thought we had a done deal 3 years ago. I had everybody signed up to it. And we put into law, for the first time—into law—protecting those areas. But, it's never enough. And so, we have to fight this again. And so, now I have to fight—when the energy bill gets to the floor, I have to fight an Amendment that was put on in the Energy Committee that puts oil drilling over the entire eastern Gulf of Mexico all the way up to within 10 miles of the Florida coast. That's what the Dorgan Amendment did. And, of course, I've talked to some Senators that voted for it who didn't understand it and will change their vote. But, I still have to fight this fight. Thank you, for bring-

ing the scientific perspective to it.

Senator Cantwell. Thank you, Senator Nelson.

As a—and I think you know, I think I tried to help in your effort of stopping—

Senator Nelson. You did. You did.

Senator Cantwell.—to repeat this lunacy of opening up drilling off the coast of Florida. I think this previous hearing that we had about the coastal communities—it is literally 60 percent of our GDP, these coastal economies. And they've already been built on the assets and resources that are there. And somebody who thinks that they can just casually change that with an amendment, I think, are very, very shortsighted in the impacts that it would have.

Well, let's turn to our witnesses. We're very grateful that you are here, and we look forward to your comments. We're going to hear from Nancy Sutley, Chair of the Council on Economic—Council on Environmental Quality for the Office of the President; and Honorable Jane Lubchenco, Administrator of the National Oceanic and Administrative—National Oceanic and Atmospheric Administration; Admiral Thad Allen, the U.S. Coast Guard Commandant; and Laura Davis, Deputy Secretary of the U.S. Department of the Interior.

Welcome, to all of you. Chair Sutley, why don't we start with you, and we'll just go down the line from there.

# STATEMENT OF HON. NANCY H. SUTLEY, CHAIR, WHITE HOUSE COUNCIL ON ENVIRONMENTAL QUALITY

Ms. Sutley. Thank you, Senator—Chair Cantwell. Thank you, for the opportunity to be here. And thank you, Ranking Member Snowe and Senator Begich, for being here this morning and for the opportunity to appear before you.

T'm Nancy Sutley, Chair of the Council on Environmental Quality

and Chair of the Interagency Ocean Policy Task Force.

The oceans cover more than 70 percent of the planet's surface and are critical to our survival. These bodies of water provide about half the oxygen we breathe, drive weather patterns, and have a major impact on our climate. Nearly half of our population is located in coastal counties. We rely heavily on the oceans for a number of activities, including fishing, tourism, and energy development, to name a few. Our rich and productive coastal regions and waters account for the majority of the national economy, totaling

trillions of dollars each year.

The United States has been a leader in exploring and protecting the oceans. As we research and monitor the ocean ecosystems, we have come to realize why it's so important to protect this critical resource. To ensure that the Federal Government is effectively achieving its stewardship responsibilities and responding to the growing demands and uses of these resources, the President established the Interagency Ocean Policy Task Force in June. The Task Force was charged with developing recommendations that include a national policy for the stewardship of our oceans, coasts, and the Great Lakes, a framework for improved Federal policy coordination, and an implementation strategy to meet the objectives of the National Ocean Policy. We submitted our interim report on September 10, and the report was made available for public comment. The task force was also asked to develop a recommended framework for effective coastal and marine spatial planning within 180 days.

The interim report proposes a comprehensive national approach to uphold our stewardship responsibilities and ensure accountability for our actions. It contains proposals for a national policy, a robust governance structure, and priority actions for the Federal Government. I'd ask the Committee to refer to my written com-

ments for additional detail on these key recommendations.

I'm happy to report that the 24 agencies involved in the Task Force worked very hard, very collegially, and reached consensus on the interim report. And I'd like to especially recognize my col-

leagues, who are here today, for their leadership.

I also want to highlight the robust public engagement process that the task force has undertaken to hear from and involve stakeholders. We held 38 expert roundtable meetings, had over 2,000 people attend our six regional public meetings, and have received more than 3,400 comments on our website.

Moving forward, the task force is focusing its efforts on developing a recommended framework for effective coastal and marine spatial planning. We're seeing greater demands across the board, from offshore energy, both conventional and renewable, increased shipping, recreational, commercial fishing, and the desire for offshore aquaculture. These demands create stress on an already

stressed environment, increase conflicts among users, create greater demand for use and occupancy of the ocean space, and empha-

size the greater need for conservation.

We recognize the need for ecosystem-based management and moving away from an uncoordinated sector-by-sector or stove-piped approach, toward a more integrated marine resource management. The framework we are working on would only be a first step in the development of coastal and marine spatial planning. And while the framework will provide the foundation for coastal and marine spatial planning in the United States, much will be left to be developed among Federal, State, regional, and tribal partners.

Upon completion of the next part of our report, we intend to issue it for 30 days of public comment, as we did with the interim report. We look forward to hearing from the public and continue to welcome input from the Committee, the Committee members, and

your colleagues in Congress.

Thank you, for the opportunity to testify this morning.

And I also want to extend my condolences to our colleagues in the Coast Guard.

And I look forward to your questions.

[The prepared statement of Ms. Sutley follows:]

PREPARED STATEMENT OF HON. NANCY H. SUTLEY, CHAIR, White House Council on Environmental Quality

Thank you Chair Cantwell. And thank you Ranking Member Snowe and members of the Committee, for the opportunity to appear before you this morning to discuss

the President's Interagency Ocean Policy Task Force.

As you know, the oceans cover more than 70 percent of the planet's surface and are critical to our survival. These bodies of water provide about half of the oxygen we breathe, drive weather patterns and have a major impact on our climate. Nearly half of our population is located in coastal counties. We rely heavily on the oceans for a number of activities including fishing, tourism and energy development, to name a few. Our rich and productive coastal regions and waters account for the majority of the national economy—totaling trillions of dollars each year.

The United States has been a leader in exploring and protecting the oceans. As we research and monitor the ocean ecosystems, we have come to realize why it is so important to protect this critical resource. We have reduced overfishing, made great strides in reducing coastal pollution, and helped restore endangered species and degraded habitats. But we also recognize that demands on the oceans, our coasts, and the Great Lakes are intensifying, spurred by population growth, migration to coastal areas, and economic activities

tion to coastal areas, and economic activities.

Traditional and renewable energy development, shipping, aquaculture, and emerging security requirements are examples of new or expanding uses expected to place increasing demands on our ocean resources. To ensure that the Federal Government is effectively achieving its stewardship responsibilities and responding to the growing demands and uses of these resources, the President established the

Interagency Ocean Policy Task Force in June of this year.

The Task Force was charged with developing recommendations that included a national policy for the stewardship of our oceans, our coasts and the Great Lakes, a framework for improved Federal policy coordination, and an implementation strategy to meet the objectives of a national ocean policy within 90 days. We submitted our Interim Report on September 10, and the report was made available for public comment, with comments requested by October 17. The Task Force was also charged with developing a recommended framework for effective coastal and marine spatial planning within 180 days.

The Task Force, which I chair, comprises 24 senior-level policy officials from across the Federal Government. Because of its wide range of members representing interests throughout the Federal Government, the Ocean Policy Task Force has been able to include input from agencies with a natural focus on the oceans like NOAA, the Coast Guard, and Department of the Interior. But at the same time, it includes agencies like Labor and Health and Human Services—who have a less traditional, but also critical stake in the national policy developed around this resource. Because science is the foundation of the National Policy, science agencies such as the National Aeronautics and Space Administration and the National Science Foun-

dation were also very involved.

Across the Task Force membership there is a clear recognition of the importance of what the President has asked us to achieve. I am happy to report that the level of commitment and participation by all those represented on the Task Force has been outstanding and I would especially like to recognize my colleagues that are here today—Dr. Lubchenco, Admiral Allen and Laura Davis for their leadership on the Task Force.

Public Engagement

The Task Force has undertaken a robust public engagement process to hear from and involve stakeholders and interested parties. We have held 38 expert roundtable meetings, six regional public meetings, and received more than 3,400 comments on our website. Our public engagement efforts have directly involved thousands of Americans in the development of our recommendations for the President.

The 24 expert roundtables regarding the National Ocean Policy included rep-

resentatives from sectors including: energy, conservation, science, recreational fishing and boating, commercial fishing, transportation, agriculture, human health, States, tribes, and local governments, ports, business, and national and homeland security. In addition, the Task Force has hosted 14 additional expert roundtables to inform its development of a recommended framework for coastal and marine spatial planning. Several Task Force or Working Committee members attended each roundtable. There was robust participation, and the Task Force received many valuable comments and perspectives for its consideration during each session. Through these expert meetings, we engaged approximately 700 interested stakeholders and private citizens in the work of the Task Force.

The Task Force has received thousands of comments through the Council on Environmental Quality (CEQ) Ocean Policy Task Force (OPTF) website from a range of affected and interested parties, including academia, citizens, commercial interests, non-governmental organizations, and States, tribes, and regional governance structures. We released the Task Force's Interim Report for 30-days of public comment and received over 1,800 comments. We anticipate releasing the second phase of work, proposing a framework for marine and coastal spatial planning, also for public

comment later this year.

The Task Force also hosted six regional public meetings in Anchorage, Alaska; San Francisco for the West Coast Region; Providence for the East Coast; Honolulus Coast Region; Pr for the Pacific Islands; New Orleans for the Gulf of Mexico Region; and Cleveland for the Great Lakes Region. The Pacific Islands meeting was virtually and interactively connected to several Hawaiian Islands and to Guam, American Samoa and to Saipan in the Commonwealth of the Northern Mariana Islands. The Gulf Coast meeting connected all five Gulf Coast States live and interactively through the Gulf Coast Ecosystem Learning Centers.

There were three ways to participate in each of these meetings: live at the site (or satellite sites); by telephone; and by webcast. These meetings were located in key regions with distinct interests in the development of a national ocean policy and

regions with distinct interests in the development of a national ocean poncy and framework for coastal and marine spatial planning.

These meetings were very well attended—over 2,000 people signed in at the public meetings, nearly 1,800 logged onto the webcasts, and hundreds used our call-in line to participate. This robust engagement provided the Task Force with excellent input and a real flavor of the diversity of the regional challenges, issues, and opportunities for our events and the Great Lakes tunities facing our oceans, coasts, and the Great Lakes.

#### The Interim Report

On September 10, the Task Force sent President Obama an Interim Report addressing the first three charges from the President. The report was made available for public comment on September 17, with comments requested by October 17. This Interim Report proposes a comprehensive national approach to uphold our stewardship responsibilities and ensure accountability for our actions. We believe that it outlines a more balanced, productive and sustainable approach to our coastal, ocean, and Great Lakes resources. It contains proposals for a national policy, a robust governance structure and categories for action that the Federal Government will prioritize. Let me briefly walk through those key recommendations.

#### A National Policy

The Interim Report proposes a new National Policy, based on sound science, that recognizes that America's stewardship of the oceans, our coasts, and the Great Lakes is intrinsically and intimately linked to a wide set of intersecting and overlap-

ping equities-environmental protection and sustainability, human health and wellbeing, national prosperity, adaptation to climate and other environmental change, social justice, foreign policy, and national and homeland security.

The Interim Report outlines a vision of oceans and coasts that are healthy and resilient, safe and productive, and understood and treasured. And it provides—for the first time in our Nation's history—a comprehensive statement of our National Policy and a set of overarching guiding principles for U.S. Government management decisions and actions affecting the oceans, our coasts, and the Great Lakes.

#### A Robust Governance Structure

The Interim Report recommends modifications to the existing governance structure, the Committee on Ocean Policy, which was first created by Executive Order 13366 (2004) under the prior Administration. We received much input recommending that the structure could and should be strengthened—by providing a stronger mandate and policy direction to the agencies, more effectively linking science and management, and by ensuring renewed and sustained high-level en-

The Task Force is recommending a new structure, an interagency National Ocean Council, led by CEQ and the Office of Science and Technology Policy (OSTP). The Interim Report calls for the creation of a Governance Advisory Committee to improve coordination with State and local authorities, tribes, and regional governance structures that have emerged over the last several years and where so much innova-tion and early leadership has been demonstrated. These steps, combined with sustained high-level staff involvement, would ensure that these areas become, and remain, a high priority throughout the Federal Government.

#### Categories for Action

Finally, the Interim Report prioritizes categories for action to address some of the most pressing challenges facing the oceans, our coasts, and the Great Lakes. Four of the categories for action relate to improving how the Federal Government does business. These are: (1) Ecosystem-Based Management; (2) Coastal and Marine Spatial Planning; (3) Inform Decisions and Improve Scientific Understanding; and (4) Coordinate and Support (Federal, State, tribal, local, and regional management of the oceans, our coasts, and the Great Lakes).

In addition, the Task Force proposed five priority areas of special emphasis—substantive areas of focus that we felt deserved renewed and sustained attention from the Federal Government. These are: (1) Resiliency and Adaptation to Climate Change and Ocean Acidification; (2) Regional Ecosystem Protection and Restoration; (3) Water Quality and Sustainable Practices on Land; (4) Changing Conditions in the Arctic; and (5) Ocean, Coastal, and Great Lakes Observations and Infrastruc-

One of the areas of particular importance relates to the changing conditions in the Arctic. Increased human activity in the area is bringing additional stressors to the Arctic environment, with serious implications for Arctic communities and ecosystems. In fact, global climate change has already had an appreciable impact on these communities. As the Arctic system changes with climate change, the pressures for increased development of living and non-living resources and for increased com-

merce and transportation will only grow.

This August, I had the privilege of traveling throughout Alaska with a number of Task Force members to meet with local communities and see firsthand the challenges and opportunities emerging in an increasingly accessible Arctic region. The common observation that we came away with is that the U.S. Arctic region—including its native peoples, its environment and its resources—is a true national treas-

ure, but a vulnerable one.

We also recognize that overlaying all of this, we must implement this policy and these areas of emphasis consistent with the 1982 Law of the Sea Convention. Accession to this vitally important treaty would allow the United States to participate more effectively in the interpretation and development of the convention, including with regard to the changing realities of the global marine environment. As a Party, the United States would have access to procedures that would allow us to maximize international recognition and legal certainty over our extended continental shelf (likely extending at least 600 nm off Alaska).

#### Next Steps: Coastal and Marine Spatial Planning

Moving forward, the Task Force is now focusing its efforts on developing a recommended framework for effective coastal and marine spatial planning. We are seeing greater demands across the board—from offshore energy, both non-renewable and renewable, increased shipping, recreational and commercial fishing, and the desire for offshore aquaculture. These demands create stress on an already stressed

environment, increased conflicts among ocean users, greater demand for use and occupancy of ocean space, and greater need for conservation. Numerous scientists, policy experts, Congress, and others have emphasized the need for ecosystem-based management; looking more holistically and across legal jurisdictional boundaries to conserve and sustainably use our marine environment. To do so requires us to move away from an uncoordinated, sector by sector, or stove piped approach to more inte-

grated marine resource management.

States such as Massachusetts, California, and Rhode Island have stepped out in front on this issue over the last few years, as well as have a number of foreign governments, such as Australia, the United Kingdom, the Netherlands, and Norway. The Task Force is looking at these examples and listening to experts in science, policy, and law, State, regional, and tribal representatives, and numerous stakeholders. Themes the Task Force has heard include that coastal and marine spatial planning must be proactive and integrated, ensure broad stakeholder participation, be adaptreaucracy, and be done in partnership with States, regional governance structures (e.g., Gulf of Mexico Alliance, West Coast Governors' Alliance, Great Lakes Commission, Mid-Atlantic Regional Council on Oceans, South Atlantic Governors' Alliance, and Northeast Regional Ocean Council) and tribes, as appropriate.

The Task Force is working with these ideas as it develops the recommended framework. This framework would only be a first step in any development of coastal and marine spatial planning. Coastal and marine spatial planning is intended to incorporate these ideas and allow for a more coherent approach to how we manage oceans, coasts, and the Great Lakes to achieve sustainable economic, environmental, and social benefits now and in the future. Coastal and marine spatial planning has been defined a number of ways, but some of the key themes include that it is a transparent, proactive, adaptive, forward-thinking, and integrated planning approach for the use of marine space.

I expect the Task Force to further these ideas in the framework. However, while the framework will provide the foundation for coastal and marine spatial planning in the United States, much will be left to be developed among Federal, state, regional, and tribal partners from the bottom up, to ensure their interests, along with those of stakeholders and the public, are included in any planning process.

Upon completion of its next report, we intend to issue it for 30 days of public com-

ment, as we did with the Interim Report. We look forward to hearing from the public, and continue to welcome any input the Committee, its members, or your col-

leagues in Congress would like to provide.

Thank you for the opportunity to testify this morning and I look forward to your questions.

Senator Cantwell. Thank you very much for your testimony. Dr. Lubchenco, thank you very much for being here.

#### STATEMENT OF HON. JANE LUBCHENCO, Ph.D., UNDER SECRETARY FOR OCEANS AND ATMOSPHERE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Dr. LUBCHENCO. Thank you very much, Madam Chairwoman, members of the Subcommittee.

My name is Jane Lubchenco. I am Under Secretary of Commerce for Oceans and Atmosphere and Administrator of NOAA. I greatly appreciate the opportunity to testify before you today on the Interagency Ocean Policy Task Force's work, including its interim re-

port, which was release publicly on September 17.

I appreciate the Committee's interest in this important and historic endeavor. As the President declared in his memorandum that established the task force, quote, "We have a stewardship responsibility to maintain healthy, resilient, and sustainable oceans, coasts, and Great Lake resources for the benefit of this and future generations," unquote. And to succeed in protecting them, he went on, we need to, quote, "act within a unifying framework under a clear national policy, including a comprehensive ecosystem-based framework, for the long-term conservation and use of our resources," un-

Based on my personal knowledge of coastal and marine ecosystems from decades of scientific research, and on my current responsibility for leading NOAA, I completely agree with the President's statement.

NOAA is the Nation's primary ocean agency. Our name says it all: Oceans and Atmosphere. NOAA's mission, to understand and protect changes in the Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs, aligns nicely with the work of the Task Force. The countless hours of creative work by NOAA employees are reflected in the interim report's strong support for healthy and resilient oceans, coasts, and Great Lake ecosystem that support human uses and ensure vibrant communities and economies.

As a science and regulatory agency, NOAA operates under the basic principle that sound science must inform decisionmaking. Similarly, the interim Ocean Policy Task Force recommendations are solidly grounded in scientific knowledge. Much of the content of the interim Ocean Policy Task Force report reflects NOAA's priorities as an operational marine science and management agency. Emphasis on ecosystem approaches to management has been a NOAA operating principle for several years, and we are pleased that this draft policy reaffirms and strengthens our operating principle by making it one of the priority objectives for how the Federal Government will do business under this national ocean policy.

NOAA's mission, as a key ocean science agency, is very much aligned with the interim report's areas of special emphasis on ecosystem restoration and robust ocean science and observing systems. These areas of emphasis are essential to sustaining diverse uses of oceans, ranging from recreational fishing and boating to commercial fishing, shipping, energy generation, and national security.

Understanding the ocean's role in climate change and the impacts of climate change on ecological and human communities is also a major part of NOAA's core business. Climate change is already having significant impacts on our living marine resources and on coastal communities. NOAA's extensive expertise in understanding climate dynamics and impacts is clearly relevant to both current and future uses of oceans.

One of my priorities for NOAA is to connect the dots between healthy oceans, healthy and secure people, the economy, communities, and jobs. Simply put, human well-being, good jobs, and resilient communities depend upon the health and resilience of natural ecosystems. At the broadest level, we must seek to advance more holistic approaches to understand and balance human use, sustainability, and preservation of ecosystem resources and functioning. These concepts were a part of the task force's discussions, and I am pleased that these important issues are interwoven throughout the

NOAA is committed to assist CEQ and the task force in responding to the President's charge to deliver a coastal and marine spatial planning framework, one that will enable governments, at all levels, to optimize use and protection of marine resources for the max-

imum benefit of the Nation.

NOAA's capabilities in science, stewardship, and service are central to national economic and environmental goals. NOAA's existing scientific capabilities and ocean management authorities, including the ocean observing systems and mapping capabilities, along with management responsibilities for marine sanctuaries, estuary and research reserves, area-based fisheries, and protected marine resources, uniquely position the agency to support a national coastal and marine spatial planning framework.

NOAA has already used elements of coastal and marine spatial planning for many years under its ocean management authorities. Recent examples include working with the U.S. Coast Guard to modify the traditional navigation routes to reduce impacts on North Atlantic Right Whales and other species, managing multiple compatible uses within marine sanctuaries, and regulating fish-

eries in time and space for sustainable use.

But, NOAA's goal, and the goal of coastal and marine spatial planning, is to move toward a more robust, holistic management approach that reduces ocean/human-use conflicts and ecosystem

impacts while enabling sustainable use of oceans.

Apart from helping to produce these two framework documents, NOAA is committed to the successful implementation of their recommendations. NOAA has many mandates, including the Magnuson-Stevens Act, National Marine Sanctuaries Act, Coastal Zone Management Act, and Marine Mammal Protections Act, which could also serve as tools in the implementation of the task force's recommendations.

It is clear that there is much that we can do under present authorities to enhance collaboration within the Federal Government and between the Federal Government and the States and tribes. We will, of course, want to engage with Congress on the extent to which we can accomplish the new policies under current legislation and on where we think additional authorities may be required for full implementation.

Let me conclude by stating how pleased I am with the progress that has been made by the Ocean Policy Task Force. I particularly wish to thank Chair Sutley for her leadership and vision. It has been rewarding to work with all of the other agencies that are part of the task force, and I want to thank each of them for their participation and perspectives. Our collective effort will ensure that we move forward with a comprehensive ecosystem approach to addressing our stewardship responsibilities and to ensure accountability for our actions. The Nation's oceans are counting on us.

[The prepared statement of Dr. Lubchenco follows:]

PREPARED STATEMENT OF HON. JANE LUBCHENCO, PH.D., UNDER SECRETARY FOR OCEANS AND ATMOSPHERE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

#### Introduction

Madam Chairwoman and members of the Subcommittee, my name is Dr. Jane Lubchenco and I am the Under Secretary of Commerce for Oceans and Atmosphere and the Administrator of the National Oceanic and Atmospheric Administration (NOAA). Thank you for the opportunity to testify before you today on the Interagency Ocean Policy Task Force's work including its Interim Report, released on September 17, 2009.

Î appreciate the Committee's interest in this important and historic endeavor that began on June 12, 2009, with President Obama's memorandum to the heads of exec-

utive departments and Federal agencies establishing an Interagency Ocean Policy Task Force. Under the leadership of the White House Council on Environmental Quality (CEQ), the Task Force was charged with developing recommendations that include a national policy for our oceans, coasts and the Great Lakes, a framework for improved Federal policy coordination, an implementation strategy to meet the objectives of a national ocean policy, and a framework for effective coastal and marine spatial planning.

The urgent need for the President's action is not new. In two separate reports,

first in 2003 and then in 2004, both the Pew Oceans Commission, of which I was a member, and the U.S. Commission on Ocean Policy (USCOP) recognized the need for a stronger ocean policy and improved governance structure. Specifically, the USCOP report, An Ocean Blueprint for the 21st Century, identified the need for a comprehensive and coordinated national ocean policy and recommended moving away from the current fragmented, single-sector way of doing business and toward

ecosystem-based management.

As the President declared in his memorandum, "We have a stewardship responsibility to maintain healthy, resilient, and sustainable oceans, coasts and Great Lakes resources for the benefit of this and future generations," and that to succeed in protecting them, "The United States needs to act within a unifying framework under a clear national policy, including a comprehensive, ecosystem-based framework for the long-term conservation and use of our resources." I have dedicated my career to studying coastal and marine ecosystems and now, as I am responsible for leading NOAA, I could not agree more with the President's statement. As the Department of Commerce's representative on the Task Force, I am both excited and honored for NOAA to participate as we have an exceptional range of scientific capabilities, as well as policy and management expertise that have contributed to this initiative of national importance.

#### The Task Force

The Task Force is comprised of 24 senior-level policy officials from across the Federal Government. To complete the tasks laid out in the President's memorandum, CEQ established a Working Committee composed of senior officials and key representatives from the agencies and departments to support the Task Force. CEQ also established several subgroups to help inform the Working Committee. The Working Committee and subgroups met on a weekly basis (in some cases, several times a week) to meet the President's aggressive 90 day schedule. Reflecting this shared commitment to meaningful and permanent action, the Federal agencies have had an "all hands on deck" strategy to engage in a robust policy debate.

The breadth of agencies and departments participating in the Task Force reflect how the oceans touch on most of what we do as a Federal Government. Throughout this process, NOAA, the Nation's primary ocean agency, was pleased to see so many agencies whose primary focus is not ocean and coastal issues be very supportive and engaged. The Department of Health and Human Services (HHS) is one example of a Department whose primary mission is to ensure the health of all Americans and provide essential human services, which does not explicitly lend itself to the stewardship of the Nation's oceans, coasts, and Great Lakes. Yet, HHS was engaged throughout the Task Force process realizing that healthy oceans support human health and their participation was comparable to other agencies that deal with ocean issues on a more regular basis such as the U.S. Coast Guard, Environmental Protection Agency, Navy and the Department of the Interior. It is this type of interagency commitment that will be critical to the effectiveness of a comprehensive National Policy for the Stewardship of the Ocean, our Coasts, and the Great Lakes. Many talented and dedicated NOAA employees have worked numerous hours on

the charges laid before the Task Force. This has included very senior personnel in our Agency involved in marine science and policy, coastal zone and living resource management, and communications experts. Included in this NOAA team is Dr. Paul Sandifer, a former member of the USCOP whose experience on the Commission was invaluable to the Working Committee and subgroup deliberations. I am proud of their efforts thus far and I know that the outcome of this Task Force has and will continue to benefit from NOAA's steadfast participation. That being said, I want to emphasize the importance of a collaborative approach among all of the agencies that have been involved in this process. They all have sent very talented senior people to participate in the Task Force and empowered them to work collaboratively with the other agencies; resulting in surprisingly few "turf battles" as these policies and

principles for ocean management have emerged.

#### The Interim Report

The first 90 days of hard work by the Task Force resulted in the Interim Report. which was released on September 17, 2009. The Interim Report proposes a new National Ocean Policy that recognizes that America's stewardship of the ocean, our coasts, and the Great Lakes is intrinsically and intimately linked to environmental sustainability, human health and well-being, national prosperity, adaptation to climate and other environmental change, social justice, foreign policy, and national

and homeland security.

The Interim Report also recommends a proposed policy coordination framework that makes modifications to the existing ocean governance structure, including a stronger mandate and policy direction, and renewed and sustained high-level engagement. Under the proposal, CEQ and the Office of Science and Technology Policy would lead an interagency National Ocean Council to coordinate ocean-related issues across the Federal Government and the implementation of the National Ocean Policy. Such a governance structure, combined with sustained high-level staff involvement, would ensure that ocean issues remain a priority and are addressed consistently throughout the Federal Government. The proposal also includes a Governance Advisory Committee to the National Ocean Council to improve coordination and collaboration with State, Tribal, and local authorities, and regional governance

organizations.

The Interim Report prioritizes nine categories for action, including ecosystembased management, regional ecosystem protection and restoration, and strengthened and integrated observing systems, that seek to address some of the most pressing challenges facing the ocean, our coasts, and the Great Lakes. These strategies and objectives provide a bridge between the National Ocean Policy and action on the ground. As we have heard from listening sessions all over this country, there is great enthusiasm and high expectations that we will move from planning and coordination to meaningful improvements in coastal and ocean ecosystems.

Lastly, the Interim Report highlights the need for the United States to provide leadership internationally in the protection, management, and sustainable use of the world's ocean and coastal regions, including through accession to the Law of the

Sea Convention.

The recommendations in the Interim Report reflect the considerable input the Task Force received through a robust public engagement process. The Task Force convened 24 expert roundtables with representatives from a variety of stakeholders and sectors including energy, conservation, fishing, transportation, agriculture, human health, State, tribal, and local governments, ports, recreational boating, business, science, and national and homeland security. Several Task Force or Working Committee members attended each roundtable. Public comments were also accepted via the CEQ website.

In addition, between August and the end of October, we held six regional public listening sessions where Task Force members traveled to the different regions of the country and heard from many interested stakeholders. NOAA was the primary support to CEQ for organizing and running the regional listening sessions and I personally participated in all six of these sessions as I believe that public participation is

vital to the success of this process and meeting our overall goals.

Throughout the various public engagement processes there were several key themes that we heard over and over again. These include ecosystem-based management, support for science-based decisionmaking, the need for improved governmental coordination, collaboration and transparency, and the importance of ensuring that adequate financial and other resources are made available to implement the National Ocean Policy. The Task Force took these comments and integrated them into the Interim Report. The extraordinary amount of public engagement in the process also illustrated the fact that, wherever one lives in this great country, the oceans matter to our individual and national prosperity, our health, our security, and our quality of life. The comments received on the interim report through the public comment period are currently under review and the interim report will be modified as necessary.

#### NOAA's Input to the Interim Report

NOAA's mission, to understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs, aligns with the work of the Task Force. The countless hours of creative thoughts and negotiations by NOAA employees, in coordination with our interagency partners, are reflected in the Interim Report's strong support for healthy and resilient oceans, coasts and Great Lakes ecosystems that support human uses and ensure vibrant communities and economies.

As a science and regulatory agency, NOAA operates under the basic principle that sound science must inform decisionmaking. Science is the underpinning of the Interim Ocean Policy Task Force recommendations. It feeds the substantial informational needs of ecosystem-based management and provides tools for achieving ecosystem-based management such as coastal and marine spatial planning, to inform better decisionmaking and to improve understanding of the impacts of the ocean environment on living resources and human communities. Ocean sciences in the United States are supported by research agencies such as the National Aeronautics and Space Administration, National Science Foundation, and National Institutes of Health, and "operational" agencies such as NOAA, the Department of the Interior, and Environmental Protection Agency. There are also important ocean science components in a number of other agencies as well, including the U.S. Navy.

Much of the content of the interim Ocean Policy Task Force report reflects

NOAA's priorities as an operational marine science and management agency. Emphasis on ecosystem approaches to management has been a NOAA operating principle for several years, and we are pleased that this draft policy reaffirms and strengthens our operating principle by making it one of the priority objectives for how the Federal Government will do business under this National Ocean Policy. Working across agencies and vertically among Federal, tribal, state and local government of contribution with the priority is initially among Federal, tribal, state and local government of contribution with the priority of the priority

working across agencies and vertically almong rederal, tribal, state and local governmental agencies is similarly a high priority for our agency.

NOAA is a key ocean science agency fulfilling the role of providing the scientific information to the Nation in support of the Task Force recommendations. As such, NOAA made large contributions to the content of the Interim Report. Similarly, NOAA's missions are very much aligned with the Interim Report's areas of special emphasis in ecosystem restoration, including habitats, fisheries and protected species, robust ocean science capabilities including integrated ecosystem assessments, biodiversity assessments, and ocean exploration, and a robust ocean observing systems.

Understanding the ocean's role in climate change and the impacts of climate change on ecological and human communities is a major part of NOAA's core business. Climate change is already having significant impacts on our living marine resources and coastal communities. Entire ecosystems are undergoing unprecedented changes—one only has to look to Alaska to see the extent and magnitude of these changes and to get a preview of the kinds of impacts that may be in store for the rest of the country. NOAA has extensive expertise in improving our understanding of climate dynamics. We are able to monitor and forecast short-term climate fluctuations and to provide information on the effects climate patterns may have on the Nation. We also track changes in biological and physical indicators of climate change such as shifts in the geographic ranges of species.

The Arctic is an emerging area of national concern from a variety of economic, ecological, cultural/subsistence and climate-related issues. NOAA Scientists supply a variety of services in the Arctic and are providing ongoing advice on topics ranging from mapping and charting for emerging transportation issues and the extent of the U.S. continental shelf to advice on the likely impacts of climate change on protected species such as ice-dependent seals and fish stocks and on Alaska Native subsistence communities. For these and other reasons, NOAA supported the inclusion of

the Arctic as an area of special interest in the Interim Report

As the NOAA Administrator, it is one of my priorities for NOAA to be a leader for human survival on Earth, in quantifying the values of these services, and in helping to educate businesses and Federal, state and local decisionmakers about how the health of human society and the health of the environment are tightly coupled. Simply put, human health, jobs, prosperity, and well-being depend upon the health and resilience of natural ecosystems. Nowhere is this connection more evident or important than in our oceans and along our coasts and Great Lakes where NOAA has major responsibilities. Human impacts degrade coastal, ocean and Great Lakes ecosystems, and degraded marine ecosystems result in increased risks to human communities and their economies, and to public health and safety. At the broadest level, we must seek to advance more holistic approaches to understand and balance human use, sustainability, and preservation of ecosystem resources and functioning. I personally made it a priority to see that these concepts were a part of the Task Force's discussions, through my participation in all six of the regional listening sessions. I am very pleased with how these important issues are inter-woven throughout the Interim Report.

#### Next Steps—A Framework for Coastal and Marine Spatial Planning

NOAA is committed to assisting CEQ and the Task Force in the President's charge to deliver a coastal and marine spatial planning framework—one that will

enable governments at all levels to optimize both use and protection of marine ecosystems for the maximum benefit of the Nation. During this second phase, we have expanded NOAA's involvement to include additional staff with expertise in spatial management, data integration, legal affairs and ocean sciences and management. This additional expertise and similar contributions by other agencies is allowing rapid and concrete progress toward development of a workable framework for coastal and marine spatial planning, a framework where we can bring to bear many of NOAA's capabilities in science, stewardship and service to support national economic and environmental goals. In addition to the Task Force's work, NOAA has also sponsored internal training in marine spatial planning and extended invitations to other Task Force agencies to hear from international experts in marine spatial planning about their experiences in this emerging field elsewhere in the world.

NOAA's existing scientific capacities and ocean management authorities, including ocean observing systems and mapping capabilities, along with management responsibilities for marine sanctuaries, estuarine research reserves, area-based fisheries, and protected marine resources, uniquely position the agency to support a national coastal and marine spatial planning framework. NOAA has practiced elements of coastal and marine spatial planning for many years under its ocean management authorities; recent examples include working with the U.S. Coast Guard to modify traditional navigation routes to reduce impacts on North Atlantic Right Whales and other species, managing multiple compatible uses of marine sanctuaries, and regulating fisheries in time and space for sustainable use. But NOAA's goal, and the goal of coastal and marine spatial planning, is to go a step further and foster a more robust, holistic management approach that effectively reduces human use and ecosystem conflicts while enhancing economic activity and maintenance of critical ecosystem services.

NOAA, together with the Department of the Interior and Environmental Protection Agency, has also brought to the Task Force's coastal and marine spatial plantion Agency, has also brought to the Task Force's coastal and marine spatial planning framework discussions its experience in working with the coastal States on their regional collaborations. These include, in part, the Governor-created regional groups: Northeast Regional Ocean Council, Mid-Atlantic Regional Council on the Ocean, Gulf of Mexico Alliance, and the West Coast Governors Agreement. These State-led regional bodies, and individual State marine spatial planning efforts such as the Massachusetts Ocean Plan and Rhode Island's Ocean Special Area Management Plan, are currently leading marine spatial planning efforts and bringing substantial information and ideas to the Task Force.

Apart from helping to produce these two framework documents, NOAA is committed to the successful implementation of their recommendations. NOAA has many mandates including the Magnuson-Stevens Act, National Marine Sanctuaries Act, Coastal Zone Management Act, and Marine Mammal Protection Act, which could also serve as tools in the implementation of the Task Force recommendations. In working with the various agencies on the Task Force, it is also clear that there is much we can do under present authorities to enhance collaboration within the Federal Government and between the Federal Government and the states and tribes. We will, of course, want to engage with Congress on the extent to which we can accomplish the new policies under current legislation, and on where we think additional authorities may be required for full implementation. In either case, if the President chooses to adopt these recommendations, they could require NOAA to modify and re-prioritize some of its missions and data gathering responsibilities. Additionally, it will require all of the Line Office elements of NOAA to continue to focus on working collaboratively together and with the many external partners that will be required to support ecosystem-based management of the oceans. We look forward to the implementation phase of this historical effort to harmonize the management of the Nation's coastal, ocean and Great Lakes ecosystems.

Let me conclude by stating how pleased I am with the progress that has been made by the Ocean Policy Task Force. I would particularly like to thank Chair Sutley for her leadership and vision. It has been rewarding to work with all of the other agencies that are part of the Task Force, and want to thank each of them for their participation and perspectives. Our collective effort will ensure that we move forward with a comprehensive ecosystem approach to addressing our stewardship responsibilities and to ensure accountability for our actions. The Nation's oceans are

counting on us.

Finally, I'd like to thank the Committee for this opportunity to testify and I look forward to working with you on this important issue.

Senator Cantwell. Thank you very much. Next, we'll hear from Admiral Allen.

Thank you, for being here, today. We look forward to your comments.

#### STATEMENT OF ADMIRAL THAD W. ALLEN, COMMANDANT, U.S. COAST GUARD

Admiral ALLEN. Thank you. Good morning, Madam Chair, Senator Snowe, and other members present. Thank you very much, for holding this hearing.

And I'm happy at the opportunity to be here with my colleagues. Over the last several months, we've forged a very strong partnership and a bond of friendship, and I think we're all committed to moving this effort forward.

I'm also very pleased to be representing the Department of Homeland Security and Secretary Napolitano as a member of the task force.

And I would ask that my written statement be included in its entirety for the record.

I believe the Ocean Policy Task Force represents a significant opportunity to employ a whole-of-government approach for managing our oceans, coastlines, Great Lakes, and waterways.

This is an issue of critical strategic importance to our service in our maritime safety, security, and stewardship roles. Those roles are clearly reflected in the report's vision statement, an America whose stewardship ensures that the ocean, our coast, and Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future generations. And, in fact, it's hard to find a section of the task force report where the Coast Guard does not have significant equities. But, here are a few that I consider most important:

The first would be an improved policy coordination and predictable processes for how we manage our roles and responsibilities in relation to the ocean. A national oceans policy will enhance interagency coordination and ensure senior-level attention on ocean-related issues. This will result in more efficient Federal oversight of our oceans, coasts, Great Lakes, and waterways, and improved communications with our partners throughout the public and private sectors.

Marine spatial planning, a key element of this policy, similar in many regards to urban planning for the ocean, provides an objective and transparent framework to guide the decisions for the use of ocean, coastal, and Great Lakes water resources. We need to establish a sustainable balance between use and conservation while providing greater predictability for public- and private-sector investments. Marine spatial planning will help us reduce conflicts in the maritime domain and responsibly harvest oceanic resources.

As a cooperating agency within the National Environmental Policy Act process, the Coast Guard becomes immersed with conflicting waterway uses, such as renewable energy proposals, deepwater ports, oil and gas exploration, aquaculture, sanctuaries, vessel traffic lanes, navigable channel sizes, and the establishment of anchorages. These conflicts will expand as technology makes our oceans more accessible to exploration.

Currently, the Coast Guard adjudicates conflicts individually, without the benefit of an overarching marine spatial planning framework. The lack of a broader national plan makes it difficult to understand the implications across all stakeholders and the ecosystem. Without such perspectives, the ensuing uncertainty forces higher costs, inefficiencies, and the potential for litigation of disputes.

The oceans are our last global commons. Thus, our domestic ocean policies must be considered relative to international frameworks. The task force, to be effective—for the task force to be effective, it is paramount that the United States become a signatory to the United Nations Convention on the Law of the Sea. UNCLOS puts us on an equal footing when negotiating with other nations, on extended continental shelves, ocean resources management, freedom of navigation, and international ocean policy issues.

We must work closely also with the International Maritime Organization as we implement any new policy. The IMO has proven time and time again that it can bring the global maritime community together to address shared concerns. The passage of the International Ship and Port Facilities Security Code and the work on greenhouse gas emissions are just two examples. While there are those that say the IMO process sometimes takes longer, it does re-

sult in a highly effective way to generate a consensus.

I'd like to speak for just a moment about the Arctic region. In August, I had the honor of joining my fellow task-force members on a trip to the Arctic. Climate change is causing Arctic temperatures to rise at nearly twice the global rate, resulting in back-to-back record low sea-ice coverage in 2007 and 2008. Decreasing sea ice and enhanced technologies are opening new possibilities for shipping routes and marine activity in the Arctic. It requires special and immediate attention. A national ocean policy should give special consideration to the Arctic region and provide for robust and coordinated implementation of U.S. Arctic regional policy as developed in the National Security Presidential Directive 66.

By simply convening the Ocean Policy Task Force, we are acknowledging how important the maritime domain is to our national prosperity, security, and resilience. We fully endorse a national ocean policy that supports integrated ocean observing systems and sensors to monitor and collect information about our ocean, coast, and Great Lakes. This data significantly adds to our overall maritime domain awareness and improves our ability to provide for maritime safety, security, and stewardship.

In closing, I fully endorse the stated goals of the Ocean Policy Task Force. I look forward to building the national plan that will allow our Nation to benefit from our oceanic resources while sustaining them for future generations to enjoy.

And thank you for the opportunity to testify today, and I look

forward to your questions.

[The prepared statement of Admiral Allen follows:]

### PREPARED STATEMENT OF ADMIRAL THAD W. ALLEN, COMMANDANT, U.S. COAST GUARD

#### Introduction

Good morning, Madame Chair, Senator Snowe, and distinguished members of the Subcommittee. I am pleased to be here today to discuss the Coast Guard's role in the Interagency Ocean Policy Task Force that President Obama established in June. A new national ocean policy especially as it creates a unified framework for effective coastal and marine spatial planning—is critical to the Nation and to the ability of the Coast Guard to execute its mission. I will also briefly discuss several objectives the Coast Guard would like to see addressed as this important ocean policy process moves toward completion and initial implementation.

#### Importance to the Coast Guard of a Better National Ocean Policy

Ms. Nancy Sutley—the Chair of the White House Council on Environmental Quality and leader of this Task Force—has presented an excellent overview of the substance and purpose the Task Force, and what it hopes to accomplish in promoting the health and productivity of our oceans, coastlines, waterways, and Great Lakes. I would like to discuss in some more detail the benefits of a national ocean policy to the Coast Guard and the Nation as a whole.

For well over two centuries, the Coast Guard has worked to safeguard our Nation and its citizens, to secure our maritime borders, and to serve as a responsible steward of our oceans, coastlines, intercoastal waterways and the Great Lakes. As the principal Federal maritime law enforcement agency, the Coast Guard protects our coastal waters and marine resources, ensures safe and secure navigation, and performs other essential tasks such as search and rescue, servicing aids to navigation, and counter-drug operations.

Our Nation is facing many new challenges in marine spaces. Potential new shipping lanes burgeon as Arctic ice melts. The size and volume of commercial shipping around the world continue to increase. There is increasing interest in our continental shelves for oil and gas production. Overfishing and other destructive practices proliferate. Parts of the ocean are suffering acidification. Invasive species are being introduced and migrating to new areas. Critical coastal habitats and the environmental benefits they provide are being lost. A comprehensive approach is imperative to address these many challenges.

These challenges are not new. Most of these have been well documented in the past—by the Stratton Commission report in 1969, the Pew Commission report in 2003, and the report of the U.S. Commission on Ocean Policy in 2004. For its part, the Coast Guard produced a strategy document in 2007 titled "The U.S. Coast Guard Strategy for Maritime Safety, Security, and Stewardship." After quoting from the Final Report of the U.S. Ocean Policy Commission on maritime regimes, and noting the increased security challenges following the 9/11 terrorist attacks, I provided the following observation in that strategic document: "In ocean policy, the United States needs integrated regimes that address concerns ranging from increased use of the Exclusive Economic Zone (EEZ) to new uses in the Arctic. To fill these gaps, and create a more integrated system, the Coast Guard must work to strengthen existing maritime regimes, and develop new ones where necessary." That need has become increasingly apparent to me as I have continued to serve as the Commandant of the Coast Guard.

Although the work of producing the Interim Ocean Policy Task Force Report was limited to 90 days, the Department of Homeland Security and the Coast Guard are proud of what the Task Force produced in this timeframe. This report provides admirable focus on, and balance of safety, security, economic resource and environmental stewardship issues. The report emphasizes a number of areas that the Coast Guard views as critical to achieve safe, secure, and environmentally prudent commercial shipping, such as: ecosystem-based management of coastal waters; adaptive management; coastal and marine spatial planning; plans for addressing changing conditions in the Arctic; science-based decision-making; and improved maritime domain awareness. The Department of Homeland Security and the Coast Guard look forward to working across government and the maritime community to implement any national ocean policy that may result from the work of the Task Force. In order to ensure that any policy takes the concerns of all stakeholders into account, the Task Force will continue to solicit and consider suggestions from the public and other stakeholders as to the substance of its proposals.

I would also like to emphasize a key point upon which all Task Force members agree: the time has long since come for the United States to join the 1982 Convention on the Law of the Sea. Task Force Chair Sutley, Dr. Jane Lubchenco, Administrator of the National Oceanographic and Atmospheric Administration(NOAA), and

I co-authored an 4 op-ed piece in the Seattle Times (published Sept. 4), in which we noted the crucial importance of acceding to the Convention as the Task Force completes its work. Among other things, accession to the Convention is essential to promote our vital national interests in the Arctic. The Clinton, Bush, and Obama Administrations have all made clear their strong support for the Convention. So, too, have the Joint Chiefs of Staff and a diverse array of other national security leaders, environmental policy experts, and the entire spectrum of maritime industry stakeholders. To this overwhelming body of opinion, we recently added the unanimous conclusion of the Interagency Ocean Policy Task Force. In comments the Task Force has received from policy experts, industry, and other knowledgeable citizens, support for the Convention has been overwhelming. I strongly urge the U.S. Senate to provide its necessary consent for the United States to join the Convention as soon as possible.

#### Coast Guard's Role in the Process

The Coast Guard strongly supports the goals of the Task Force and has been enthusiastic to take an important role in its work. Soon after the President established the Task Force on June 12, 2009, the Secretary of Homeland Security and I discussed how best we could represent our Departmental obligations in carrying out the mission of the Task Force. Because the Coast Guard has great experience and expertise in ocean policy and marine spatial planning, Secretary Napolitano named me as the Department's representative on the Task Force. The Coast Guard has a long-standing and vested interest in developing, implementing, and carrying out a comprehensive ocean policy for the United States. My senior staff and I, along with a wide spectrum of Coast Guard operational and policy subject-matter experts, are actively participating in every aspect of this important interagency process.

actively participating in every aspect of this important interagency process. In August, I hosted a Task Force trip to the North Slope of Alaska. Several members of the Task Force—including two members of the Task Force, the Chair, Nancy Sutley and Dr. Jane Lubchenco traveled with me to see the increasingly fragile environment of Arctic and to learn what the Coast Guard, other governmental agencies, local tribal governments, and non-governmental groups are doing to enhance stewardship of this critical region. During our trip, we met with leaders of several of the indigenous peoples in the Arctic region, visited oil and gas production facilities, and witnessed first-hand the increasing number of challenges at-risk coastal communities face due to coastal erosion associated with global climate change.

Toward the end of that trip, we participated in a formal public hearing that the Task Force had arranged in Anchorage. We heard from a wide variety of experts and interested citizens on a broad range of topics related to ocean policy, ecosystem-based management, and marine spatial planning. Since that field hearing in Anchorage, senior Coast Guard leaders and I have participated in public hearings in San Francisco, Honolulu, Providence, New Orleans, and Cleveland. These public hearings have been very worthwhile and informative, and the work of the Task Force has been well received. The Coast Guard continually strives to increase our awareness of the many challenges facing our ocean and coastal waters, and we consistently engage the maritime community to define and promote the necessary steps that we can take together to overcome these challenges. The Task Force has been taking this approach at the national level.

The Coast Guard has provided physical, personnel, and administrative resources to the Task Force's efforts. A Coast Guard helicopter tour of the Louisiana coastline allowed the Task Force to observe first-hand the remaining effects of the devastation of Hurricane Katrina as well as the remarkable resilience of the region. During our flight, we were briefed on hypoxic "dead zone" caused by polluted water from the Mississippi River—often larger in area than the State of Massachusetts—in the Gulf of Mexico coastal waters.

Coast Guard participants in the Task Force have also actively provided administrative support for research, workshops, outreach to the public and other stakeholders, drafting assistance, and other coordinating efforts on the work products for the Task Force. The Interim Report—which contains a draft ocean policy, governance framework, and implementation strategy was sent to the President on Sept. 10, reflects a remarkable achievement of interagency cooperation, containing a draft ocean policy, governance framework, and implementation strategy.

We continue to support the development of a final strategy through briefing congressional staffers and holding expert roundtable discussions designed to hear suggestions and provide answers to the public and other stakeholders.

#### Importance of Coastal and Marine Spatial Planning

The Coast Guard was also involved in the second phase of tasks the President laid out in his June 12 Executive Memorandum. Specifically, Coast Guard staff at-

torneys and other subject-matter experts are actively participating in the Working Committee and the subgroups established to develop a framework for effective coastal and marine spatial planning (CMSP).

The Task Force's work in improving coastal and marine spatial planning (CMSP) is critical to the Coast Guard's ability to perform our important work. For years, the Coast Guard has essentially performed a limited form of marine spatial planning in many different ways, especially in regard to vessel traffic separation. However, these actions are undertaken on an ad hoc, case-by-case basis. The Nation would greatly benefit from a framework to implement ocean management principles that takes into account the impact of the use of U.S. waters on all alternative uses and users, as well as the entire ecosystem. A comprehensive, integrated, transparent planning process for current and anticipated uses of off-shore maritime space would reduce conflict and adverse environmental impacts, facilitate compatible uses, and preserve critical ecosystem services to better meet environmental, economic and security objectives.

The 2004 report of the U.S. Commission on Ocean Policy expressed the challenge and opportunity as follows: "While legal, policy, and institutional frameworks exist for managing some ocean uses, there remain increasingly unacceptable gaps. The Nation needs a coordinated offshore management regime that encompasses traditional and emerging uses and is adaptable enough to incorporate uses not yet clear-

ly foreseen.'

From the perspective of the Coast Guard, the Federal Government needs to establish a multi-purpose process that allows for identification and resolution of potenis a multi-purpose process that allows for identification and resolution of potentially competing uses of maritime resources and spaces prior to the emergence of conflicts; that balances ocean uses and conservation; and that creates a transparent means to determine and resolve "trade-offs" between potentially conflicting uses that reflects national and regional ocean use priorities; and that creates an accepted and expedited dispute-resolution mechanism when conflicts do arise. We need to provide a more coordinated, comprehensive, uniform, and integrated approach to exercising Federal legal authorities related to ocean use and management. Based on the work of the Task Force so far, we anticipate that an effective system of CMSP will better address the "gaps" in current ocean management regimes and better manage ocean uses. This will allow the Coast Guard to more effectively execute its many missions in support of safety, security, and stewardship in our ocean and coastal waters.

Policy experts presented case studies of CMSP in other parts of the world, as well as in a handful of U.S. states. In 1975, Australia became the first to establish a system of marine spatial planning, which strove to protect the fragile and unique ecosystem of the Great Barrier Reef while minimizing undue interference with essential shipping activity and other commercial and recreational uses. The Task Force also studied the experiences of several other European coastal countries that

have implemented marine spatial planning to provide for off-shore alternative energy production, particularly wind farms and hydrokinetic applications.

The processes that these countries have implemented have led to the establishment of shared priorities for the ocean and coasts, and a framework for balancing the shared interest in the marine environment with commercial and industrial activities. Properly structured and implemented, CMSP can streamline and simplify the permitting process, balance competing uses effectively, explicitly identify and evaluate trade-offs, provide administrative certainty, and expedite dispute resolution, all while better protecting the marine environment through science- and ecosystem-based and adaptive management. All of these benefits would help the Coast

Guard accomplish its missions more efficiently and effectively

The Coast Guard's limited involvement in marine spatial planning most obvious in its establishment and enforcement of vessel traffic separation schemes in U.S. waters, especially at the entrance to major. These traffic schemes help ensure navigational safety and security by defining where specific shipping and other activities may take place. One recent example where the Coast Guard, NOAA, and other Federal agencies employed adaptive management principles to better preserve at least one critical component of a marine ecosystem was by modifying the vessel traffic system in the approaches to Boston Harbor. In light of new scientific evidence concerning the preferred feeding and basking locations of North Atlantic right whales in Cape Cod Bay, the Coast Guard and our partner agencies weighed the benefit of amending the vessel traffic system to reduce the likelihood of vessel traffic passing through the areas with the highest incidence of whale observations. In 2007, the Coast Guard worked with other interested stakeholders to slightly shift existing shipping lanes and establish new ones nearby to reduce the likelihood of whale strikes as vessels entered and departed from the port of Boston, all while minimizing any adverse impacts on the large daily volume of commercial shipping. This is only one example of the type of prior work conducted in applying the basic technique of marine spatial planning to strategic management of our oceans, coasts, and the Great Lakes. The Coast Guard has statutory authority to establish and enforce vessel anchorage areas in U.S. ports and coastal waters, where the need to accommodate different vessel types and varied uses must be weighed against environmental impacts and the burden of maintaining such measures. Likewise, the Coast Guard has the authority to establish security zones and regulated navigation areas in U.S. ports and waters. The Coast Guard also plays a key role as a cooperating agency helping to determine whether and under what conditions various offshore activities should be authorized, such as deep-water ports, hydrokinetic or wind-based renewable energy proposals, or traditional uses such as oil and gas exploration and production. Moreover, while undertaking these responsibilities, the Coast Guard engages and listens to a wide variety of stakeholders, including the shipping industry, port authorities, and in some instances the International Maritime Organization in the process of reviewing and making recommendations for such plans.

A system of effective CMSP would greatly improve and enhance the effective collaboration of Federal and state agencies, affected local governments and tribes, and other stakeholders to determine the most efficient and prudent uses of our oceans, coasts, and Great Lakes.

Given the significance of these issues, the remarkable cooperation that we have seen from all the members of the Task Force, the positive tenor and text of the Interim Report, and all other indications, the Coast Guard is fully confident that the process to develop a recommended framework will continue to properly address the Coast Guard's, and other Task Force members' interests.

In the meantime, the Coast Guard and its interagency partners are working within the current structure to make the ocean and our coastal and Great Lakes waters safer, more secure, more productive, and as environmentally sound as we can. On October 16, the Coast Guard, the State Department, the Environment Protection Agency, and NOAA cosponsored a 2009 World Maritime Day event in New York, with several parallel events taking place in major port cities throughout the country. Representatives from a broad range of government agencies, maritime industries, non-governmental organizations, and the general public, participated in these events. Dr. Holdren, Director of the White House Office of Science and Technology Policy, gave the key-note presentation on the topic of global climate change and pollution, and its impacts on the ocean's ecology. Other discussion topics at the event included shipping safety, maritime security, and how climate changes present challenges to the maritime community. Many of those in attendance applauded the Administration's commitment to moving forward with a national policy for the oceans, coastlines, waterways and Great Lakes, and developing a framework for effective coastal and marine spatial planning.

#### Conclusion

To meet our national responsibilities in our oceans, coastlines, intercoastal waterways and the Great Lakes, our Nation, the Department of Homeland Security, the Coast Guard, and the other agencies concerned must develop and implement the best possible national ocean policy and structure. We are all convinced that this should include a comprehensive, integrated, transparent, and ecosystem-based planning process for the various uses of coastal and marine space. We share the goal in the vision statement the Task Force expressed in its Interim Report: "An America whose stewardship ensures that our oceans, coastlines, intercoastal waterways and the Great Lakes remain healthy, resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future generations."

Thank you for your attention and your interest in this important topic. I would ask that my written remarks be entered into the record. I am ready to respond to any questions that you may have.

Senator Cantwell. Thank you, Admiral Allen.

Last, we'll hear from the Honorable Laura Davis, from the U.S. Department of the Interior.

Thank you for being here.

## STATEMENT OF HON. LAURA DAVIS, ASSOCIATE DEPUTY SECRETARY, DEPARTMENT OF THE INTERIOR

Ms. DAVIS. Thank you very much, Chairwoman Cantwell and Ranking Member Snowe and other members of the Subcommittee. I appreciate the opportunity to appear here.

I'd like to submit my full written statement and summarize my

remarks now-statement for the record.

I'm Laura Davis. I'm the Associate Deputy Secretary of the Interior. The Department of the Interior is proud to be playing a leadership role on the President's Ocean Policy Task Force.

I'm honored to appear here today with my fellow task-force members, Chair Nancy Sutley, Admiral Thad Allen, and Dr. Jane Lubchenco. I especially want to acknowledge Chair Sutley's leader-

ship and the extraordinary efforts of her staff.

I know that those of you on this committee have worked for many years on the issue of ocean and coastal policy. And all of us look forward to working closely with you and receiving your input

as we move forward.

In June, the President charged us to work together on an expedited timeline to develop a policy recommendation to achieve healthy, resilient, and sustainable ocean, coast, and Great Lakes resources for the benefit of this and future generations. To achieve the President's vision, we have sat down together, over the course of 4 months, at all levels of all of our departments, to meet his charge. We've attended public meetings across the country and heard the thoughtful concerns expressed by citizens living in those regions who took the time to come and meet with us. We've released an Interim Ocean Policy document which includes a recommendation for a robust governance and coordination approach and a plan for expeditious implementation. And we're spending lots of time together now as we discuss how to make our best recommendation to the President on a framework for effective coastal and marine spatial planning. These activities have already strengthened our coordination with each other and our partnerships with States, tribes, regional organizations, and others in the stakeholder community.

All of the Department of the Interior is involved in this effort. The Department has a lot at stake in these discussions. For starters, we have, after all, leasing, permitting, and oversight responsibility in the Minerals Management Service for conventional and renewable energy resources on the 1.7 billion acres on the Outer Continental Shelf. These resources are a national priority to help us se-

cure greater energy independence.

The National Park Service and the Fish and Wildlife Service manage over 35,000 miles of coastline and 254 ocean and coastal parks and refuges. The Bureau of Land Management administers 1100 miles of coastline and the California Coastal National Monument. The Bureau of Indian Affairs works with tribes to address their ocean and coastal issues. And because the Department is committed to sound scientific decisionmaking, the U.S. Geological Survey provides the rigorous scientific research that supports our resource management activities.

So, we're all involved, and proudly so, in working together with our Federal sister agencies to achieve the goals of the President's Ocean Policy Task Force. We're committed to developing and implementing a coordinated and comprehensive national policy for our treasured but vulnerable ocean, coast, and Great Lakes resources. We look forward to working with you as we move forward, to implement this vision.

Thank you again for the opportunity to appear here today, and I look forward to answering your questions.

Thank you.

[The prepared statement of Ms. Davis follows:]

PREPARED STATEMENT OF LAURA DAVIS, ASSOCIATE DEPUTY SECRETARY, DEPARTMENT OF THE INTERIOR

Chairwoman Cantwell, Ranking Member Snowe and members of the Sub-committee, my name is Laura Davis. I am the Associate Deputy Secretary of the Department of the Interior. I appreciate the opportunity to appear before you today to discuss the President's Interagency Ocean Policy Task Force and the Department of the Interior's role in the process and its oceans and coastal responsibilities.

In establishing the Interagency Ocean Policy Task Force, the President said, "We have a stewardship responsibility to maintain healthy, resilient, and sustainable ocean, coasts and Great Lakes resources for the benefit of this and future generations." We at the Department of the Interior are proud to be part of the Task Force and pledge to do our part to fulfill the President's vision for a coordinated, comprehensive national policy for our ocean, our coasts and the Great Lakes.

As the Nation's principal conservation agency, the Department of the Interior is responsible for conserving and providing access to many of our significant coastal

and ocean resources.

The Department manages and conserves ocean and coastal lands and waters to protect native species and their habitats, provide recreational opportunities for the public, and ensure safe and responsible natural resource energy development. Department scientists conduct extensive ocean, coastal, and Great Lakes research and mapping to predict, assess, and manage impacts on coastal and marine environments. In collaboration with our partners, the Department integrates effective multiple-use management from upland ecosystems to deep oceanic waters.

Our oceans, coasts and uplands are interconnected and interdependent both ecologically and economically. As a steward of our ocean and coastal resources, we see first hand, the affects of climate change and other threats and the imperative to increase the resiliency and adaptability of these ecosystems in the face of these chal-

lenges.

The 1.7 billion acres of the Outer Continental Shelf that we manage are crucial to securing our energy independence through conventional and renewable energy development. The 35,000 miles of coastal lands and waters of the ocean and Great Lakes we manage stretch across 35 states and territories and are of enormous recreational, biological, and cultural value to the Nation. Over 254 National Park Units and National Wildlife Refuge Units spanning 34 million acres of ocean and coast conserve and protect places where people connect with the ocean. These areas provide communities the ability to preserve their cultural heritage and economic livelihood. We also work with our insular areas to assist them in ensuring that the coral reefs on which their island communities depend will be there for future generations.

nood. We also work with our insular areas to assist them in ensuring that the Corai reefs on which their island communities depend will be there for future generations. I want to convey to you, Madam Chairwoman, and to the members of the Subcommittee, that the Secretary shares the President's commitment to making our ocean, coasts and the Great Lakes healthy, resilient, and sustainable—environmentally and economically—through improved coordination among Federal agencies and partnership with States, territories, Tribes, and regional and local authorities. And I want to thank the fellow members of the Task Force, those here today and not here today, for their participation in this important effort. Chair Sutley is a great leader and each of the members of the Task Force is committed to the President's vision.

#### **National Ocean Policy Task Force**

Recognizing that the time has come for a clear and comprehensive national ocean policy to uphold our stewardship responsibilities, and serve as a model of coordinated, consistent, efficient and informed ocean and coastal decision-making, on June 12, 2009, President Obama issued a memorandum to the heads of executive departments and Federal agencies establishing an Interagency Ocean Policy Task Force. The Task force is led by the White House Council on Environmental Quality and

charged with developing a recommendation for a national policy that ensures protection, maintenance, and restoration of the ocean, our coasts and the Great Lakes. It will also recommend a framework for improved stewardship, and effective coastal

and marine spatial planning designed to guide us well into the future.

The Department of the Interior has been proudly and actively engaged in the Task Force from the outset. We appreciate that the Task Force collaborations have already strengthened DOI coordination and planning. Interior has also participated in and supported each of the expert roundtables and the series of six public regional meetings with interested stakeholders. Close partnering and extensive public engagement has resulted in greater understanding of the common challenges and opportunities our diverse ocean and coastal responsibilities present and the need for

portunities our diverse ocean and coastal responsibilities present and the need for innovative, science-based and ecosystem-based strategies to guide our decision-making now and for the long-term.

I am honored to be the Department of the Interior representative on the Task Force. The Department has very actively participated in contributing to the Interim Task Force report that was presented to the President and released to the public in September and we continue to participate in the development of the proposed Coastal and Marine Spatial Planning Framework that will be delivered in December. Senior Departmental and bureau representatives are fully engaged in the public proposed to the propos Coastal and Marine Spatial Planning Framework that will be delivered in December. Senior Departmental and bureau representatives are fully engaged in the numerous subgroup, working group and Task Force meetings that have supported the development of the interim report and the proposed Coastal and Marine Spatial Planning framework. Along with sister agencies, The Department has contributed extensive staff resources to support CEQ in writing these documents. David Hayes, our Deputy Secretary and I have attended the public hearings associated with the Task Force, and the Department hosted the virtual Pacific Islands meeting ensuring Washington connectivity to several Hawaiian Islands and to Guam American Washington connectivity to several Hawaiian Islands and to Guam, American Samoa and to the Commonwealth of Northern Mariana Islands. Departmental representatives have attended roundtable discussions that CEQ staff hosted and have supported all six of the public hearings.

#### **Activities of Interior Agencies**

As noted above, the Department of the Interior conserves, protects, and manages more than 35,000 miles of coastline, and 254 ocean and coastal parks and refuges, as well as over 1.7 billion underwater acres of the Outer Continental Shelf (OCS). Our scientists conduct extensive ocean, coastal, and Great Lakes research and mapping to predict, assess, and manage impacts on coastal and marine environments.

Through these efforts, Interior has improved its role and effectiveness within the

ocean and coastal community at the State, regional, and national levels.

The Department of the Interior is helping lead the development of large-scale ocean and coastal ecosystem-based policies, allowing us to cross jurisdictional lines and tackle key problems with partners to carry out on-the-ground projects, and catalyze collective agency and public involvement to find solutions. I would like to highlight for the Committee a few examples our recent success in coordinating on ocean and coastal issues.

Pursuant to Congressional direction, the Minerals Management Service (MMS), working with NOAA and other Federal agencies, has developed the Multipurpose Marine Cadastre (MMC), which allows Federal managers and technical staff, as well coastal States; local, territorial, and tribal governments; private industry; and the academic community, to directly access information and resources necessary to pro-

mote and conduct good ocean governance.

The MMC is an integrated submerged lands spatial information system consisting of legal (e.g., real property/cadastre), physical, biological, human resource, and cultural information in a common reference framework. It is an ambitious, multiyear endeavor that will help greatly inform any marine spatial planning approach.

The MMS has leasing, permitting and oversight responsibility for oil and gas, renewable energy, and mineral activities within the OCS. MMS employs a robust environmental and collaborative process in reviewing these activities including memoranda of understanding with the Federal Energy Regulatory Commission (FERC), the U.S. Coast Guard, the U.S. Fish and Wildlife Service and the Department of Defense, among others.

The Ú.S. Geological Survey (USGS), a world leader in natural science, is an unbiased, multi-disciplinary earth and biological science agency that works in full partnership with States and Federal agencies, to provide data and maps of the seabed and characterization of the aquatic habitat. From the upper watersheds to the abyssal deep of the ocean, USGS is engaged in monitoring water quality and assessing water availability; forecasting coastal change; building a better understanding of ocean-based hazards from landslides, submarine volcanic eruptions, earthquakes, tsunamis, and extreme storms.

The U.S. Fish and Wildlife Service, the National Park Service, the Office of Insular Affairs and the Bureau of Land Management all have numerous successful programs underway that work with Federal, State, territory, tribal, international, and private partners to fulfill extensive coastal and marine-based natural resource conservation planning and coordinate statutory responsibilities. Notable activities involve science, mapping, and monitoring, as well as restoring and protecting barrier islands, coastal wetlands, watersheds, and ocean ecosystems.

### The Coastal and Marine Spatial Planning Framework and Information Infrastructure

The Department of the Interior looks forward to ongoing cooperation and coordination with our partners and stakeholders to meet the President's call to develop a recommended framework for effective coastal and marine spatial planning (CMSP). We share and fully support the President's goal of working toward establishing a framework that is a comprehensive, integrated, ecosystem-based approach to address conservation, economic activity, user conflicts, and sustainable use of ocean, coastal, and Great Lakes resources consistent with international law.

With management responsibility over 35,000 miles of shoreline, Interior very much recognizes the threats to the sustainability of our coastal communities, economy, and natural resources, posed by rising sea levels as today's coasts may be become part of tomorrow's oceans. Additionally, Interior supports securing clean, renewable energy security derived from the oceans as a national priority

#### Conclusion

Interior has and will continue to take a leadership role in national, regional, and local efforts to build the long-term engagement with non-Federal partners to meet goals for coastal and ocean ecosystem and economic health. We stress the coordination of coastal and ocean activities across the bureaus that are responsive to regional priorities established by the states, and effectively meet departmental strategic goals. We work closely with the ocean and coastal community at the state, regional, and national levels. An Ocean and Coastal Activities Coordinator helps to facilitate this critical coordination.

The President's Interagency Ocean Task Force provides an exciting and important opportunity for us all to work together to develop and implement a coordinated, comprehensive plan for our oceans, coasts and Great Lakes. We look forward to working with you as we go forward with this process and I thank you again for the opportunity to appear before you today.

Senator Cantwell. Thank you very much.

And again, thank you, to all the witnesses, for being here. And thank you for your testimony. I think you've outlined areas of responsibility that you each have in the various areas of ocean policy. But, I think as we move forward, the public wants to know, What is a national ocean policy and who's in charge? And if each of you could just answer for me whether you think your agency should be in charge of the policy.

[Laughter.]

Senator Cantwell. I'm very supportive of interagency cooperation. But, I think, having been a member of this committee for several years myself, and being through the last Oceans Commission recommendations, this—and the fact that we—let's just say, the lack of an organic act and various attempts to put focus to this—I think now it's time to come clean and let's say who really should lead this effort. So, if each of you could give me some comments on that.

And we'll start with CEQ.

Ms. SUTLEY. Thank you, Madam Chair. And thank you, for the question.

The report of the Task Force, and really the consensus recommendation of the Task Force, was that we needed to have highlevel engagement, we needed to—through the National Oceans Council and that—the recommendation is to have that Council co-

chaired by the Council on Environmental Quality and the Office of Science and Technology Policy, recognizing the important—the importance of stewardship and science in carrying out this national ocean policy. The National Ocean Council would comprise highlevel representatives from the agencies here and others, recognizing the important work that they do, the important scientific and regulatory work at NOAA, the important activities at—that the Coast Guard carries out, and the responsibilities of the Department of Interior, as well as others who have important responsibilities over our coasts—oceans, coasts, and marine resources. So, the—that recommendation, I think, builds on the recommendations of earlier commissions, including the Joint Oceans Commission and the U.S. Commission and the Pew Commission, that there needed to be some high-level oversight and coordination, and that really—I think the recommendation of the National Ocean Council is built around that.

Senator CANTWELL. Dr. Lubchenco, what is the policy, and who's in charge?

Dr. LUBCHENCO. Thank you, Chairwoman.

It's pretty clear to me that, for a national ocean policy to be fully successful, it needs to have strong guidance about what the goals are, it needs to have strong leadership as well as good collaboration and cooperation. And so, in my view, the keys to success are leadership that facilitates the coordination and collaboration. Also, accountability for implementation of the policy, and visibility and access at senior White House level as well as throughout the Federal family.

I don't believe that any single agency can fully execute all of the qualities that I just articulated as being required. I do believe that NOAA has the scientific expertise and the ocean and coastal management experience to be an important leader in this effort, the implementation of the policy, and in providing the scientific expertise that is required to make it fully successful.

Senator Cantwell. Is that an endorsement of Chair Sutley's recommendation, or an alternative?

Dr. Lubchenco. I've articulated what I think are the elements to success. I—and those include having strong leadership that is able to convene all of the relevant agencies. I'm telling you that I think we have a key role to play in this.

Senator Cantwell. Thank you. Thank you.

Admiral Allen? I know I'm asking a dicey question here, but, at the same time, this is what we've got to get down to. People in my State—and we're going to hear from some of them, and, I'm sure, from my colleagues; they're going to want to know who's in charge of this policy.

Admiral Allen. Yes, ma'am. And thank you for the question.

Throughout our deliberations on the task force, I have been in very, very strong agreement with Administrator Lubchenco's position on this. And we both feel that spec'ing out the functions that are required to be successful are what's really important here. And she talked about accountability, access, and ability to actually achieve and effect across the interagency, and I think that is very, very important, moving forward.

The Coast Guard is always going to be a supporting player, not a lead, on this. But we are looking for the ability to go to a single point in government to merge the policy issues and, frankly, ultimately make very, very difficult resource decisions on how we're going to proceed with implementation.

So, I support Director Lubchenco.

Senator Cantwell. Deputy Secretary Davis, how about the Interior Department? Do you want to step up to the oceans?

Ms. DAVIS. Well, thank you, for the question. And I think we do

have significant responsibility and authorities in the ocean.

I will say that—I mean, you've obviously put your finger on that there are a lot of different agencies with a lot of different interests in ocean and ocean policy. We do believe, at Interior, that the approach outlined in the Interim Task Force report, which is—brings the requisite senior-level attention to this issue set, will be able to provide the direction and the accountability that Dr. Lubchenco talks about. Because, I think—we believe it is very difficult to assign one agency with this responsibility alone.

Senator Cantwell. Thank you.

Senator Snowe, do you have questions?

Senator SNOWE. Yes, I do.

Senator CANTWELL. And we're going to do a 5-minute round, so—

Senator SNOWE. Thank you.

To get back to the question that the Chair posed, noticing the composition of this council, it would include the Administrator of EPA and the Administrator of NASA. Both agencies, of course, have independence from the overarching departmental authority; they have budget independence. Now, we know that NOAA doesn't. And that has been the case since the Administration of President Nixon. So, that goes a ways back. And I'm just wondering if that would not be a preferable approach: to establish NOAA in law. I mean, to pass legislation that gives you statutory authority that first, I think, would solidify NOAA's position as the leader on oceans issues. I mean it defies reason, as to why NOAA would not be part of this council. I understand the Secretary of Commerce is part of it. But, that still doesn't get to the direct issue, in terms of who is the preeminent leader, when it comes to ocean policy, within the agencies.

So, would that help, Dr. Lubchenco? Should we take that step to codify your agency into statute? Is it long past due? Because, I see

the lack of authorization as an impediment, frankly.

And, second, given the fact that NASA and EPA are both included in this council, it doesn't stand to reason that your agency is not. Now, I'm just trying to understand, what was the rationale involved? First of all, Chair Sutley, why that didn't happen? And, secondly, Dr. Lubchenco, can you comment on whether or not we should move forward with providing you statutory authority?

Chair Sutley?

Ms. Sutley. Thank you, Senator Snowe, for the question.

I think the recommendation was to try to give the highest-level attention to the very important issues surrounding the National Ocean Policy, and the work of the proposed National Ocean Council was that it—the representation on the Council be at the secretarial

level—or, the Cabinet Secretary level. We certainly expect that NOAA will continue to play a very strong role on—not only on the task force but on any subsequent structure that we adopt, including the National Ocean Council. Their scientific expertise, resource management expertise and authorities are incredibly important to the success of any national ocean policy, and Dr. Lubchenco, who's been very active in the task forces, has joined me at all the public hearings that we have. So, we expect NOAA to be a very important and key part of this process.

Senator Snowe. Well, I just would say that I understand the issues of secretarial representation, but that's not true of the entire Council that's being proposed. And I just believe that providing NOAA with the leadership position that it deserves at this point in time, to be the conduit for ocean policy. So, I just am sort of mystified as to why NOAA would have been exempted, because there are other agencies that are in here, that are not at this secre-

tarial level, that are included in this council.

Dr. Lubchenco?

Dr. Lubchenco. Senator, the composition of the National Ocean policy—I'm sorry—the composition of the National Ocean Council included principals and deputies that were explicitly identified. And the representative from the Department of—and therefore, Commerce is represented by the Secretary on the Council. Because NOAA is within the Department of Commerce, and because it's the principals and deputies, I think that's the way that sorted out.

I do believe that it would be very beneficial to NOAA to have an organic act. I don't believe it's my responsibility to say whether it should be an independent agency or remain within the Department

of Commerce. That's beyond my pay grade.

Senator Snowe. Right. But you see specific benefits deriving from codifying your agency into law—

Dr. Lubchenco. I do believe——

Senator Snowe.—giving formal leadership role—

Dr. LUBCHENCO.—it would be very useful for us to have an organic act.

Senator Snowe.—however we do it. Right.

Well, I just see that it made much more sense to include NOAA in the Council, to be the conduit to the Task Force, given the fact that you are the lead agency when it comes to ocean policy. So, I appreciate that. I know it's a difficult position for you to respond to. But, it is certainly something that I think, Chair Cantwell, we ought to address here within the Committee.

Thank you.

Senator Cantwell. Thank you very much.

Senator Begich.

Senator Begich. I—thank you, Madam Chair—and I hate to continue on this line, but I'm just trying to understand it a little bit better. And I'll just give you an example. When I was mayor, and we had a situation with crime in our community, I co-chaired, with our U.S. Attorney, and had multiple folks—because, at the end of the day, in our situation, we pulled the trigger on the amount of money and resources. And so, I'm looking at who's co-chairing. And what I've learned, in my very short time here, if you don't have the right people at the top, the resources don't get allocated, which is

a big question I have on this. It's great policy, but I read very little about how we're going to allocate money, other than—I see some comments, Dr. Lubchenco, that I'm going to ask you about. So, be

prepared for that.

Why would you not just have the co-chairs—and this—maybe I'm just too new to this—is the Secretary of Interior, Secretary of Commerce, and their designees—and then have agencies, like yourself and the list that you had, Ms. Sutley, in regards to who would be the contributing partners? I think Admiral Allen laid it out how he plays a role, here. He's not the lead role, but he plays a contributing role. Why not do that? Because, at the end of the day, the Secretary of Commerce and Secretary of Interior will have to allocate resources, if we believe the oceans are a significant piece of the equation of our country and what we need to do. From Alaska's perspective, it is very significant. It's economic development. It's environmental issues. It's huge. Why would you not do that?

Who wants—because, at the end of the day, you've got to pull the trigger on who's going to foot the bill and take care of all these recommendations. Otherwise, there'll be another report that these folks have seen for multiple years.

Ms. SUTLEY. Thank you, Senator.

I—I'll say, we didn't—if—CEQ didn't ask for this recommendation, but I think the—it was the consensus of the Task Force that the Council itself needed to be chaired by White House entities because the responsibilities over the oceans, coasts, and marine resources, and the Great Lakes really cover so many parts of the Federal Government. And the concern that all of the pieces of a national ocean policy would need to be considered and—to ensure that—as well as that we are—as we carry out these stewardship responsibilities, we're also coordinating and linking into important commercial shipping, security interests that lie outside of, I think, the direct domain of what we propose with respect to the National Ocean Council.

So, there were many suggestions made to us. And, as I said, the recommendations of the previous outside commissions was that there be high-level engagement from the White House, as well as the agencies involved. So, that was the basis of the task-force discussions and the basis of that recommendation.

Senator Begich. Fair statement. I don't agree with it, but thank you for that. I just think that, you know, in all my experience, it—you know, at the end of the day, it's going to—where are the resources going to go to allocate for these purposes? And someone has to pull that trigger on the highest level possible in the Department; it seems to me, the Secretary level.

Let me, if I can real quick, Dr. Lubchenco, on a—kind of moving somewhat away—but, in your prepared remarks, you mentioned that NOAA may have to modify or reprioritize some of its missions and data-gathering responsibilities. Can you—are you prepared to elaborate a little bit more what you mean by that so I understand that and understand what the impacts might mean in—what resources you may adjust or where the focus might be from your department?

Dr. Lubchenco. Senator, it's clear that to fully implement the types of areas identified in the interim report will require signifi-

cantly more information and the acquisition of that information, for example, to better integrate, across the Federal family, many of the activities that affect oceans and that benefit from oceans. Doing that will require some additional effort. And although the Interim Report has not, obviously, been finalized and we are still working on the marine spatial planning portion of the report, what it—what will be laid out in the end are—is mostly policy and framework that will then need to be made much more specific, partly across the Federal family, partly with respect to interactions between States and tribes. And as we get into the identification of those specifics, it will be easier to map that onto what current—the extent to which our current capacities can meet those, as opposed to additional areas where we need—may need to redirect resources or have additional resources. So, these are starting discussions, framing policies, and their implementation remains to be identified.

Senator Begich. Thank you very much.

My time has expired. Thank you, Madam Chair.

Senator Cantwell. Thank you.

Senator LeMieux, welcome to this subcommittee. Glad to have your participation.

# STATEMENT OF HON. GEORGE S. LEMIEUX, U.S. SENATOR FROM FLORIDA

Senator LEMIEUX. Thank you, Madam Chair.

Thank you very much for your testimony this morning.

And thank you, for holding this committee meeting. It's very important to Florida. I can't think of a state that's more impacted by the work that you're going to do than Florida. We, with the exception of Alaska, have the longest coastline in the United States, as the Admiral knows, 14 ports with lots of traffic in and out. We're one of the largest exporters, as a State, in the world. And a huge, important part of our lifestyle, as well as our tourism that comes to our State, involves recreational fishing. We have more recreational fishermen, a million or so in Florida, than some 20 states combined. And I'm getting lots of letters from constituents who feel that this process is excluding them and that they are not being listened to. And it's very much heightened with these new restrictions that are being placed on fishing; on grouper, on snapper, and now on amberjack. I hope, once we figure out who's going to be in charge of this and who's going to spend the money, that you all will listen to recreational fishermen, especially from my State of Florida, and the impact of what you do. These exclusion zones that are discussed, for where fishing can be and can't be, have a huge and dramatic impact on our State. And it's my concern that we are lumping together commercial fishing and recreational fishing. For many years, our recreational fishermen have lived under standards for limits of how many fish they can take. And those standards have worked.

And, specifically, Doctor, in terms of the National Marine Fisheries Services, and the work that they're doing and these different rules that are being placed about fishing for different fish, I have a great concern that the information that you all are using to make these decisions is not accurate. Now, we are hearing, from our fish-

ermen, information that's opposite to these scarcity reports about these different fish.

I have more of a statement to make than a question. But, my question and hope from you is that you will take into account recreational fishing. It's a huge part of Florida's commerce and lifestyle, and certainly a big part of the ocean, in terms of how we view it. And I wonder, if you want to start, Dr. Lubchenco, and talk to the point of recreational fishing and how it will fit into this

strategy.

Dr. Lubchenco. Senator, thanks very much, for that question. And thank you for the opportunity for me to clarify that recreational fishermen are very important to NOAA. I have had extensive conversations with leaders within the recreational fishing community, especially over the last couple of months, and have heard many of the same things that you have heard. They feel that they have not been paid attention to by NOAA. I've made it clear that we intend to change that. We—NOAA and the recreational fishing community should be natural allies. And we haven't had the kind of productive working relationship that I believe we should and can and will have.

And within NOAA, I'm making some internal changes. I have announced the intent to create a new position, a senior policy advisor for recreational fishing, to make sure that we have clear channels of communication, clear responsibility within NOAA. I met last week with the American Sports Fishing Association's Sports Fishing Summit, in San Diego, to communicate that message and to find ways that we can work collaboratively together in a very productive fashion.

We share an interest in having healthy oceans. More fish mean more responsibilities for fishermen. And many of our policies are

designed to achieve those goals.

I believe that there was not any explicit desire on the part of the Interagency Ocean Policy Task Force to exclude mention of recreational fishing. And we have heard, in our public hearings, that this was an omission. One of the benefits of having an interim report with lots of opportunities for the public to comment—one of the benefits of having the public hearings has been, we've been able to get that feedback. And we have heard it.

Senator LEMIEUX. Well, thank you very much for that.

Chair Sutley, could you comment on recreational fishing, as well?

Ms. SUTLEY. Yes. Thank you, Senator.

We—the task force, I think, recognizes the significant role of recreation, including fishing, beach access, nature-watching, boating, and all of the activities. My parents live in Florida and spend every day at the beach. And so, we recognize that recreation is a very important part of how we, as Americans, value our coasts and our marine resources. And we didn't mention sectors specifically in the report, but, as Dr. Lubchenco said, we have heard a great deal from the recreational fishing community. We've had some stakeholder meetings with the recreational fishing community and are looking forward to continued opportunities to interact with them.

Senator LEMIEUX. OK. Thank you very much, Madam Chair.

Senator Cantwell. Thank you very much.

I think we're hearing, you know, from all Senators here, obviously, a strong concern that NOAA be part of any kind of national council, and obviously there—that there has to be strong leadership. So, I'm sure we'll have more opportunity to discuss that.

I think what I'm going to do is allow for a second round, I think, if that's what members are interested in. And then we will get to our second panel and hear from them, as well. But, we don't get all of you here collectively in your representative perspectives, the

hats you wear, so we're going to take advantage of that.

One of the obvious debates that we're hearing a lot about is about climate change and what to do about climate change. And often I think the oceans are left out of that discussion, or at least not a centerpiece, and yet, for the various reasons we all just mentioned, it's where the most dramatic impacts are happening right now. And the proposed National Ocean Policy includes a resiliency and adaptation to climate change and ocean acidification. So, it does call out for some special emphasis there. How do we—how would we go about implementing that? How would we go about meeting those objectives?

And so, what I want to do is hear from each of you about how

And so, what I want to do is hear from each of you about how would the White House, how would NOAA, Department of the Interior—how would we meet those objectives, and who do you think

would be in charge of that?

Ms. Sutley. Well, thank you, Senator. The issue of climate change, I think, was really one of the motivations for wanting to take on this challenge of developing a national ocean policy, recognizing the stresses on the ocean and our marine resources and our Great Lakes, that the—that climate change is putting on them. So, it's a very important component of the report. It's an important component of how we intend to go forward. The issues about adaptation and science are very important, and I think that having the engagement from the science agencies, from NOAA and the Department of Interior, and NASA and the other science agencies, to understand the science, understand the impact of climate change on the oceans, and going forward on this—in this task force and other efforts within the Federal Government, on adaption and resiliency, I think we have a lot to—both to learn and to put together some implementation plans. But, the report does highlight how important—and that this is one of the strategic objectives that we need to turn our attention to first.

Senator Cantwell. Dr. Lubchenco?

And, if I could add, just to something to that, just as an example, you know, how, under this National Ocean Council, would somebody deal with what we've just seen in Washington—the State of Washington, with this toxic algae bloom? Who—other than just studying the problem, who would be in charge of doing something

about the underlying causes?

Dr. Lubchenco. Madam Chair, I greatly appreciate your drawing attention to the importance of oceans in the climate—in our discussions about climate. It's clear that oceans have a key role in the climate system, that they are being impacted by climate change, and that many of the ways that we are dealing with specific events or new policies must be taking climate change into account.

One of the important roles that NOAA plays in this is to provide much of the observing information, both in situ, as well as from satellites, to provide much of the modeling information and the scientific basis for us to understand what's happening and be able to make forecasts about what's likely, down the road, with the idea of using that information directly in making better policy and management decisions in light of climate change and ocean acidification.

The importance of those issues to the business of the Ocean Policy Task Force is partly recognizing the important cross-cutting assets and cross-cutting responsibilities across the Federal family for addressing climate change and ocean acidification. So, I believe that we can make better progress in adapting to climate change by working—by having the Federal family work more closely together, not just across the Federal agencies, but also in partnership with States and with tribes.

Relative to the specific very unfortunate occurrence of the harmful algal bloom causing the mortality of all the birds in Washington, I think one of the things we're going to see more and more often are surprises with respect to things like that happening. I do not know if we can attribute that event to climate change specifically. But, it is clear that we are seeing increasing surprises, and part of our management should be done with the expectation that we are going to be seeing surprises, that there is uncertainty in this future world that is being so affected by greenhouse gas emissions.

Senator Cantwell. That was exactly my point. I don't—it's not so much that I think that's attributable, because it's probably attributable to runoff and a whole bunch of different things, but, when we find a cause, I'm interested in what we're going to do to act. And again, a council versus, you know, direct authority, is what we're trying to understand here. We understand the dramatic impacts. Not everybody in America understands the dramatic impacts that are happening to our oceans, because they look out and they see the water and they think everything's OK. But, when you see an instance like this, 8,000 birds dead on the coast of Washington, you understand that something is not right. But, then the question is, Who's going to do something, on the preventative side? What agency here, what action is actually going to come up with a result where somebody is going to take action and authority?

We all hear what EPA is saying about the atmosphere in general, and what they're going to do. But, we're interested in what specifically is in the actions they're going to be taking on ocean policy.

So, I don't know if either of the other two witnesses want to respond to that. I know it's probably a little more germane to Dr. Lubchenco and Chair Sutley, but if you have a comment, we'd love to hear it.

Admiral Allen. Just a brief comment, ma'am.

We recently concluded an agreement between the United States and Canada, working in the United States with the United States Coast Guard, NOAA, and EPA, to establish 200-mile zones off the coast where we would limit the types of fuel that ships could use as they contribute to the emission of greenhouse gases, and there-

fore, the ultimately link to acidification. A small piece, but instructive, in that that's what's going to happen, as Dr. Lubchenco mentioned, to integrate across the Federal whole-of-government approach, how to act when you have a situation like that. And I think this small step toward the elimination of greenhouse gases and their contribution to ocean acidification is an example of the types of things we need to do and how we have the opportunity to, to use a military term, "tighten up the formation" and focus our effort to pick those places where we can and have an effect.

Senator Cantwell. Secretary Davis?

Ms. DAVIS. Thank you, Chairwoman Cantwell, for the question. I think, first, I would say that the Department of the Interior is seeing climate impacts on lands that we administer throughout the United States, coastal and otherwise. So, this is incredibly important, that we address these issues in the evolving ocean policy that

we're all working on.

And Interior, of course, has science to bear and to bring to this effort. And I think that's one great benefit of the Ocean Council, as proposed, is that you do have senior-level attention directed from the White House and all of the senior management of the agencies involved and talking and cooperating. I don't think you can overstate the importance of that occurring. And this-I-it sort of leads to an answer to your question about the "And then what?" when you have a situation like you do off of your coast. And I think that, just practically speaking, the fact that under a National Ocean Council, with regular meetings and senior-level involvement and talking about issues like this as they come up, and what the science is telling us about what we're seeing out there, you have a lot better chance, with all of us in the room, of seeing an actual a plan of action and a coordinated plan of action that benefits from the communication and collaboration that we think will come out of-come out at the back end.

Senator Cantwell. Thank you very much. Yes, I think it really just points to the fact that, just because we can't see underneath the oceans, we haven't seen the neglect that has existed, and that neglect is really causing us serious problems today. So, thank you all for your answers to that.

Senator Snowe?

Senator SNOWE. Thank you.

I wanted to follow up on one of the issues that had been raised in one of the mandates that the task force was given with respect to ocean policy. One was to develop the National Ocean Policy. The second issue, of course, was marine spatial planning. And, Commandant Allen, I'd just like to discuss this with you, initially, because obviously there are multiple challenges in this concept which still appears to be nebulous. And even the public hearings elicited, I think, few details in what would constitute a public policy and how it would work with respect to marine spatial planning. And I know there have been concerns expressed by ocean stakeholders like the maritime industries, for example. Some of the states in New England have conducted a planning process within their own state waters. But, nevertheless, when you're talking about a broad-scale plan, as recommended in this effort, which is talking about 3.4 million square miles within the Exclusive Economic Zone, it

does raise tremendous concerns among commercial and recreational fisherman, for example.

So, first of all, how would this process work, to begin with? I mean, how do we navigate this pathway to encompass this broadscale, as some have said, "ocean zoning"?

Because that just raises significant questions about how that process would evolve, first of all; and, second of all, who would be affected by it; and third, I want to talk to you about the emerging homeland security threat posed by small vessels, that we discussed last week, as we've seen, off Mumbai, India, off the coast of Somalia, even the USS Cole, back in 2000, in Yemen. And so, how would

that be reconciled with marine spatial planning?

Admiral ALLEN. Yes, ma'am, thank you very much for the question. And I thank you doubly for the question because we get involved in this every day in the United States Coast Guard. In addition to our enforcement and regulatory responsibilities, we are often a cooperating agency in licensing and permitting activities with the other agencies that are represented here at the table; most notably in doing waterway suitability assessments for things like deepwater ports for LNG offshore, renewable wind projects, and so forth. In the process of doing that, we tend to answer in a silo about what are the implications of that particular activity, in terms of safety and security on the waterway. A lot of times, the Coast Guard's determination on what happens is taken as a surrogate vote on how the waterway should be used. And that is not what we're trying to do. We're trying to just comment on that particular activity.

At the heart, marine spatial planning looks at what we call ecosystem-based management. It's a more holistic approach to all the activities that take place out there, including the need to conserve, look at conflicts with uses, create greater transparency on the in-

formation that's used to support those decisions.

And I'll give you a very good example. It was highlighted, earlier by, I believe, Dr. Lubchenco. We went to some very great lengths to reorient the vessel traffic separation schemes coming in to Boston, to make sure that we weren't in an area where right whales would gather in habitat they would operate in. In the process of doing that, we found out, shortly thereafter, that there was an application for an offshore LNG site right where we were moving the traffic lanes to. This is a classic case where you could deconflict these activities, and we see this as a cooperating agency, moving forward.

And I think what we need to figure out is how to do this, because these activities occur. They're not stopping. They will continue, whether or not we have marine spatial planning or not. But, the opportunity afforded to do this in a coordinated manner, we see the value of that immensely every day, in the everyday work of the Coast Guard. And that includes—we talked about recreational boating, commercial fishermen, recreational fishermen, and the extraordinary amount of use by small-boat traffic out there. If you put a security zone around an LNG ship that's moving through Narragansett Bay, you have effectively excluded the use of that area for small boats. And that's the type of discussion we need to have, ma'am.

Senator SNOWE. And how—either you or Chair Sutley or Dr. Lubchenco and Deputy Secretary Davis, could you explain how we

expect this process to work?

Ms. Sutley. Well, really, at the end of the 180 days, where we'll have a draft report—a draft framework on coastal marine spatial planning, I expect that that—it will be just that, a framework, a discussion of what we believe marine spatial planning is, and some recommendations on how we might move forward. And, as the Commandant said, I think the concept is really to try to look across the activities and uses of the space in the ocean and try to understand how they all fit together.

So, at this point in our discussions, we haven't, sort of, settled on any particular definition or way of moving forward, but that we would have a recommendation. It will be, really, a fairly high-level recommendation, and we'll seek additional input and comment on that before we move forward. And I think we recognize that, in many of the activities that the agencies who are part of this discussion participate in, they already think about how there are uses of the ocean resources, and we want to make sure that we're using the information we have and the science we develop to understand how those uses fit together.

Senator SNOWE. But, a process hasn't been established——

Ms. Sutley. No, it has not.

Senator SNOWE.—at this point.

Ms. Sutley. That's right.

Senator SNOWE. I would think that that would be a very complicating approach, frankly, in terms of designing a process, let alone the whole map. So, do you think that that's really conceivable?

Ms. Sutley. Well, I think——

Senator SNOWE. I'm just not so sure how it will work.

Ms. Sutley. Well, as we're in the middle of the process of trying to even describe the framework, I expect that it will be a long-term process and, you know, require a lot of thinking and discussion and public participation to come up with something that works.

Senator SNOWE. OK. Thank you.

Senator CANTWELL. Senator Begich, you have a second round of questions?

Senator Begich. I do, just a few.

And, Ms. Sutley, I was listening carefully; and, you know, my background as a Mayor, I was just visualizing the comprehensive plan we have just done for Anchorage—took 10 years, three mayors. I can't even imagine how many public hearings we had, community meetings. And I look at marine spatial planning as—it's zoning for the waters. I mean, that's basically what it is. And I want to also echo some concerns of how that—I'd be very curious how that process works, because, as someone who's struggled with doing this simple, I thought, comprehensive plan for a community that wasn't that large, in the sense of groundmass, it turned into a long, drawn-out process, and very expensive process, to add to that. So, I just—I'm—you know, I'd be very curious about that.

And also, just a statement generally is, in that experience, which is small in comparison to, obviously, the marine spatial planning is, one size cannot fit all. Every region is different. Florida is different than Alaska. The East Coast is different that the western States. So, as you think about that.

I made a statement in my opening comments regarding the—I felt, as well as the State of Alaska's State government feels, that there was a lack of economic understanding of the fisheries, energy, commerce, that occurs within our oceans, in the interim policy. One, Ms. Sutley, do you agree with that? And, if so, in the next period of time, how will you address what we think is a void in this plan?

Ms. Sutley. On your first point, on marine spatial planning, I think we recognize it's going to be a challenging exercise, and I think the analogy is to the kind of comprehensive planning we do on land. But, I think, again, just trying to break through some of the stovepipes and look in a more integrative way at how all of us relate to the use of ocean resources And, I think, very important and—to that is going to be, How do we interact and make sure that we're really taking a bottom-up approach, that this does reflect the differences among regions—certainly the Arctic and Alaska as its own region—

Senator Begich. Right.

Ms. Sutley.—but that that has—for this to be successful, we have to have something that does recognize and does come from the regions themselves—

Senator Begich. Thank you, for that.

Ms. Sutley.—coming up. With respect to the economic interests, I think the President asked us, really, at this point, to focus on some of the stewardship issues. But, we recognize, in the report and in our discussions, how important it is to link the work that the task force is doing to important economic considerations, including recreational, commercial fishing, shipping, and energy development; and I think, again, reflected by the task-force members who are here, that those interests are very important, shipping and security interests; that the Department of Homeland Security and the Coast Guard, the Department of Defense has been very engaged in this process. The energy development oversight responsibilities that the Department of Interior has, and the fisheries responsibilities that NOAA has are all very important. As we go forward and as we consider how we finalize the report, I think we'll ensure that we're clear on the link between the—

Senator Begich. That's great.

Ms. SUTLEY.—the health of the oceans, and our healthy economy, and these important economic uses of the ocean.

Senator Begich. Great, thank you very much. And then, in your—when you do your final report—this is going to be a—kind of a consistent comment I'll have, not only in this committee and other committees that I serve on, and other aspects—is, Will you discuss the budgetary requirements—where and how that will occur? You know, we do a lot of bills around here, but we always forget one little component of it, and that is how we're going to pay for it. And what happens is, the Departments then get subjected to additional workload and say, "Well, now shift everything around and make it all work, and oh, by the way, don't diminish what you're doing," which is totally impossible. So, are you going to ad-

dress the financial requirements, short-term as well a long-term, at all in the report?

Ms. Sutley. Well, the report has—

Senator BEGICH. And if not, could you? Let me-I'm going to

jump to the potential answer, so—

Ms. Sutley. Yes. Well, the report outlines that we—you know, we understand that agencies will have to commit resources and assets, and many of them do, certainly, now commit significant resources to their responsibilities on the oceans. And the interim report outlines the development of strategic plans on the priority areas, including the Arctic. And in that process, I think where—that's where we would expect the budgetary and resource needs to be identified for these areas, for the agencies who are involved in this effort.

Senator Begich. Thank you very-

My time is up. And, Madam Chair, I'll have some other questions

I'll submit for the record and just go from there.

But, again, thank all of you. And thanks for all your work on the effort in the task force, and I'm looking forward to continue to work with all of you.

Thank you very much.

Senator Cantwell. Thank you.

Senator LeMieux, do you have a second round of questions?

Senator LEMIEUX. Just one topic, Madam Chair.

I wanted to speak to Deputy Secretary Davis about how you're going to integrate the potential energy opportunities there are in the ocean. We're doing some really unique research, I think, at the Florida Atlantic University, in Palm Beach County, on tidal energy capabilities. With the Gulf Stream right off the eastern shore of Florida, there are some really unique opportunities, going forward, with generating energy from the sea.

How will that work in this process? As I understand it, the Department of Interior, operates under a 5-year plan. There's been some concern that this is a difficult framework for these technologies that are advancing so quickly. So, if you could speak to what the Department is looking at and doing, in terms of these potential capabilities in the ocean for energy, not just the traditional ones of exploration for oil, but these new renewable types, as well

as how this will fit into the ocean task force.

Ms. DAVIS. Thank you for that question, Senator. I appreciate it, and you are right that the oil and gas activity that we conduct, that is under the Outer Continental Shelf Lands Act, isn't a good fit at all for the potential renewable opportunities off of our coasts. And we were given the authority, under the Energy Policy Act, to conduct renewable activities. FERC will be primarily doing wave management. And we are stepping out very aggressively on wind offshore on the Outer Continental Shelf. And Secretary Salazar and the Administration certainly realize the great potential for developing this clean energy source. Earlier this year, the Secretary announced the first-ever framework for the development of offshore wind energy that's being implemented now. And thanks to that framework, we now have an orderly process and an open and a transparent process through which wind projects are being evalu-

ated and permitted. There's a whole lot of interest on the East

Coast and some growing interest in other places, as well.

With regard to how this all fits into Ocean Policy Task Force, I think we feel very strongly that the collaborative and communication aspects of the policy and the marine spatial planning approach, which we're working hard to figure out what that framework is—our view is that the information that's developed there and communicated probably better and more accurately among us as we go forward, it's going to enhance our ability to make choices—you know, good, scientifically and ecosystem-based choices about where it's appropriate to site and permit these resources, and other places where it may not be as advisable.

Senator LeMieux. Do you think that you'll set up a similar framework for the tidal energy harvesting? Not just the wind, but also, these—you're familiar, I'm sure, with these buoys that float in the water, and the other things that are being looked at, that can then generate energy; will there be a similar permitting proc-

ess, as there is for the wind?

Ms. DAVIS. Well, that's going to be largely handled through FERC and its permitting processes, so I really can't speak to, sort of, what they're thinking.

Senator LEMIEUX. Why does one go to one agency, and one go

to the other?

Ms. DAVIS. We executed a Memorandum of Understanding between the agencies. There were some lingering questions about who would handle what, in terms of offshore permitting for renew-

able energy activities. And that's how that happened.

Senator LeMieux. I think, Madam Chair, that kind of goes back to your question about who's in charge. If we've got two similartype activities being potentially regulated by two different agencies with two different regulatory schemes, how is that going to interplay into coastal traffic, recreational fishing, commercial fishing. So, I think your point is well taken.

I thank you, for your answer.

Senator Cantwell. Thank you, Senator LeMieux.

And again, thanks to the panelists. I think you can see, from the members who attended, we care very much about this policy. I think we're all for more focus on the oceans, but we want that to be a clear and transparent process. And given what's transpiring, we certainly don't want to just have oceans by committee; we want to have oceans leadership. And so, we applaud all of you for participating in that effort. So, thank you very much for being here today.

And obviously, if members have follow up questions, they'll submit those to you. And if you could get back with responses, we'd appreciate it very much. But, again, thank you for attending.

We're going to turn next to the second panel to hear from them about the formation of oceans policy and governance and what types of activity of governance we should see.

I want to call up to the witness table, if we could do that quickly—if people could move out quickly, I would appreciate it—we'd like to call to the witness table Mr. Billy Frank, Chairman of the Northwest Indian Fisheries Commission; Dr. Dennis Takahashi-Kelso, Executive Vice President of the Ocean Conservancy; Mr. Matthew Paxton, from the Coastal Conservation Association; and Ms. Carolyn Elefant, from the Ocean Renewable Energy Coalition.

We thank all of you for being here today to participate as witnesses in this hearing on oceans policy. We look forward to hearing your comments and, specifically, how you think the new oceans policy and governance would work, particularly from the local perspec-

So, Mr. Frank, it's a pleasure to have you here before the Committee. We appreciate your leadership in the Northwest, and the Northwest Indian Fisheries Council. And we look forward to your testimony. But, thank you for traveling to this Washington.
Senator Cantwell. You might have to push on the microphone

button, there, so that-Mr. Frank. Is that it? Senator Cantwell. Yes.

Mr. Frank. Oh.

# STATEMENT OF BILLY FRANK, JR., CHAIR, NORTHWEST INDIAN FISHERIES COMMISSION

Mr. FRANK. Thank you, Madam Chairman. And thanks for the invite from the Committee, and thank the Committee. I hear a lot of questions and a lot of answers, I hope. And, you know, the ocean needs us all, especially right now, as I heard.

You know, our tribes are from the great State of Washington and along the Pacific Coast. We manage 200 miles out in the ocean. We sit on the Pacific Fishery Management Council. We sit on the U.S./ Canada Pacific Salmon Commission for the international treaty for salmon. We manage from Alaska to Mexico. And we stand ready

to, hopefully, be part of the policy over the ocean.

The ocean certainly needs all of us right now. We're extremely concerned about acidification and certainly, the warming of our ocean, our climate, the changes that we see that's going along. We manage from the snowcaps to the whitecaps. And we live along the watersheds, we live along the ocean. If you want success, include the tribes, include our natives from Alaska, include our Hawaiians that live along the ocean. You know we're connected—our infrastructure is together. You know, I consider our infrastructure as the center of excellence. As the U.S. Senate knows, and U.S. Congress and the President of United States, we're involved in natural resource management, and we are here to assist, whatever we can do, to make a better day for our ocean, as well as all of our watersheds and certainly our Puget Sound in the Great Northwest.

We support regional approaches to management of our ocean issues. We need to provide adequate funding for implementing of the policies, set clear well-designed coordination mechanisms, among all responsible managers, actively promote and support an ecosystem based on management approach, engage treaty tribes in development guidelines for marine special planning. The zoning of the ocean is a concern, it's very important that we do it right.

And you have on record our general tribal position. The Makah Tribe along the Pacific coast, that is one of my member tribes that belongs in the Northwest Indian Fisher Commission, we support their testimony, along with all of our other tribes along the ocean. And certainly we work with the Columbia River Fish Commission,

as well as the Great Lakes Fish Commission. Our tribes are all hooked together. And on natural resource, we work with our native Alaskans up in our north country. We're concerned in all of what's happening, as far as the ocean is concerned. We need more attention to everything that's happening within the zoning of our land, the zoning of our mountains, and the zoning of our watersheds. We need some strict attention to that. I think we need a panel of the states sitting here to address, "What part do you play in this great movement that we're going to do?"

We can't fail—if we write a policy, we must see it through. Let's not put it on the shelf, like the policies in the past. I remember Senator Magnuson, I remember Senator Jackson, in my time, and I remember all of the Presidents that came forward after that—policies that sit there and never get moved; they're still sitting

there. And here, we're looking at another policy.

Hopefully, we can find a policy that's going to bring us all together and address the problems of the ocean. Certainly, I heard all your concerns, our Chairlady, and we're now out there, with our tribal people, monitoring the ocean right now with all of the things that are happening on our coast and inside Puget Sound and the Straits of Juan de Fuca.

So, thank you.

[The prepared statement of Mr. Frank Jr. follows:]

# PREPARED STATEMENT OF BILLY FRANK, JR., CHAIR, NORTHWEST INDIAN FISHERIES COMMISSION

The western Washington Tribes wish to thank this Subcommittee for the opportunity to provide our perspective on the need for a national ocean policy. The treaty tribes of western Washington have been stewards of our lands and waters since time immemorial. Sustainability has been the central theme of our management philosophy. Preserving our fish and wildlife resources, as well as access to them, is essential to our economic, cultural, and spiritual well being. This importance has always been understood by our people and is why our hunting and fishing rights are secured by treaty with the United States. The breadth and scope of current tribal involvement in all aspects of natural resource management underscores how central it remains to tribal life today.

The western Washington Treaty Tribes regard the Federal Government as a partner and trustee charged with the conservation and protection of ocean resources and the tribe's treaty reserved right to harvest those resources sustainability for generations to come. This partnership and trust relationship must be recognized within the development of a national ocean policy and incorporated within the resulting ocean governance structure. In recognition of this relationship and duty, we provided the Interagency Ocean Policy Task Force with these initial seven recommendations for their consideration:

- The national ocean policy should support regional approaches to managing ocean issues, including clearly defining mechanisms for engaging individual states and tribes and supporting existing regional ocean governance entities;
- Provide adequate funding for implementing the Nation ocean policy, including regulatory entities;
- The national ocean policy should set forth clear, well-designed coordination mechanisms among all managers of ocean resources;
- The national ocean policy should actively promote and support the transition to ecosystem-based management, including needed assessments, monitoring, and research;
- Engage treaty tribes early in developing guidelines for marine spatial planning and adopt an integrated and adaptive approach for this planning effort;
- The national ocean policy should support greater research on offshore renewable energy, including examining the potential impacts to coastal communities and resources as well as supporting the associated planning processes; and

• The national ocean policy should acknowledge and address the unique threat climate change poses to ocean and coastal resources and communities.

We commend the Interagency Ocean Policy Task Force for their thorough inquiry and the nine recommended priority objectives contained within the Interim Report. They set an ambitious schedule for policy development—including holding six regional hearings, numerous conference calls—and diligently staying focused on the task. We are appreciative of their direct engagement of the tribes in a government-to-government relationship during this process. Appropriately, the solicitation of tribal input was timely and allowed for substantive dialog on the issues. We wish to thank the task force and their staff for this. It is our desire that the momentum gained by this effort can be translated into the adoption and implementation of the recommended priority objectives for a national ocean policy.

We agree with the Interim Report's recommendation to form a National Ocean

We agree with the Interim Report's recommendation to form a National Ocean Council composed of principal- and deputy-level officials from the Administration. This governance structure is necessary to ensure high-level engagement on ocean issues that has been lacking in the past. Upon establishment this council must have clear operational and procedural rules as well as identified overarching principles to guide its decision-making process. Clearly stated principles and procedures will instill consistency in management actions and promote greater trust by those whom

the decisions affect.

The treaty tribes in western Washington are supportive of the recommendation for tribal representation on the Governance Advisory Committee to the National Ocean Council. This is both appropriate and necessary to fulfill the Federal Government's treaty trust responsibilities. Much of the National Ocean Council's work will have a direct bearing on the abundance and/or access to tribal trust resources. Consequently, inclusion of tribal perspectives and providing for their direct participation in developing these policies must occur. Adequate funding should be provided to tribes to support the necessary meeting preparations and intra-tribal coordination of policy issues that will be expected of these representatives.

The inclusion of tribal perspectives in the development of ocean and coastal policy is necessary if we are to jointly manage these shared trust resources with the United States in a comprehensive and sustainable manner. The treaty reserved fishing and hunting rights of Western Washington tribes are place-based. That is to say, the tribes cannot exercise their treaty rights outside of their usual and accustomed areas. Consequently, how species respond or adapt to climate change or how access to these resources may be hindered is a major concern to the tribes. Even minor changes in resource abundance or access can result in severe impacts to tribal

communities, both from a cultural and economic standpoint.

Marine spatial planning is a concern because it creates the potential for use conflicts within tribes' usual and accustomed areas. Continuation of traditional practices (hunting, fishing, gathering) and access to trust resources is a priority for the tribes. Tribes desire a process that comprehensively balances onshore, nearshore and offshore activities. A governmental forum (tribal/state/Federal) that provides for input of regional or local management concerns is needed. This process must recognize Federal trust responsibilities and the need to manage trust resources in a comanagement relationship with the tribes. The process must be structured to engage the tribes in meaningful dialog on a government-to-government basis, and not merely soliciting tribal comments in the same manner and time-frame as non-tribal stakeholders.

Congress and this Subcommittee also have a vital role to play in developing a national ocean policy. Adequate funding of the Omnibus Public Lands Act of 2009 is important in order to fully implement the Interim Reports' recommended objectives. Title XII of this Act initiates several programs within the National Oceanic and Atmospheric Administration that will be critical for the informed management, use, and preservation of our ocean, marine, and coastal resources. We are supportive of the core objective of this legislation to utilize state/tribal/federal partnerships to ad-

dress emerging natural resource management issues.

We believe the new programs envisioned by this legislation will be important to facilitate the transition to greater ecosystem-based management of our ocean and coastal resources. A national ocean policy needs a strong grounding in science. This legislation captures the basic elements that a national ocean policy should promote including the establishment of comprehensive monitoring, assessment, and research programs that coordinate and integrate the various entities currently engaged in these activities. We recommend that a pilot project focused on refining the management approach for rockfish populations off the Olympic Coast of Washington be enacted to demonstrate how this concept would work.

In closing, the pressures on the marine environment and resources are far too great and complex not to have a national ocean policy. Long-term management goals and objectives should be developed to address climate adaptation, with the aim to improve regional ocean governance. Climate change and ocean acidification are real problems that will require substantive action across all levels of government. Effects are being felt now by the tribes in their daily lives within our communities as the natural resources we depend upon and reserved by treaties with the United States are becoming increasingly impacted.

Preserving and restoring the health of our ocean and coastal areas and the abundance of the associated natural resources should be our collective goal. We need to focus our energy on continuing to move forward, to improving our management approaches and better integrating our existing governance structures. We must guard against those that wish only to revisit old debates over allocation of and access to resources which serve only to distract focus and stymie progress toward greater re-

source protection, conservation, and restoration.

The tribes welcome the opportunity to work in partnership with Congress and the Federal Government on these important issues to ensure that our shared trust resources can be passed on to future generations.

Thank you for allowing me this opportunity to share the views of the western

Washington tribes on a national ocean policy.

Senator Cantwell. Thank you, Chairman Frank, for being here and for that testimony. And we'll look forward to asking you some specific questions about how we actually get that policy implemented.

We'd like to turn now to Dr. Takahashi-Kelso.

Thank you very much.

Am I saying that right?

Dr. Takahashi-Kelso. Takahashi-Kelso.

Senator Cantwell. Yes.

Takahashi-Kelso: Thank you.

Senator CANTWELL. Thank you very much for being here. And we look forward to your testimony.

# STATEMENT OF DENNIS TAKAHASHI-KELSO, Ph.D., EXECUTIVE VICE PRESIDENT, OCEAN CONSERVANCY

Dr. TAKAHASHI-KELSO. Thank you, Chairwoman Cantwell, Ranking Member Snowe, and members of the Subcommittee, for convening this oversight hearing at such an important juncture, and for inviting me to testify.

My name is Dennis Takahashi-Kelso, and I am Executive Vice

President of Ocean Conservancy.

Like the Chairwoman, I hail from the West. Much of my career in natural resources management and environmental protection over the past several decades, was spent in Senator Begich's home State of Alaska. I was Alaska Commissioner of Environmental Conservation when the tanker *Exxon Valdez* ran aground and spilled 11 million gallons of crude oil. I saw the effects on only on wildlife, but on human communities that rely on the ocean for their way of life.

The ocean is essential to all of us, regardless of where we live, because it is the life-support system for our planet. As President Obama has stated, our oceans, coasts, and Great Lakes also play critical roles in our Nation's economic well-being and national security. More than \$1 trillion of our annual gross domestic product is generated from the coasts.

What is happening in our oceans today is not as graphic as a major oil spill or as easily carried on the evening news, but it is a time of profound change for our oceans, and only decisive action will secure our national ocean future.

The single greatest and most pervasive threat to our ocean is climate change. The effects are already visible: melting ice, rising sea levels, ocean acidification, and extreme weather events. And while we cannot bring an immediate end to the trajectory of ocean and climate change, we can manage other activities that impact ocean

ecosystems already under stress.

Madam Chair, you gave an example earlier, and I think it is a very good one, of how the oceans are struggling right now. Scientists are reporting the most harmful algal bloom ever recorded in your State of Washington, leading to mass mortality of seabirds that may well go more than 8,000 birds, perhaps 10,000 or higher. Oceanographer Vera Trainer was quoted in the Seattle Times last week as saying, "The ocean is trying to tell us something." The ocean is trying to tell us something, and we must not only listen, but also act.

We applaud President Obama for moving so quickly to establish an ocean policy. One area singled out by the President's task force is the Arctic, where temperatures are rising almost twice as fast as the rest of the planet. The area of seasonal sea ice is shrinking, exposing coastal villages to the full force of the sea. Longer periods of open water encourage new industrial activities that may put additional pressure on ecosystems and coastal communities.

As the Administration develops a national policy, it is essential for protection, maintenance, and restoration of ecosystem health to be the core focus. In that way, the ocean can provide diverse bene-

fits long into the future.

Never before has so much activity taken place in the ocean. Wind farms and other new energy facilities, recreational uses, offshore drilling, shipping superhighways, commercial fishing, and fish farming are all competing for what was once considered to be boundless space. Yet, the United States has no comprehensive national policy to govern how Federal agencies manage the ocean, nor do we have regional plans that address which uses are compatible with others and how we protect ocean health so that future generations can have the benefits we still enjoy.

But, we have a real opportunity to get this right. Ecosystembased management through marine spatial planning helps sustain economic benefits by providing predictability, lowering costs, and reducing conflicts. At the same time, it ensures that ecosystem

health is the goal of management decisions.

A number of states, as well as other countries, have used this approach successfully. We believe that incorporating it into the National Ocean Policy is a positive step. And we commend congressional leaders like yourself, Madam Chair, for recognizing its potential to transform ocean governance.

President Obama's willingness to take the lead on ocean policy provides a rare opportunity. The Ocean Policy Task Force is laying a strong foundation, but it is one on which the Administration and

Congress must build in the months and years ahead.

Madam Chair, we very much appreciate your leadership, and we look forward to continuing to work closely with you and your colleagues. As the Task Force concludes its work, we are looking to this Subcommittee to lead. There has never been a more important moment for shaping our Nation's ocean future.

[The prepared statement of Dr. Takahashi-Kelso follows:]

PREPARED STATEMENT OF DENNIS TAKAHASHI-KELSO, Ph.D., EXECUTIVE VICE PRESIDENT, OCEAN CONSERVANCY

Thank you Chairwoman Cantwell, Ranking Member Snowe, and members of the Subcommittee for convening this oversight hearing at such an important juncture, and for inviting me to testify. My name is Dennis Takahashi-Kelso, and I am Execu-

tive Vice President of Ocean Conservancy.

My career in public service includes diverse roles in natural resources management and environmental protection over several decades, much of it in Alaska. As Alaska Commissioner of Environmental Conservation, I was responsible for pollution control and environmental health regulation, including oversight of seafood safety for the seafood industry. When the tanker Exxon Valdez ran aground, I enforced the state's oil spill clean-up standards. I also served as Alaska's Deputy Commissioner of Fish and Game; Director of the Alaska Division of Subsistence; Chair of the Alaska Emergency Response Commission; and member of the Alaska Coastal Policy Council. More recently, my doctorate in Energy and Resources (University of California, Berkeley) led me to teach and conduct research as a member of the Environmental Studies faculty at the University of California, Santa Cruz; and I subsequently served as the fisheries conservation program officer for The David and Lucile Packard Foundation.

## The Urgent Need for Action

The ocean is essential to the health of every living thing. It is the life support system for our planet. Regardless of where we live, it gives us much of the food we eat, the water we drink and the oxygen we breathe. In his June 12 memorandum, President Obama noted that our oceans, coasts, and Great Lakes play critical roles in our Nation's economic well-being and national security. The President also observed that we have a stewardship responsibility to maintain healthy, resilient, and sustainable oceans, coasts, and Great Lakes resources for the benefit of this and future generations. Too often, we have failed to meet this stewardship responsibility;

and the challenges we now face are daunting.

The single greatest and most pervasive threat to our ocean is posed by climate change. As the engine that drives our planet's climate, our ocean is on the front lines of the global climate challenge. It absorbs half of the carbon dioxide emitted into the atmosphere and more excess heat from greenhouse gases than all rainforests combined. Indeed, the ocean is the unsung hero in this battle. But it is also the most vulnerable victim. We already have begun to see the effects, including melting ice, rising sea levels, and extreme weather events. We have seen harmful changes to marine wildlife populations. For example, conservative predictions show that if the Arctic ice cap continues to disappear, two-thirds of all polar bears will be lost by 2050. Even the tiniest organisms will be affected as the ocean grows more acidic, compromising productivity and jeopardizing the food web. On average, the ocean is a degree warmer than it was a century ago. Another two degrees is likely to devastate many coastal communities, kill most of the world's coral reefs, and result in mass extinctions of marine life.

Added to the overarching threat posed by climate change are the additional perturbations caused by our multiple uses of the ocean, from overexploitation to coastal

pollution.

These are not theoretical or future problems: the stresses on our ocean and coastal ecosystems are well-documented and a crisis today. To give one of many current examples, Madam Chairwoman, in your home state scientists are currently reporting the longest lasting and largest harmful algal bloom ever recorded in the region, resulting in mass mortality of seabirds unprecedented in Washington state waters. Harmful algal blooms can damage human health, as well, such as Washington's subsistence communities that rely on shellfish (Lefebvre and Robertson, in press). In a recent Seattle Times article (October 30, 2009) on the algal bloom, oceanographer Vera Trainer is quoted as saying that "the ocean is trying to tell us something."

While a specific link between this algal bloom and a warming climate is not clearly established, there is no question that carbon emissions and climate change are causing an array of problems in the marine environment. Perhaps most overwhelming and pervasive is ocean acidification, which was one of the primary subjects explored in this subcommittee's May 2008 hearing on "The Effects of Climate"

Change on Marine and Coastal Ecosystems in Washington.

But the ocean is not only the victim of climate change, it also can be part of the solution. A healthy and resilient ocean can continue to perform its key climate regulation functions and continue to provide us with all of the goods and ecosystem services we need to survive. A healthy and resilient ocean also can be a source of renewable energies that can increase the Nation's energy independence and decrease use of fossil fuels. President Obama has made clear that increasing energy independence tops his priorities. He recognizes that as a potential major source of renewable energy, the ocean has a role in achieving these goals, and many states are working creatively to take the lead in developing ocean-based renewable energy.

The ocean is already an economic engine for our country. In 2003, ocean-related economic activity contributed more than \$128 billion to American prosperity and supported well over 2.2 million jobs. Roughly three-quarters of the jobs and half the economic value were produced by ocean-related tourism and recreation, sectors that rely on healthy oceans. Currently more than \$1 trillion, or one-tenth, of the Nation's annual gross domestic product is generated from the coasts (National Ocean Economics Program 2004). Harnessing the ocean's renewable energy resources, if done carefully, will create jobs and grow the Nation's economy (see attached report on

Offshore Alternative Energy Economics (Kildow and Colgan 2009)).

The ocean must be healthy and resilient to continue to support the current level of economic and other activity and to meet the promise of renewable energy and other uses. Today's ocean, coastal, and Great Lakes ecosystems face an era of unprecedented activity. Wind farms and other energy facilities, diverse recreational uses, offshore drilling, shipping superhighways, sand and gravel mining, commercial fishing, and aquaculture facilities are all competing for what once seemed like boundless space. Novel uses, such as wave energy and offshore aquaculture, or even combined energy aquaculture projects, present economic opportunities, but will also result in new demands on ocean ecosystems, which are limited, fragile, and already under stress (Halpern et al., 2008). In order to maximize the benefits the oceans provide, both ecologically and economically, we need a strong, clear national policy; and then we need a rational process to address multiple management objectives consistent with that policy (see Kappel et al., 2009 and Turnipseed et al., 2009).

## The Interagency Ocean Policy Task Force

Our oceans, coasts, and Great Lakes are currently governed by more than 140 laws and 20 different agencies, each with different—sometimes conflicting—goals and mandates. Numerous commissions and experts have identified the need for a unifying national policy for oceans, coasts, and Great Lakes.

We commend President Obama and his administration for moving so quickly to establish a coherent national ocean policy and a Task Force that will provide leadership and facilitate coordination as we begin to address these challenges in a focused and consistent way. In his proclamation establishing National Oceans Month, the President put it this way:

[W]e are taking a more integrated and comprehensive approach to developing a national ocean policy that will guide us well into the future. This policy will incorporate ecosystem-based science and management and emphasize our public stewardship responsibilities. My Administration also is working to develop a systematic marine spatial planning framework for the conservation and sustainable use of ocean resources. I am committed to protecting these resources and ensuring accountability for actions that affect them.

One of the President's specific charges to the Task Force is to "prioritize upholding our stewardship responsibilities and ensuring accountability for all of our actions affecting ocean, coastal, and Great Lakes resources."

The Interagency Ocean Policy Task Force has worked tirelessly under the leadership of Chairwoman Sutley to advance the President's vision and to do so very quickly. The June 12 Presidential memorandum mandated a very ambitious timeline for the work of the Interagency Ocean Policy Task Force, but that has not prevented Task Force members from engaging in an admirably transparent and inclusive process as they have moved forward.

Six public listening sessions have been convened around the country, and thousands of members of the public have expressed their views directly to Task Force members. The 90- and 180-day mandates in the Presidential memorandum have necessarily required an expedited process, but we believe such decisive action is entirely appropriate given the challenges we face. Too often the opposite has been true: indecision, delay, and inaction have left the oceans and coasts as victims of policy inertia.

## An Oceans, Coasts, and Great Lakes National Policy

Many members of the environmental community submitted joint recommendations to the Task Force for the adoption and implementation of an oceans, coasts, and Great Lakes National Policy. I have attached them in full at the end of my testimony. As those recommendations note, protection, maintenance, and restoration of ecosystem health must be the core focus of a national policy to meet the needs of present and future generations. We believe that ecosystem-based management is the best way to achieve this objective.

According to a consensus statement of more than 220 scientists and policy experts, "[Ecosystem-based management (EBM) is] an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors" (McLeod et al., 2005, p. 1).

The Task Force's September 10 Interim Report highlighted many of the key elements of a national policy. It called for a precautionary, ecosystem-based management approach, based on the best available science, and adaptive management based on clearly stated goals, objectives, and benchmarks. We support the Interim Report's national priority objectives, including the areas of special emphasis, recognition that targeted work is needed at the regional level, and acknowledgement that the United States must show leadership at the international level to achieve ecosystem and resource health goals.

One area singled out for special emphasis is the Arctic. Temperatures in the Arctic are rising almost twice as fast as on the average for the rest of the planet, causing water temperatures to climb and the area of seasonal sea ice to shrink. The loss of sea ice exceeds the rates predicted by climate models, and scientists predict that the Arctic Ocean will be one of the first regions to feel the effects of increased ocean acidification. The Interagency Ocean Policy Task Force recognized the need to address changing conditions in the Arctic as a national priority objective. We endorse the Task Force's recommendation to develop a strategic action plan for the Arctic to help address those challenges in a proactive manner.

The Task Force's proposed National Ocean Council is intended to ensure better interagency cooperation on policies that affect our oceans and coasts. To that end, the conservation community has submitted a number of specific recommendations to the Task Force, which I have also attached for ease of reference. These recommendations range from clarifying the definition of ecosystem-based management to improving representation on the Ocean Research and Resources Advisory Panel. We specifically underscore the recommendation for principal National Ocean Council membership for the Administrator of the National Oceanic and Atmospheric Administration.

## Coastal and Marine Spatial Planning

Marine spatial planning (MSP) is a tool that can accomplish ecosystem-based management. Researchers have defined MSP as "a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives" (Ehler and Douvere 2009, p. 18). MSP can help promote sustainable economic development by providing predictability, saving costs, and reducing conflicts, with concomitant ecological benefits. A number of states, as well as other countries, have used MSP successfully, and incorporating it into the National Ocean Policy is a positive step. We commend the President for charging the Task Force with development of a framework for MSP, and congressional leaders like Senator Rockefeller and yourself, Madam Chairwoman, for recognizing its potential to transform ocean governance.

MSP does not supplant existing management authorities for sectors like fisheries, transportation, and energy; instead, it coordinates and integrates decision-making across sectors and among government entities to improve institutional effectiveness and efficiency. MSP can help achieve better ocean management by providing a practical way to organize marine spaces and interactions among various human uses of the ocean while ensuring that the goal of healthy ecosystems is at the core of planning efforts and management decisions (Crowder et al., 2006).

# Marine Spatial Planning Framework

The national ocean policy commitment to ecosystem health should guide the MSP framework. Toward that end, we recommend the following goals:

- protection, maintenance, and restoration of coastal, marine, and Great Lakes ecosystem health-including protection of important marine ecological areasfor current and future generations; and
- to the extent it is consistent with that overall goal, fostering sustainable development that can realize economic opportunities without detriment to ecosystem

In addition, national security interests are important considerations in the planning process; and coordination of these activities should be fully integrated in the MSP process.

Ecosystem attributes should serve as the foundation for setting national management objectives for ecosystem health. These attributes include native species diversity, habitat diversity and heterogeneity, populations of key species, and connectivity between species and habitats. Stresses such as climate change, ocean acidification, and water pollution-including marine debris-need to be considered,

as well as the underlying geophysical characteristics of the ecosystem.

Because of uncertainty about the effect of these stressors in ecosystems and on the overall health of the oceans, we support the Interim Report statement that "[d]ecision-making will also be guided by a precautionary approach" (p. 14). While science has made progress in understanding how marine systems operate, considerable uncertainty remains, especially with respect to overarching shifts in areas such as climate change and ocean acidification. When an activity, or the cumulative impact of activities, raises threats of serious harm to the environment or human health, a precautionary approach provides a way of accounting for uncertainty. Where there is uncertainty about potential catastrophic disturbances, such as effects of an oil spill or a hurricane, marine spatial plans should provide redundant protec-

Specific recommendations for a governance structure and planning process for the MSP framework are outlined in greater detail in the attached letter from the environmental NGO community on marine spatial planning submitted to the National Ocean Policy Task Force on October 30, 2009. Also attached is a report on Ocean Renewable Energy and the Marine Spatial Planning Process developed jointly by ocean renewable energy interests and conservation groups.

Among the key points, a governance structure for marine spatial planning should utilize the proposed National Ocean Council (NOC) for interagency coordination in order to manage, approve and implement planning, which should be conducted on a regional level. The NOC provides a single point of policy formulation, plan ap-

proval, and ultimate accountability.

In order to advance planning on an ecosystem basis across jurisdictional boundaries, the NOC should establish regional ocean councils to plan in partnership with regional, state, and local entities. Among key participants would be Regional Ocean Partnerships, Regional Fishery Management Councils, and Interstate Marine Fisheries Commissions.

Wherever the issues involve other sovereign entities, including tribes and foreign governments, these entities should participate in the planning process. In addition, Federal funding should be provided to assist states and tribes in developing marine spatial plans that are consistent with regional and national MSP objectives and con-

tribute to the implementation of the National Ocean Policy.

The governance structure should also include robust participation of stakeholders and the general public. Their involvement will increase the likelihood that plans reflect people's values, increase social well-being, be viable over the long term, and utilize stakeholders' information and perspectives. In addition to appropriate public and stakeholder participation, transparency is essential to the legitimacy of a ma-

rine spatial plan.

The MSP framework should ensure accountability and result in a binding plan.

To build such a plan, key actions should include:

- identifying regional planning needs to guide evaluation of options;
- · assembling data for analysis and planning;
- conducting ecological and socio-economic assessments and identifying data gaps for each region;
- · evaluating compatibility of human activities with each other and with ecosystem health;
- developing marine spatial plans designed to implement national and regional management objectives;
- adopting binding marine spatial plans;
- · monitoring, revising, and adapting plans as conditions change.

The Administration and Congress must commit to adequate and sustained funding if marine spatial planning is to be successful. We urge Congress to provide funding for MSP through the appropriations process, and also to consider a sustained source of revenue for long-term funding. This is an investment worth making that will be rewarded handsomely through the more efficient use of ocean resources, and their preservation for future generations.

#### Capitalizing on the Moment

Madam Chairwoman, our ocean today is in crisis; but President Obama's willingness to lead on ocean policy provides a rare opportunity. The Interagency Ocean Policy Task Force is laying a strong foundation, but it is one on which the Administration and Congress must build in the months and years ahead. Current legislation provides ample authority to establish a national ocean policy and to adopt an implementation framework. In the longer run, though, Congress has a crucial role, both in appropriating funds for policy implementation and in considering new enabling

Madam Chairwoman, we very much appreciate your convening this hearing, and we look forward to working with the subcommittee on national ocean policy issues. There has never been a more important moment for shaping our Nation's ocean future.

#### References

Crowder, L. B., G. Osherenko, O. R. Young, S. Airame, E. A. Norse, N. Baron, J. C. Day, F. Douvere, C. N. Ehler, B. S. Halpern, S. J. Langdon, K. L. McLeod, J. C. Ogden, R. E. Peach, A. A. Rosenberg, and J. A. Wilson (2006). Resolving mismatches in U.S. ocean governance. *Science* 313:617–618.

A. A. Rosenberg, and J. A. Wilson (2008). Resolving linsinatches in C.S. ocean governance. Science 313:617-618.

Crowder, L. and E. Norse. (2008). Essential ecological insights for marine ecosystem-based management and marine spatial planning. Marine Policy 32(5):772-778.

Ehler, C. and F. Douvere (2009). Marine Spatial Planning: A Step-by-Step Approach Toward Ecosystem-based Management. Intergovernmental Oceanographic Commission (IOC) Manual and Guides No. 53, ICAM Dossier No. 6.

Halpern, B. S., Walbridge, S., Selkoe, K. A., Kappel, C. V., Micheli, F., D'Agrosa, C., Bruno, J. F., Casey, K. S., Ebert, C., Fox, H. E., Fujita, R., Heinemann, D., Lenihan, H. S., Madin, E. M. P., Perry, M. T., Selig, E. R., Spalding, M., Steneck, R., and Watson, R. (2008). A Global Map of Human Impact on Marine Ecosystems. Science. 319, pp 948-952.

Interagency Ocean Policy Task Force (2009). Interim Report of the Interagency Ocean Policy Task Force, September 10, 2009.

Kappel, C. V., B. S. Halpern, R. G. Martone, F. Micheli, and K. A. Selkoe (2009). In the Zone Comprehensive Ocean Protection. Issues in Science and Technology, Spring 2009.

Lefebvre, K. A., and S. Robertson (in press). Domoic acid and human exposure risks: A review. Toxicon.

Mapes, L. V. Algae bloom killing seabirds mystifies researchers. The Seattle Times. October 30, 2009. Available at http://seattletimes.nwsource.com/html/localnews/2010165049 birds

McLeod, K. L. et al., (2005). Scientific Consensus Statement on Marine Ecosystem-Based Management. Communication Partnership for Science and the Sea.

National Oceans Economics Program (2004). Market Data: Ocean Economy Data. Accessed 30

July 2009. Available at: http://oceaneconomics.org/Market/ocean/oceanEcon.asp.
Pew Oceans Commission (2003). America's Living Oceans: Charting a Course for Sea Change.
Turnipseed, M., L. B. Crowder, R. D. Sagarin, and S. E. Roady (2009). Legal Bedrock for Rebuilding America's Ocean Ecosystems. Science 324, 183.

USCOP (U.S. Commission on Ocean Policy) (2004). An Ocean Blueprint for the 21st Century: Final Report.

Attachments: [will be retained in Committee files].

Recommendations for an Oceans, Coasts, and Great Lakes National Policy, Environmental NGO consensus document.

Comments on the Interim Report, Environmental NGO recommendations on a National Ocean Policy, submitted to the Interagency Ocean Policy Task Force, 10/

Comments on Marine Spatial Planning, Environmental NGO recommendations on MSP, submitted to the Interagency Ocean Policy Task Force, 10/30/09.

Kildow, J. and C. Colgan. Offshore Alternative Energy Economics, Report to Ocean Conservancy. The National Ocean Economics Program, submitted October 15, 2009.

Ocean Renewable Energy and the Marine Spatial Planning Process, report prepared by conservancy interaction of the program pared by ocean renewable energy interests and conservation groups and submitted to the Interagency Ocean Policy Task Force.

Senator Cantwell. Thank you very much, for your testimony. Mr. Paxton, welcome to the Committee. Thank you, for being here today.

# STATEMENT OF MATTHEW PAXTON, BALL JANIK, ON BEHALF OF THE COASTAL CONSERVATION ASSOCIATION

Mr. PAXTON. Thank you, Madam Chair Cantwell, for holding this important hearing on the National Ocean Policy Interim Report.

My name is Matthew Paxton, and the testimony I'll provide

today is on behalf of the Coastal Conservation Association.

The Coastal Conservation Association is the leading maritime

Senator Cantwell. Mr. Paxton, could you just pull that a little closer to you, the microphone.

Mr. Paxton. Absolutely.

The Coastal Conservation Association is the leading marine recreational fishing group in the United States. CCA has over 100,000 volunteer members in 17 states. This volunteer membership, that spans from Brownsville, Texas; to Portland, Maine; to Seattle, Washington, has made CCA an organization that prides itself on passionate grassroots efforts to influence policies and laws that promote sustainable fisheries for recreational anglers.

We commend the Obama Administration for placing such high priority on ocean policy and launching an extremely aggressive

180-day timeline to develop a national plan for our oceans.

The focus of my comments will be on the process to establish a national ocean policy and the role of Congress, maintaining regional ingenuity, ensuring access to the marine environment and finally, promoting marine recreation as a core element of the Na-

tional Ocean Policy.

On July 22, 2004, the members of the U.S. Commission on Ocean Policy submitted a final report, titled "An Ocean Blueprint for the 21st Century," to the President and the Congress. This committee held hearings on the report and incorporated many of the recommendations from the U.S. Commission into legislation developed by this committee to reauthorize the Magnuson-Stevens Fishery Conservation Management Act. The previous Administration benefited from this ocean policy roadmap, but so did the public. The final report was based on 16 public meetings, 18 regional site visits, and commissions-and the Commission heard from over 400 witnesses and over 275 invited presentations, resulting in nearly 2,000 pages of testimony.

The concern with this National Ocean Policy process is that it will be developed entirely within the bureaucracy of the Administration and not subject to any further comment or review by the public. Our recommendation and request would be for this committee and other relevant committees to hold oversight hearings on the final report and consider legislation for any ocean management proposals that do not have statutory authority. We do not want the National Ocean Policy to enforce new legal mandates under the

auspices of some existing legal authority.

Regional input needs to be preserved. Maintaining regional input and expertise is absolutely critical for establishing a balanced and uniquely responsive national ocean policy.

We are encouraged by recommendations in the interim report to coordinate the laws and agencies to improve ocean management. However, a national ocean policy should not be a mechanism to establish an overarching bureaucracy that consists entirely of govern-

mental officials implementing Federal-down mandates. This would require important laws that come from this committee to fall under one national ocean policy approach, requiring such laws as the Coastal Zone Management Act, the National Marine Sanctuaries Act, MSA, and others, to simply enforce a single national ocean management mandate. All these laws maintain critical important critical regional input as a core legal step in establishing complex ocean and fisheries management, regulations, and policies. This should not change in an effort to establish national ocean policy.

For instance, the interim report requires an ocean policy that implements ecosystem-based management. Currently, the Regional Fishery Management Councils implement varying forms of ecosystem-based management. However, it is not a legal requirement to do so. The National Ocean Policy must encourage better coordination between agencies and promote policies that focus the stewardship of our oceans, but not at the expense of regional ingenuity.

The reauthorization of the MSA in 2006 required a report on the state of the science for ecosystem-based management. I would encourage this Committee to request this report from the Administration to help inform how ecosystem-based management can be implemented and whether additional legal authority is necessary.

Pursuant to the interim report, officials with CEQ and NOAA and other agencies are charged with developing a marine spatial planning framework. Marine spatial planning should be a policy that seeks to better inform decision-making in the ocean environment and address gaps in science data to improve conservation management objectives. Marine spatial planning should not be a means to catalog, map, and designate vast marine areas as marinerestricted set-asides. The interim report makes numerous references to ambiguous terms, such as "healthy," "pristine," and "resilient," and articulates broad management concepts that call for the protection of biological diversity. The report then couples these hard-to-define terms and concepts with a precautionary approach when there is scientific uncertainty. Marine spatial planning under this approach would arbitrarily exclude users, primarily recreational users and other marine user groups, we fear, from the marine environment and its resources. Recreational interests and access to the marine environment must be a core element of any marine spatial planning policy and proposal.

Last, sustainable recreational use should not only be supported within a national ocean policy, it should be actively promoted. Hunting, fishing, boating, and being outdoors are laudable things. The recreational community believes that stewardship of our ocean environment involves sustainable human uses. We strongly encourage this Administration and this Committee to take advantage of this opportunity to promote the outdoorsman conservation ethic in the ocean environment and make recreational uses a core principle

of national ocean policy.

As the Senate Committee with the primary jurisdiction over the laws that impact ocean management, you have a significant role to play in overseeing this National Ocean Policy and whether laws are being expanded or constricted without Congressional approval.

I commend you for holding this hearing today. I would recommend that further hearings be held by this committee once the Administration issues its final report next month.

And thank you for this opportunity to testify. [The prepared statement of Mr. Paxton follows:]

> PREPARED STATEMENT OF MATTHEW PAXTON, BALL JANIK, ON BEHALF OF THE COASTAL CONSERVATION ASSOCIATION

Thank you for this opportunity to testify on the White House Council on Environmental Quality's Interim Report of the Interagency Ocean Policy Task Force and its recommended framework for effective coastal and marine spatial planning.

The testimony I will provide today is on behalf of the Coastal Conservation Association. My name is Matthew Paxton. I am an attorney at Ball Janik law firm.

The Coastal Conservation Association (CCA) is the leading marine recreational fishing group in the United States. Formed by a small group of sport fishermen in Houston in 1977, CCA has grown to a seventeen-state operation with over 100,000 members. This volunteer membership that spans from Brownsville, Texas to Portland, Maine to Seattle, Washington has made CCA an organization that prides itself on passionate grassroots efforts to influence policies and laws that promote sustainable fisheries for recreational anglers.

Over the last 20 years, CCA has been active in a number of conservation issues both on the state and Federal level, including all of the east and Gulf coast net bans; gamefish status for redfish, speckled trout, tarpon, striped bass, river shad, marlins, spearfish and sailfish; and the reduction of bycatch through the use of technology and time and area closures. CCA has also pushed for the improvement of the fishery management system through the restructuring of state and Federal reg-ulatory bodies; the elimination of conflicts of interests by decision-makers, and the active involvement of its membership in the management process

We commend the Obama Administration for placing such a high priority on ocean policy and committing resources and time of the White House Council on Environmental Quality, the National Oceanic & Atmospheric Administration and numerous other agencies to develop a comprehensive, coordinated strategy to manage our oceans. The extremely aggressive 180-day timeline to develop a National Ocean Policy that includes an integrated, ecosystem-based framework for marine spatial planning, is a daunting endeavor and if completed will be an historic accomplishment for ocean stewardship.

The urgency to establish such an expansive national policy and framework, however, does raise concern from the recreational community, and other marine user groups, that important concepts and perspectives might be overlooked or simply left out in order to meet arbitrary dead-lines.

The focus of my comments will be on the process to establish a National Ocean Policy and the role of Congress; maintaining regional ingenuity; ensuring access to the marine environment; and finally promoting marine recreation as a core element of the National Ocean Policy.

# Process—Development of a National Ocean Policy

On July 22, 2004, the Members of the U.S. Commission on Ocean Policy submitted a final report titled An Ocean Blueprint for the 21st Century to the President and the Congress. The report was required under the Oceans Act of 2000.¹ This committee held hearings on the report and the 2006 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act, developed and passed by this committee, contained many of the recommendations from this important ocean policy report.2

The previous Administration benefited from this ocean policy roadmap and the comprehensive recommendations on how to manage our oceans and marine resources more effectively. The public also benefited from this process—there was a final report with recommendations based on sixteen public meetings and eighteen regional site visits and the commission heard from over 400 witnesses and over 275 invited presentations, resulting in nearly 2,000 pages of testimony.3

<sup>&</sup>lt;sup>1</sup>Oceans Act of 2000 (P.L. 106-256).

<sup>&</sup>lt;sup>2</sup> Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109–

<sup>479).

3</sup> U.S. Commission on Ocean Policy Final Report, An Ocean Blueprint for the 21st Century,

The Obama Administration announced in June that it will develop a comprehensive National Ocean Policy within 180 days. The Administration has held five public meetings and provided opportunities for various ocean user groups to meet in closed door meetings at CEQ and NOAA. I understand the U.S. Ocean Commission report was a much different process and was the result of a Federal Act, however, there is some benefit in providing a comparison in the process that took place to develop solid recommendations for ocean policy in the Ocean Commission report and what is taking place today.

As I mentioned earlier, the effectiveness of CCA has been the active involvement of its volunteer membership on the local, state and Federal level. Through local boards, state commissions, and Federal regulatory and management bodies, recreational users have been able to influence and shape policies and laws that impact fisheries conservation and ocean management. It is a well-worn process that CCA members understand and work within to develop effective policies that embody our

conservation ethic and outdoorsman ideals.

The concern, in particular for potentially new concepts like marine spatial planning or ocean zoning, is these concepts will be developed entirely within the bureaucracy of the Administration and not subject to any further comment or review. Our recommendation would be to provide the Senate Committee on Commerce, Science and Transportation and the House Committee on Natural Resources the opportunity to hold oversight hearings on the final report and consider legislation for any ocean management proposals that do not have statutory authority. We do not want the National Ocean Policy to enforce new legal mandates under the auspices

of some existing legal authority.

A recent example of this was the approval by Department of Commerce of a fishery management plan authorizing commercial offshore aquaculture under a very expansive legal view of "harvesting" under the Magnuson-Stevens Act (the Federal fishery law for managing commercial and recreational catch). Nowhere in MSA is there even a reference to aquaculture. This is a clear example of how a policy that does not have legal authority may be shoe-horned under some other existing authority and implemented without a fully transparent, vetted and public process to de-

velop the appropriate law.

Again, the policy must balance the equities of those that will be affected. In the instance of offshore commercial aquaculture, we will not know until after the fact if the appropriate legal and regulatory protections were put in place to manage these commercial enterprises in the ocean environment.

# Maintain Regional Input—No Top-Down Mandates

The Interim Report places a substantial focus on coordinating the numerous agencies and laws that ultimately intersect with the stewardship of our oceans. The report recommends a policy coordination framework that would provide a structure to strengthen ocean governance and coordination by "providing clear and visible leadership and sustained high-level engagement within the Federal Government." 4 Within this policy coordination framework, the report does recommend greater parwithin this policy coordination halmework, the report does recommend greater participation by local and regional governance structures. Maintaining regional input and expertise is absolutely critical for establishing a balanced and uniquely responsive National Ocean Policy. We are encouraged by these core recommendations on coordinating the laws and agencies to improve ocean management.

However, a National Ocean Policy should not be a mechanism to establish an overarching bureaucracy that consists entirely of governmental officials implementing Federal-down mandates. This approach could require important laws that come from this committee to fall under one National Ocean Policy approach, requiring such laws as the Coastal Zone Management Act, the Marine Sanctuaries Act, MSA and others to simply enforce a single national ocean management mandate. All these laws maintain regional input as a core legal step in establishing complex ocean and fisheries management regulations and policies and this should not change in an effort to establish a National Ocean Policy.

The Interim Report provides encouraging references to maintaining local and re-

gional input, however, in an effort to dictate change in ocean policy it might become expedient to simply mandate that all actions relating to the ocean environment meet one Federal standard. The National Ocean Policy must encourage better coordination between agencies and promote policies that focus the stewardship of our oceans, but not at the expense of regional ingenuity.

For instance, the report requires a National Ocean Policy that implements ecosystem based management. The various Regional Fishery Conservation and Management Councils currently implement varying forms of ecosystem based manage-

<sup>&</sup>lt;sup>4</sup> Interim Report of the Interagency Ocean Policy Task Force, pg. 18.

ment. Naturally, this approach to ecosystem based management is inherently regional and reflects the unique ocean conditions and fishery dynamics in that area. The Federal/state process in MSA that established the Regional Councils is not perfect, but it does provide for ample opportunity for critical regional input. In addition, this Act allows for the direct involvement of anglers to either sit on the various Councils developing the fishery regulations or the opportunity to provide numerous recommendations on how best to manage our shared fishery resources. Ecosystem-based management should not be a Federal mandate under a National Ocean Policy.

The reauthorization of the MSA in 2006 required a report on the "state of the science for advancing concepts and integration of ecosystem considerations in regional fishery management".<sup>5</sup> I would encourage this committee to request this report from the Administration to help inform how ecosystem-based management can be implemented and whether additional legal authority is necessary.

## Marine Spatial Planning—Maintaining Public Access

Pursuant to the Interim Report, officials within CEQ, NOAA and other agencies are charged with developing a marine spatial planning framework that will provide a "comprehensive, integrated, ecosystem-based approach that addresses conservation, economic activity, user conflict, and sustainable use of ocean, coastal, and Great Lakes resources". Marine spatial planning must be a policy that seeks to better inform decision-making in the ocean environment and address gaps in science and data to improve conservation and management objectives. Marine spatial planning must not be a means to catalogue, map and designate vast marine areas as marine restricted set-asides.

The Interim Report makes numerous references to ambiguous terms such as "healthy," "pristine," and "resilient" and articulates broad management concepts that call for the protection of biological diversity. The report then couples these hard-to-define terms and concepts with a precautionary approach when there is scientific uncertainty. The Marine spatial planning under this approach would lead to the preservation of the ocean based entirely on precautionary principles and arbitrarily exclude users—primarily recreational users, we fear—from the marine environment and its resources.

Recreational interests and access to the marine environment must be a core element of any marine spatial planning policy and proposal. Too often recreational interests are afterthoughts of marine policy, when under the Magnuson-Stevens Act, the recreational community has equal legal standing as commercial interests to fishery resources and access to the marine environment. For marine spatial planning to be effective it must not ignore recreational interests at the outset, but instead have a strong focus on maintaining and encouraging public access and recreation in the marine environment.

This committee developed and ultimately created the law that provided important rules for how all future marine restricted areas can be established. We would encourage this Administration, and recommend that this committee ensure, that the legal requirements in the Magnuson-Stevens Act are strictly followed before establishing any marine restricted area under a marine spatial planning policy. Any marine restricted area should: (1) be based on sound science; (2) be the smallest marine area possible to achieve an articulated conservation goal, and (3) be continuously reviewed to determine whether the marine restricted area is necessary to achieve these conservation goals.<sup>8</sup>

these conservation goals.<sup>8</sup>
It should not be the goal or result of marine spatial planning to determine or catalogue marine areas that should be simply set-aside as marine reserves or no-go zones. Any policy to set-aside large areas of the marine environment to access or recreation creates disproportionate, negative impacts to the fishing and private boating public by simply locking them out of the oceans. Marine spatial planning should not be a means to lockup the ocean to public access and recreation.

## Promote Recreation as a Core National Ocean Policy

Sustainable recreational use should not only be supported within a National Ocean Policy, it should be actively promoted. Under principle three of the Interim Report—Current and Future Uses of Ocean Ecosystems—there should be a specific recommendation for "the promotion of recreational uses of the ocean."

<sup>&</sup>lt;sup>5</sup> Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1882(f) (P.L. 109–479).

<sup>&</sup>lt;sup>6</sup>Interim Report, pg. 2.

<sup>&</sup>lt;sup>7</sup> *Id.*, pg. 14. <sup>8</sup> MSA, 16 U.S.C. 1853(b)(2)(C) (P.L. 109–479).

We believe, for example, that the efforts and outreach made by the Department of Interior, which are designed to get kids outdoors with their families, increase physical activities, and reacquaint the public with their natural resources is a good model. Hunting, fishing, boating, and being outdoors are laudable things. The recreational community believes that stewardship of our ocean environment involves sustainable human uses.

Recreating in America's oceans is big business and supports hundreds of thousands of jobs, but it is also more than that. It allows Americans to utilize America's public marine resources as they do so with terrestrial resources. Such outdoor activities strengthen the family, improve public health, re-link people with natural resources and invest in them a stewardship ethic.

We strongly encourage this Administration and this committee to take advantage of this opportunity to promote the outdoorsman conservation ethic in the ocean envi-

of this opportunity to promote the outdoorsman conservation ethic in the ocean environment and make recreational uses a core principle of both the final report and the framework for marine spatial planning in a National Ocean Policy.

As the Senate Committee with the primary jurisdiction over the laws that impact ocean management, you have a significant role to play in overseeing this National Ocean Policy and whether laws are being expanded or constricted without Congressional approval. I commend you for holding this hearing today, I would recommend that further hearings be held by this committee once the Administration issues its final report next month and thank you for this opportunity to testify.

Senator Cantwell. Thank you, Mr. Paxton. Ms. Elefant, thank you for being here.

## STATEMENT OF CAROLYN ELEFANT. LEGISLATIVE AND REGULATORY COUNSEL, OCEAN RENEWABLE ENERGY COALITION

Ms. Elefant. Good morning. Thank you, Madam Chair, for hold-

ing this hearing and also for the opportunity to testify.

My name is Carolyn Elefant. I'm the Legislative and Regulatory Counsel to the Ocean Renewable Energy Coalition. We are the national trade association for marine renewables, which includes wave, tidal, hydrokinetic, ocean thermal, and offshore wind.

I'd like to open by saying that OREC commends the efforts of the Administration and this Committee to craft a national policy for responsible development of our ocean's renewable energy resources. In particular, we appreciated the task force's efforts to reach out to the broad swath of stakeholders and users who take advantage

of our public waterways

Like the task force, OREC recognizes that climate change is one of the biggest threats to our Nation's oceans. And, in fact, if you speak to some of our member companies and ask them why they've gotten into this industry of approaching the challenges of harnessing our Nation's waves and tidal power, they'll tell you that they're committed to leaving this nature—to creating a cleaner Nation for future generations. So, our members are very concerned with the impacts of climate change, and these technologies can contribute to mitigating climate change.

As the Electric Power Institute has studied, ocean renewables can provide 400 terawatts of power, which is roughly 10 percent of our Nation's power needs. It's a little bit more than what conventional hydropower delivers today. And, for that reason, I confess that our organization was a little bit disappointed to see that the interim report really didn't focus very much on development of renewable energy resources from the oceans or acknowledge the role

that they can play in mitigating climate change.

Now, with the limited time I have available now, I'd like to focus on OREC's visions for ocean—for coastal and marine spatial planning and also describe, in that context, some of the challenges that our industry faces.

One of the first components of marine spatial planning is that we need to develop information to inform these planning efforts. Right now, there is information that has been gathered through the process of permitting other types of development within the oceans, and some of that information may be available and housed in State and Federal agencies; other information needs to be collected. OREC sees a role for Congress and this Committee in helping to identify or authorize those agencies that should connect—collect the necessary data to inform ocean planning decisions, and also to providing funding for these gathering efforts.

The other issue that we wanted to focus on is, as we move ahead with marine spatial planning, we don't want to stop ongoing activity. Right now our industry is gaining momentum. We have had—we've had access to unprecedented amounts of funding and also been the beneficiaries of new tax credits which are really driving our industry's growth. At the same time, we haven't had the opportunity to site many projects. And so, there's a lot that is unknown—yet unknown about how marine renewables will operate

within the environment and what their impacts will be.

We urge this committee and also the task force to allow the opportunity to—for us—for our industry to deploy the first generation of marine renewable technologies, even as marine spatial planning efforts are ongoing. We believe that, by deploying this first generation of technologies, we can gather information about how they work and what role they can play, and that can inform future deci-

sionmaking.

And third, as an alternative to the precautionary principle which was alluded to in interim task force, OREC believes that planning efforts should recognize the role of adaptive management in moving ahead with marine renewables. Adaptive management allows developers to deal with uncertainty through rigorous post-deployment monitoring and also by making operational changes where data might show that there's an adverse impact on the environment. Again, the data gathered through adaptive management can also

help inform broader planning efforts.

Fourth, OREC believes that this coastal and marine spatial planning efforts provide a natural opportunity for multiple agencies with jurisdiction over these resources to cooperate and collaborate on permitting. Right now, our permitting process is very much—takes place in the—as one witness mentioned, the stovepipe type of approach. We see an opportunity for agencies to collaborate through memoranda of understanding, and undertake and create uniform applications, and also abide by uniform scheduling deadlines, and to share information throughout the process. And we see the marine spatial planning approach as providing an opportunity for agencies to do that.

Finally, even though the task force is a national body, the role of the states are paramount. As—in our particular—in our industry, some of the best sites on West Coast—the best wave sites on the West Coast and the best offshore wind sites on the East Coast straddle State and Federal lines. And so, if there isn't any coordination between the ongoing spatial planning efforts being under-

taken by states, like Massachusetts, Rhode Island, and Oregon, and the Federal effort, we may find ourselves in a situation where, for example, a state designates an area as appropriate for marine renewables, however, Federal policy would exclude them, and it would put a developer in a situation where it couldn't build a project out. So, we'd like to see coordination between what the State and Federal agencies are doing, and also an opportunity to leverage off what states are doing, and share that information.

One of the best parts about participating in the marine spatial planning dialogue is that we all agree that climate change is a critical issue. Marine renewables, if given a chance, can prove—may prove that they can help to mitigate the damage that climate change can cause to our oceans and also may be compatible with other multiple uses.

Thanks again for the opportunity to testify, and I look forward to any questions you may have.

[The prepared statement of Ms. Elefant follows:]

PREPARED STATEMENT OF CAROLYN ELEFANT, LEGISLATIVE AND REGULATORY COUNSEL, OCEAN RENEWABLE ENERGY COALITION

On behalf of the Ocean Renewable Energy Coalition (OREC), I appreciate the opportunity to present my comments on a framework for coastal and marine spatial planning.

OREC is a national trade association representing the marine renewable energy industry, including wave, tidal, hydrokinetic, current, ocean thermal energy conversion (OTEC) and, in collaboration with other trade associations, offshore wind, solar and biomass. Founded in 2005 with just four members, OREC now stands 45 members strong, reflecting the increased interest in and commitment to OREC's mission of advancing the commercialization of marine renewables in the United States.

Development of marine renewables technologies can play a significant role in our Nation's economic recovery and expand our renewable energy portfolio. According to the Electric Power Research Institute, ocean renewable energy in the United States has the potential to supply some 400 terawatt hours of clean power annually, or roughly 10 percent of today's electric demand. This is more than the electric generation currently delivered from all conventional hydropower plants in the United States.

A robust marine renewables energy industry advances other national economic, energy and environmental goals by:

- Producing renewable, emission- free energy from our Nation's abundant ocean resources, thereby mitigating climate change effects;
- Reducing our Nation's reliance on oil imported from the Middle East, Venezuela
  and other politically volatile areas;
- Revitalizing shipyards, coastal industrial parks and shuttered naval bases;
- Creating green jobs in coastal communities hit hard by our country's current economic crisis;
- Securing our Nation's place in developing offshore renewable energy technologies thereby ensuring that the United States is an exporter, not an importer, of these technologies;
- Providing low cost power for niche or distributed uses like desalinization, aquaculture, naval and military bases, powering stations for hybrid vehicles and for offshore oil and gas platforms; and
- Promoting coastal planning that reflects the goals of bio-diversity, and optimal
  use of resources which contemplates synergistic gains for all offshore industries.

The Coalition commends the work of the Committee and the National Ocean Policy Task Force to craft a national policy for the responsible development of our ocean, coastal, and Great Lake renewable energy resources. While this is a daunting task, we encourage this effort to enable marine renewable technologies to play a significant role in meeting our Nation's energy, economic, environmental and security produced.

The marine renewables industry in the U.S. faces unique financial, jurisdictional and regulatory hurdles that threaten the commercialization of this emerging renewable technology. First, marine renewables have not enjoyed the level of Federal support that other renewables, such as solar, biomass and wind have received. In FY08, the Department of Energy revived its dormant water power and hydrokinetic program and issued \$10 million in solicitations for grants. Appropriations increased to \$30 million for FY 09 and \$50 million in FY10. To date, DOE has not provided addi-

Second, while the potential of marine renewables is enormous, the industry stands at the same place as wind power fifteen years ago. Though offshore wind projects are now commercially viable and can be financed through power purchase agreements, marine renewables have only just reached the stage where the first generation of demonstration projects are ready for deployment. Although the first generation of marine renewables projects are small in size and lack the same private backing and access to capital as more mature energy technologies, nevertheless, they are required to comply with the same lengthy siting procedures applicable to wall established technologies. to well-established technologies.

For example, Verdant Power needed 5 years to acquire authorization to install a 30 kilowatt turbine array in the East River near New York City and Ocean Power Technologies (OPT) is embarking on the fourth year of its efforts to site a 2 mega-

watt project off the coast of Reedsport, Oregon.

The lengthy permitting process consumes scarce resources which are better used for perfecting the technologies which, in turn, would expedite commercialization. Moreover, permitting uncertainty deters private equity investors who, at present, are the primary source of capital for this nascent industry. As such, marine renewables developers have serious concerns about any system which will further delay siting or create more regulatory uncertainty for the first generation of marine re-

newables projects.

Because only two marine renewables projects have been sited in the United States and only a handful more abroad, little is known about the real world environmental, social and economic impacts of marine renewables projects. Consequently, marine renewable energy project developers are often unable to comply with resources agencies' requests for information without engaging in years of costly studies. For now, we advocate application of principles of adaptive management which allows for rigorous post-deployment monitoring and changes in operation to address adverse impacts as an alternative to extensive pre-siting studies. Adaptive management will also allow for collection of data that can inform MSP and future siting decisions.

Uncertainty regarding impacts also makes marine renewables inappropriate candidates for the precautionary principle. A policy of prohibiting action in the face of uncertainty would essentially bar any new technologies, including marine renewables, because questions about impacts cannot be resolved without actually siting

these projects and gathering data.

Marine renewables also suffer a second disadvantage in addition to their emergmarine renewables also subject to overlapping jurisdictions of multiple agencies, more so than any other offshore renewable. For example, marine renewables on the outer continental shelf (OCS) are regulated by both the Federal Energy Regulatory Commission (FERC) (for licensing) and the Mineral Management Service (MMS) (for leasing). Moreover, the existing "sweet spot" for wave energy technologies (based on existing technology, cost and operational viability) lies roughly two to five miles offshore, thus straddling state submerged lands and the OCS. Consequently, marine renewables are potentially subject to ongoing state coastal planning initiatives as well as any Federal policies proposed by the Task Force. Because of the problem of multiple jurisdictions, coordination between Federal and state programs as well as between FERC and MMS takes on heightened significance for marine renewables developers

As with offshore wind, marine renewables do not fit within the 5-year planning process established for oil and gas under the Outer Continental Shelf Lands Act OCSLA). Electricity from marine renewables is sold by contract to utilities, which have long-term planning processes for wholesale power procurement and transmission planning that must comply with Federal, state and regional initiatives. The 5-year planning process for oil and gas is out of synch with the electric utility plan-

ning process and is unworkable for marine renewables.

As the Task Force moves forward with steps toward MSP, it should bear in mind that several coastal states are already undertaking their own initiatives. These states include Massachusetts, Oregon, New Jersey, and Rhode Island. The Task Force should coordinate Federal efforts with state planning efforts. Finally, many of the models for MSP from Europe may not be appropriate for use in the United States because of our system of dual state-federal jurisdiction.

OREC and its member marine renewable energy developers are committed to environmentally responsible, economically viable development of ocean renewables projects. OREC and its members work closely with the resource agencies, NGO's and coastal communities to devise a workable approach to siting marine renewables

in an expeditious and environmentally benign manner.

To this end, OREC has negotiated legislation (S. 1462—provisions on Adaptive Management and Environmental Grant Program) that would establish an Adaptive Management Fund which developers can use to underwrite environmental studies and ongoing post-deployment monitoring requested by state and Federal resource agencies, including NOAA, for demonstration and early-stage commercial projects. Information subsidized by the Adaptive Management Fund would be placed into the public domain (in contrast to many environmental studies performed in connection with permitting which remain proprietary if the project does not move forward) to inform future decisionmaking. As added protection against environmental harm, projects receiving adaptive management funds would be required to cease or alter operation if unacceptable environmental impacts are observed during post-deployment monitoring. OREC has also supported legislation that would provide funding to coastal states to study and map their coastal resources and make such information publicly available.

OREC believes that NOAA's history of, and long experience in protecting and enhancing our Nation's coastal and ocean resources make it a critical player in developing an ocean management program. Most importantly, NOAA can play a valuable role in collecting the data necessary for a comprehensive ocean management policy. For that reason, OREC supports legislation to fund NOAA's ongoing data collection efforts through the Integrated Ocean Observatory Systems or other programs.

These carefully negotiated initiatives provide a course for moving forward cautiously, even in the face of some uncertainty and a means to gather the information that is critical to the success of MSP efforts. The Task Force should take these voluntary efforts into account when crafting an ocean management plan.

For the near term, OREC recommends that the Task Force begin to address un-

certainties regarding marine renewables technologies through adaptive management, robust monitoring and data gathering. OREC does not oppose MSP in principle nor do we object to laying the framework for eventual incorporation of MSP in National Ocean Policy. However, MSP is only as effective as the data and input upon which it is based—and gathering the baseline information needed to implement MSP will take time and funding.

In the interim, many of the goals of MSP—such as a coordinated approach to ocean development and identifying compatible uses—can also be pursued for the near future within the parameters of existing regulatory processes with some modifications or improvements and through application of adaptive management principles.

ciples.
OREC has recommended that the Task Force consider adopting the following principles in its MSP efforts to the extent possible:

- · Adaptive management should be recognized as the preferred approach for siting marine renewables and addressing concerns related to ocean management;
- · Avoid creating additional uncertainty which would effectively stop capital formation in this industry;
- · Leave the door open for future innovation;
- Ensure that ocean management or MSP is informed by adequate data, including data that has already been collected by Federal and state agencies;
- · Recognize the differences between oil and gas and marine renewables;
- Avoid creation of a new bureaucracy;
- Establish a coordinated, comprehensive approach to permitting offshore renewables through use of MOUs and creation of a uniform application;
- Avoid jurisdictional conflicts;
- Synchronize ocean management or planning initiatives with state and regional planning efforts and policymaking for the electric utility industry;
- Recognize the difficulties inherent in MSP and proceed cautiously, without slowing the marine renewables industry or sacrificing the goal of fighting climate

Marine renewables offer enormous potential to combat climate change and to provide an indigenous source of clean, renewable energy. Over the past 5 years, the marine renewables industry has gained momentum with respect to technology advancements and an influx of Federal and state funding. Stalling deployment of marine renewables at this critical juncture could devastate the industry and drive it overseas.

Because of the unique hurdles that a nascent industry like marine renewables face, OREC urged the Task Force to avoid attempts for a "one size fits all" or universal solution. With respect to marine renewables, the best approach is to allow for deployment to move ahead in an environmentally responsible manner which incorporates robust monitoring, adaptive management principles and encourages coordination between the relevant permitting agencies through use of uniform applications and process schedules and collaboration. Data gleaned from monitoring operation of the first generation of marine renewables projects can offer insight into marine renewables' environmental effects and its compatibility with other ocean uses. Ultimately, information gleaned can be used to inform siting decision and future ocean management initiatives.

Thank you again for the opportunity to comment on the issue of ocean management.

Senator Cantwell. Thank you.

And again, I want to thank all the witnesses.

And I want to start off, if I could. I'm assuming that many of you did give comments to the task force during this process. Is that correct, that everybody give input or filed something on a website or something of that nature?

This issue of spatial planning has obviously come up with many of your testimonies. And if the Administration is going to move forward on developing a framework for this, what do you think the role NOAA should play in implementing or coming up with this

framework? To any of you, or all of you.

Mr. Frank. Well, in my time, you know, I see the door open for all of us to participate, certainly the tribes. The tribes have been left out in the past, and we certainly got to be in the door and at the table in this go-around. We sit down with NOAA, with National Marine Fisheries, we manage side-by-side with them in the ocean right today, mapping and everything that they're doing out there, and certainly with Interior, with all of our agencies—our Federal agencies, as well as our states. We have to all be together, every one of us. We have to put our best foot forward. And we have—there's a right way and there's a wrong way. In the past, it has been done the wrong way. Certainly, we have to look to try to make it happen the right way.

Senator Cantwell. Dr. Kelso, did you—or Mr. Paxton? Any of you?

Dr. TAKAHASHI-KELSO. Thank you, Madam Chair.

I'd like to answer both how we think NOAA can play a role in the National Ocean Policy and the council and also with respect to

marine spatial planning.

We think it's critically important for NOAA to have a key leadership role in the National Ocean Policy and in the council. We also think it's desirable to have a strong White House presence and a role in the Council. We think that helps maintain the kind of coordination and integration that the policy is supposed to achieve. So, both of those seem important, from our perspective.

With respect to marine spatial planning, NOAA is clearly the agency with a great deal of expertise to bring to the table, particularly with respect to science and how some of the activities that are—occur in U.S. waters are regulated. The plans, however, are really regional in nature. And so, in order to be a place-based marine spatial plan, they need to build on a regional basis. So, clearly,

NOAA should have a strong role and a presence in the development, but also other entities, including the tribes, as sovereign participants, the states, and the local communities. And those regions should be drawn in a way that enable us to really get plans that are targeted on the ecosystem and socioeconomic characteristics

that bring them together as a region.

Mr. PAXTON. Madam Chair, I thought the first panel discussion was quite telling of who's in charge of all this. Quite frankly, though, NOAA is in charge with managing commercial and recreational fishing. They have regional councils, under the Magnuson-Stevens Act. They have a regional focus. They're already doing ecosystem-based management through the various regional coun-

I would argue that it's most logical that NOAA should be at the head of this. The fact that they're not is a little surprising. I know they're part of the process, but to hear that they're not at the council level is a little stunning from where we sit. They have the expertise, they know the science, and they do coastal management. They should absolutely be at the head of this.

Senator Cantwell. Thank you.

Ms. Elefant. Yes. We would also agree with that. We have rec-

ognized the role that NOAA plays already in gathering information through the interagency ocean observatory systems. And we also believe that they can continue to gather information. They know what types of information is necessary to inform decision-making. They know what types of—I mean, data-gathering sounds like, you know, something that's very simple, but in reality it's very complicated. You need to put the data into, you know, formats that are useful to different organizations and also identify the data that you need for decisionmaking. And NOAA is very knowledgeable about that. We also do have—through the Coastal Zone Management Act, played a role in regional planning. And so, we want to see them play a role in the spatial planning effort on that level.

At the same time—and so, we also were surprised to see that they had been left out, or relegated a more secondary role, in the

creation of the ocean council.

Senator Cantwell. OK.

Senator Begich, did you have questions?

Senator Begich. Thank you, Madam Chair, just a couple. I know we have a vote in about 9 minutes, here, so let me be very quick, if I can.

And, Dr. Kelso, I—I want to call you Denny; as you know, that's how we refer to you. But, let me—Dr. Kelso, if I can ask you—one of the comments that I've seen off and on is that offshore oil development or gas development maybe should be on hold while they go through the process of this effort, and the spatial planning—marine planning effort be completed. You know, obviously I would have major heartburn over that, because, as I've heard—you probably heard me describe planning efforts I've been through. This is not one that ends up in 1 year and you're done. So, can you give me any comment? Because—one, your personal experience of Alaska. But, how do you balance that as we develop a long-term policy and a planning effort and ensure that we continue to move forward on responsible offshore development?

Dr. TAKAHASHI-KELSO. Thank you, Senator Begich.

The key, I think, is to look closely at the particular environments and the state of the science that we have, as well as other key in-

formation, like traditional ecological knowledge.

So, here's how I would approach that. In a place like the Arctic, which is unusually vulnerable and has extraordinary resource values, we need to proceed carefully so we make the right decisions. That's not to say that we would simply stop and not proceed at all.

Senator Begich. Moratorium.

Dr. TAKAHASHI-KELSO. Exactly. We don't—we are not pursuing a moratorium. We're talking about a kind of time-out that lets us get it right. And the different pieces of that, including the different regions and subregions in your state, make it possible, I think, to make different decisions in different areas, based on how much information we have, how vulnerable the area is, or what the proposals are for the—for making—for pursuing resource extraction. And, in a particular example of oil and gas, there the previous Administration put such large area on the leasing block that it made it very difficult to make thoughtful decisions about the specific effects, not only on ecosystems, but also on coastal communities. As you well know, the communities in the Arctic Slope and in northwest Alaska depend so heavily on the sea, and the North Slope Borough has asked for a very careful approach. And, in the words of a borough mayor, "It's too much, too fast, too soon." And we think that's pretty good advice. That doesn't mean you can't get there. It means we need to be careful how we do that, and we make choices that are specific to the data, that are specific to risks involved and the particular proposals to go forward.

Senator Begich. And do you think—you saw some of my line of questioning regarding the economic—when you do an oceans policy, from an environmental viewpoint, that's one piece of it, but there are all the economic pieces. I know when we did our comprehensive plan, we actually required an economic analysis—impact analysis—pro and con. In other words, you know, if you shut off an area that may be already—maybe it's commercial fishing—what's the impact? Or it might be a shipping lane, or it might shrink down an area that may be accessible. Do you think that's an important part, if we go down this effort of marine spatial planning, that there need also be tied directly to it an economic impact analysis, both

private- and public-sector analysis?

Dr. Takahāshi-Kelso. I think the ocean policy and the marine spatial planning part of that provides an opportunity to give greater certainty to ensure that conflicts are reduced and to build on the best available science and to fill in some gaps in science, where those exist. I followed, in the *Anchorage Daily News*, your work—I would say, adventures—on the comprehensive plan for Anchorage.

Senator Begich. It was an adventure.

[Laughter.]

Dr. TAKAHASHI-KELSO. And I would suggest that one way we avoid the kind of tangle that you were successfully able to navigate—but it was a challenge—is, we don't take on every place at once. We don't try to do the entire U.S. Exclusive Economic Zone.

Senator Begich. Yes.

Dr. Takahashi-Kelso. We choose some pilot areas. We know that there are some areas that are ready to go. Several states have done important work already; the State of Massachusetts, the State of Rhode Island, are underway right now—the State of Washington has excellent experience with the Puget Sound partnership—and the work that's going on in other places can teach us how best to proceed. That doesn't mean that it will be simple, but I think, if we choose our pilot projects carefully, if we learn from them, we use adaptive management going forward, I think we can handle the kind of challenges that you already know so well.

Senator Begich. Thank you very much. That's actually some very good advice in how to approach the planning effort, because sometimes we want to do it all at once, and we usually collapse under our own weight. That's why—I remember, as mayor, I inherited from the former Mayor—and we had to kind of do pieces in

order to kind of get it moving. But, thank you very much.

Thank you, Madam Chair.

Senator CANTWELL. It makes me want to go back and look at the clips, Senator, from your—

[Laughter.]

Senator BEGICH. It's—let me say, it was diverse, and we had 1,900 square miles of the city. So, it was very diverse, geographically as really as reconstruction.

cally, as well as peoplewise.

Senator Cantwell. Mr. Paxton, you—in your testimony, you said that you have some concerns about eco-based management, or that it shouldn't be part of a Federal mandate or ocean policy. Could you explain why?

Mr. PAXTON. Thank you, Madam Chair.

Primarily the reason why is, we're currently doing it. The regional councils implement varying forms of ecosystem-based management. One of the things that this committee steered away from in a debate several years ago was, Do you mandate ecosystem-based management in the law? And this committee decided they didn't have the science to really get them to that place where they could write a law that said, "Here's how you do ecosystem-based management." So, what this committee did was actually say, "Let us get the state of science on it. Let us find out what we know." And I think what we've heard a lot from this panel today is that there are a lot of regional efforts that are out there. I know that Puget Sound is doing ecosystem-based management in a varying form. And I know they're doing it up in Maine. We're doing it in the Gulf of Mexico. We can do this. I think what we've got to avoid is the Federal mandate to do so.

We ran into a similar situation when they mandated a concept called "essential fish habitat." They said every council has to look at the adverse impacts on essential fish habitat. And every FMP that came out of the regional councils go sued and ended up in court, because they didn't know how to take the adverse impacts on to essential fish habitat. I think the goal has to be, when you do anything in this process, especially with something that's kind of nebulous or difficult to explain or get to, on ecosystem-based management, is, don't mandate it, because the only thing we'll get out of it is potential litigation. I think that's where we see some problems, because we've already experienced that in some places in

the Gulf of Mexico, where areas were closed because we couldn't define "adverse impacts."

So, I would recommend that we try to get a very concise explanation of what ecosystem-based management is before we say "Go do it."

Senator Cantwell. Dr. Kelso or Mr. Frank, do you want to respond to that? Any ideas about how to address Mr. Paxton's concerns?

Mr. Frank. You know, Madam Chairman, somebody has to be in charge. And, as you know, the tribes have a lot of agreements with the United States Navy, the United States Coast Guard, and the United States Army in our areas. Now, when we shake hands and make an agreement with them, the agreement stands. Before, this was not the case and problems festered, now we know who's in charge, and agreements are reached and problems are solved.

Somebody has to be in charge of the policy of the ocean. And if it's NOAA, we have to support NOAA. You know, you heard the zoning of our ocean. You know, we have to zone it right. There's

a right way and there's a wrong way.

The food chain has to be protected in the ocean. You see all the problems that we have with the food chain right now. The Chinook salmon, the great Chinook salmon is a prime example of this. You know, these things have to be protected—our water, our quantity and our quality—all of these things. You know, it'll make us look good if we put a policy together where somebody's in charge.

Thank you.

Senator Cantwell. Thank you, Mr. Frank. I've always said environmentalists make great ancestors.

[Laughter.]

Senator CANTWELL. Dr. Kelso?

Dr. Takahashi-Kelso. Madam Chair, I agree with Mr. Frank. Somebody does have to be in charge. And I have a disagreement with my—with Matt Paxton, but I'm sure we could resolve it. The disagreement——

Senator Cantwell. That's what I'm hoping for.

[Laughter.]

Dr. Takahashi-Kelso. The disagreement is that I don't see how it happens without a mandate. I think it's very appropriate that the President has put this in motion. And we think there is ample authority—ample discretion under existing authorities—to move forward with a policy. We think there is also an important role for the Congress. And we think that, in many ways, the Congress could help simplify and make clearer what the mandate is. So, there's a basis for, I think resolving what disagreement we may have.

But, the challenge is that we know we have, right now, a Swiss cheese of authorities. It is a real mess. Now, that doesn't mean that individual agencies aren't doing the best job they can with the authority they have. But, unless we have an overarching—where—an overarching mandate for pulling these together and working collaboratively, in an integrated way, to produce ecosystem-based management, and to put legs on that through marine spatial planning, I think we are going to continue to have that Swiss cheese effect.

The ocean policy that is being suggested by the task force does not take away authorities that Congress has granted. The regional fishery management councils continue to be the managers, under the Magnuson-Stevens Fishery Conservation and Management Act. That's appropriate. We think that they can, and should, adopt fishery management plans that are based upon ecosystem-based management principles.

The North Pacific Council recently has done that, and has also enacted a groundbreaking fishery management plan for the Arctic. This is exactly the kind of work that they should be doing. But, unless the fishery managers are at the table with the other kinds of activities that are going to affect fishing opportunity, we are going to have greater and greater problems, because the complexity of ac-

tivities in the ocean is going to increase.

Mr. Paxton. If I could just add one point to that, Madam Chair. I agree, Congress should clarify. And I agree that a lot of the things that you just articulated weren't Federal mandates. I think one example we can throw out real quick is, the Bush Administration used the Antiquities Act to designate the northern Hawaiian Islands and other places as marine reserves, no-go zones. The Antiquities Act was written in 1904 to, you know, save ruins in southwest Arizona. It wasn't meant to establish ocean parks, would be my argument. And I think when we get into a situation where we try to mandate, because we think we can—everyone agrees we should save the oceans—you get into bad results. And that's the only problem I see happening, if we just try to shoehorn in policies, under existing laws, that might not have application to the ocean environment.

Senator CANTWELL. I have one last question, and I don't—Sen-

ator Begich, do you have more questions?

The—Mr. Paxton, I wanted to ask you about climate change and the impact on recreational fisheries. And what do you think the Federal role should be there? And what do you think we should do

to help on that effort?

Mr. PAXTON. Climate change is obviously a very complex and difficult issue to get your hands around. I think, from the recreational community, you'll hear this—the recreational community, and, I think, some from the commercial fishing industry, would say that they care about a sustainable resource. You can't go fishing, you can't have, you know, a fishery, if you don't have a sustainable, healthy resource. To the extent that climate change is impacting sustainable fisheries, making the ocean environment unhealthy, so you don't have the opportunity to get out there and try to go recreational fishing, I think it's a huge problem.

But, I do think having a coordinated approach under this interim policy report on climate change would be an effective way to get at some big, huge concepts, like climate change. Because there are stovepipings, as you know, within our Federal Government that are all doing various things on climate change. If there's a way to coordinate those efforts, that's certainly a laudable goal and some-

thing we should be doing.

Senator Cantwell. Thank you.

Senator Begich, did you have a question?

Senator Begich. [Off mike.]

Senator CANTWELL. Well, yes, it—— Mr. Frank, did you want to make a——

Mr. Frank. Madam Chair and our Senator, all I see on climate change is, the tribes have to be involved. We can bring so much to the table, you know, in just the knowledge that we have and the data that we have, and so, you know, we have to be there. The climate change bill comes through, and, whenever it's acted on, we have to be part of that.

So, thank you.

Dr. Takahashi-Kelso. Madam Chair, can I—I wasn't going to say anything, but, Chairman Frank, you're absolutely right. I mean, my experience, especially in Alaska, is, the tribes and the elders from generation to generation have—they knew what was happening before we knew, in the sense of the scientific world, of what we were—should have been talking about decades ago. And there's great knowledge within the tribal community and the elders within—I know, in Alaska and, I'm sure, within your tribe—that we should engage in an aggressive way on what we need to be doing, based on what we're seeing in Alaska. I mean, we're moving whole villages because of the impact. And there are many other impacts. But, thank you, for those wise words.

Mr. Frank. Thank you.

Senator Cantwell. Well, thank you all for being here this morning for this hearing. I know we'll be following up with many of you on various policies and the implementation of this—the Committee plans to play a very active role in the oversight of this—but, obviously, moving forward on something that does really continue the economic and environmental vitality of our ocean.

So, we thank you for being good stewards, yourself, and for your testimony today.

This hearing is adjourned.

[Whereupon, at 12:20 p.m., the hearing was adjourned.]

### APPENDIX

PREPARED STATEMENT OF HON. JOHN D. ROCKEFELLER IV, U.S. Senator from West Virginia

Our oceans, coasts, and Great Lakes provide our Nation with unmatched wealth. Their beauty inspires us. They provide the air we breathe and the water we drink. They are home to magnificent animals—whales, dolphins, fish, and corals—that never cease to amaze us.

This Congress, Senator Cantwell and I have made a point to talk about the enormous wealth and economic support that our oceans and Great Lakes provide coastal communities, and the United States, as a whole.

Today's hearing will highlight similar work the Administration is undertaking on

this same front.

In June, the President charged the Council on Environmental Quality to create an Interagency Ocean Policy Task Force to develop recommendations for a national policy for our oceans, coasts, and Great Lakes, and he asked them to build a frame-

work for coastal and marine spatial planning.

The President set out an ambitious plan for the Federal Government with an ambitious timetable requiring the Task Force to report back in 180 days on its rec-

ommendations

It is time. Forty years ago, the Stratton Commission defined the structure and substance of a National Ocean Policy. Yet today, ocean management remains fragmented with an array of laws, regulations, and practices that confound efforts to protect, manage, and restore our oceans, coasts, and Great Lakes for future generations

We have a responsibility to get this right and I look forward to working with the Administration as it finalizes its recommendations for a national policy for the ocean, our coasts, and the Great Lakes and develops a framework for coastal and marine spatial planning.

The Commerce Committee has a longstanding history working on comprehensive ocean planning and has developed legislation that balances conservation and human uses, from habitat protection and national marine sanctuaries to commercial fishing, offshore thermal energy conversion, and maritime shipping lanes. These issues touch our lives everyday and will affect our communities for years to come.

The Committee is charged with the comprehensive study and review of all matters relating to science and technology, oceans policy, and transportation, and has exercised this interest through its oversight of: NOAA, the Nation's premier ocean science and resource agency; the United States Coast Guard, charged with safeguarding our maritime safety, security, and environment; and, other Federal agencies whose activities fall within our jurisdiction. The Committee works to make sure

policy decisions are built on and supported by strong science and technology.

I want to commend the Interagency Ocean Policy Task Force for its hard work.
This is a challenging issue. As the Task Force prepares its final recommendations

for the President, I would ask that it consider the following issues:

- 1. Give NOAA a central and strong leadership role in any efforts to improve the national stewardship of our oceans, coasts, and Great Lakes, and acknowledge the agency's critical role in the final report and framework;
- 2. Show us the money. The U.S. Commission on Ocean Policy provided over 200 recommendations to Congress to improve ocean and coastal management. The Commission estimated that the new funding necessary for implementing the recommendations would be \$1.3 billion in the first year and up to \$3.87 billion in ongoing annual costs for NOAA and other Federal agencies. Senator Cantagorical Companies of the Notional Occasion of the Notional Occasion. well, Senator Snowe, and I have called for \$8 billion for the National Oceanic and Atmospheric Administration's budget. We must recognize that, in order to improve and manage our ocean, coastal, and Great Lakes resources effectively, we need to fund these efforts. It is a wise investment in our Nation's environmental and economic future.

3. Evaluate existing legislative authorities and determine what more must be done to improve stewardship, management, and conservation, while balancing multiple uses in the marine environment. I hope that the Administration will work with Congress as it implements the recommendations.

This Committee recognizes that healthy oceans, coasts, and Great Lakes mean a healthy future. They mean quality jobs, strong industries, and thriving communities. They are a precious and beautiful natural resource, and we have a responsibility to protect them.

PREPARED STATEMENT OF HON. KAY BAILEY HUTCHISON, U.S. SENATOR FROM TEXAS

Thank you, Senator Cantwell, for holding this hearing to consider the Administration's proposed National Ocean Policy.

At 3.4 million square miles, the United States has the world's largest Exclusive Economic Zone. The safe and sustainable development of the resources contained within our Exclusive Economic Zone is vitally important to our Nation's economic health.

From commercial and recreational fishing to shipping to oil and gas development, the economies of coastal states are closely tied to our oceans. For example, In the Gulf of Mexico alone, the commercial fishing industry brings in nearly \$1 billion per year to our coastal economy and our 3.2 million recreational anglers make over 25 million trips per year. Further, the waters of our shores currently account for approximately 27 percent of our Nation's domestic oil production and 15 percent of our domestic natural gas production, generating billions of dollars in economic activity and reducing our dependence on foreign oil.

A recent Congressional Research Service (CRS) memo outlined how important these offshore resources are to our national and economic security. According to CRS, the Outer Continental Shelf (OCS) contains 85.8 billion barrels of undiscovered technically recoverable oil. This represents over half of our entire endowment of technically recoverable oil which is 166.7 billion barrels. Additionally, the OCS contains 419.8 trillion cubic feet of undiscovered technically recoverable clean burning natural gas. These reserves make up a significant percentage of the total value for technically recoverable natural gas which is 1400.4 trillion cubic feet.

These figures represent significant resource potential for our country. They translate into jobs, economic and national security and development of these resources mean more revenues for cities, states and the Federal Government.

We must continue to produce these domestic resources in a responsible manner. It is important that we continue to take steps to reduce our reliance on foreign sources of energy.

Our offshore resources are a logical step toward reducing our reliance on the Middle East and Venezuelan energy sources. We must be mindful of the role the Gulf of Mexico, Atlantic, Pacific and Alaskan OCS can play in our effort to become less reliant upon foreign countries. Our offshore oil and gas reserves hold tremendous resource potential if we will develop them responsibly.

resource potential if we will develop them responsibly.

Our National Ocean Policy needs to ensure continuing access to our oceans for both recreational and commercial purposes, and avoid closing off portions of our Exclusive Economic Zone that have significant economic value.

The current ocean governance system has worked well in the Gulf of Mexico through an appropriate balance of economic and environmental interests. It is vital that any new National Ocean Policy not disrupt this balance by increasing regulatory burdens and stifling economic development.

Again, thank you for holding today's hearing. I look forward to hearing from our witnesses on this very important issue.

# RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO HON. NANCY SUTLEY

Question 1. Harmful Algal Blooms wreak havoc on coastal communities. In Washington State, a massive toxic algae bloom has killed over 8,000 seabirds over the last 2 months near Neah Bay—the largest-ever-recorded kill of seabirds on Washington's coast. Under the proposed National Ocean Council, who in the Federal Government have the authority to actually do something about the underlying causes of these toxic blooms (other than just studying the problem)? How would the new policy coordination proposed in the Interim Report improve our government's ability to prevent human-caused toxic algae blooms?

Answer. The National Ocean Council (NOC) would maintain, strengthen, and coordinate existing authority and responsibility for monitoring, predicting, and addressing issues such as harmful algal blooms (HABs) that occur in Washington

State and elsewhere in the country.

Federal Harmful Algal Bloom research and response is mandated by the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 and the reauthorization of 2004. This Act establishes a Federal interagency Task Force, led by NOAA, to coordinate Federal efforts. It also authorizes NOAA to administer directed HAB research programs including three applied, competitive national research programs for HABs to determine the underlying causes and provide tools for mitigation, response and forecasting.

The NOC structure would provide a sustained, high level forum for responding to all aspects of HABs in a more coordinated manner, including linkages with public health agencies and, where indicated, efforts to address factors causing blooms such as nutrient pollution. This structure would build off of existing agency efforts and, with the proposed priority objectives in the Task Force's Interim Report, would bring to bear major programs of the Federal Government that can address HAB problems (e.g., ecosystem-based management; water quality and sustainable practices on land; ocean, coastal, and Great Lakes observations; and infrastructure).

Question 2. One concern expressed about the Interim Report from the commercial sector is that it shifts the "balance" toward environmental stewardship priorities over economic demands. One of the nine recommended principles for a national ocean policy is that decision-making will be guided by a precautionary approach. Can the precautionary approach be adopted as a feature of our national ocean policy without bringing use of marine resources to a halt? Could you explain how CEQ

without bringing use of marine resources to a halt? Could you explain how CEQ would apply the precautionary approach to ocean resource use and development, and how it would change how you do business?

Answer. The Interim Report responds to the President's June 12, 2009 memorandum directing the Task Force to develop recommendations to "improve stewardship of the ocean, our coasts, and the Great Lakes". Improved stewardship will support not only healthier and more resilient ocean, coastal, and Great Lakes ecosystems and services, but also benefit the economies (e.g., commercial and recreational activities) and communities that rely on them. The Task Force believes that economic growth and improved stewardship of the marine and Great Lakes environment are inextricably linked

vironment are inextricably linked.

Application of a precautionary approach, as defined in the Interim Report ("[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"), is consistent with and essential for improved stewardship. Moreover, that definition is one to which the United States has formally agreed by signing and ratifying the 1992 Rio Declaration. We must ensure that when we enjoy and use ocean, coastal, and Great Lakes resources, we use the best available information to make management decisions and minimize adverse en-

Question 3. At Dr. Lubchenco's confirmation hearing earlier thisyear, I discussed scientific comments that NOAA, EPA and Fish and Wildlife Service had submitted to the Minerals Management Service on an EIS for proposed drilling in the Chukchi Sea in the Arctic Ocean. Unfortunately, MMS dismissed NOAA's scientific and environmental expertise and largely ignored the agency's advice. I understand that NOAA submitted scientific comments to the Department of Interior on the environmental impacts of the Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015. How can we be sure that this time NOAA's views will be taken seriously and given the weight they deserve?

Answer. A healthy environment in the Arctic and elsewhere is an essential foundation for sustainable resource management that provides long-term benefits to the Nation. NOAA has a great deal of expertise in marine science, coastal management, and living marine resources. NOAA is working with the Department of the Interior and the Administration to deliver coordinated science-based decision-making and ecosystem based management as they move through a process to further refine its five-year plan for oil and gas leasing on the outer continental shelf. We expect that NOĂA and all other relevant Federal agencies will continue to work together to help DOI shape a five-year oil and gas leasing plan that effectively addresses the need for domestic sources of energy and protects environmentally sensitive areas of our oceans and coasts.

Question 4. Can we expect to see a FY2011 funding request for implementation of the national ocean policy and marine spatial planning framework? What is the Administration's position on the establishment of an Ocean Investment Fund that

draws on revenue derived from commercial activities in Federal waters or perhaps from the auctioning of carbon credits? Does the Administration plan to develop an Integrated Ocean Budget that will allow Congress and others to fully understand and evaluate how limited resources are being used to implement the proposed recommendations?

Answer. A comprehensive national policy should improve policy coordination and inform the Administration's budget process, including the setting of priorities based on available resources, identifying new areas of investment, and proposing new sources of revenue

The proposed National Ocean Council (NOC) structure would provide annual guidance for ocean, coastal, and Great Lakes priorities and budgets consistent with the goals and objectives of the policies set forth in existing law and the proposed national ocean policy. The NOC also would ensure agencies are maximizing available resources across the Federal Government, in part by promoting partnerships among Federal agencies, and with State, local, tribal authorities, and the private sector. One of the pipe patiently priority objectives that addresses management consector. One of the nine national priority objectives that addresses management co-ordination and support in the Interim Report specifically describes the need for the NOC to "evaluate existing or new funding sources" and these actions will promote better investments in, and stewardship of, the ocean, coasts, and Great Lakes.

Question 5. The Interim Report does not call out a specific role for NOAA or acknowledge its unique role—such as managing marine fisheries, coordinating ocean and coastal observations, or helping coastal communities through the Coastal Zone Management Act and Sea Grant Program. I hope this was an oversight of the Task Force and the final report will acknowledge NOAA vital role in ocean stewardship, management, and science. In its final recommendations, how does the Ocean Policy Task Force plan to ensure there will be adequate leadership to implement its recommendations and address critical ocean and coastal issues?

Answer. The Task Force considered a variety of options for improving the governance and management of our Nation's ocean, coasts, and the Great Lakes. The Task Force believed that the Executive Office of the President, Council on Environmental Quality (CEQ) and Office of Science and Technology Policy (OSTP), should lead the NOC and provide the necessary high level engagement identified as a key goal of

an improved governance structure.

The Department of Commerce, in which NOAA resides, would be a member of the NOC. NOAA is a key agency when it comes to the ocean and we fully anticipate it will have significant involvement implementing the National Policy, with the NOC, and supporting the priority objectives, including effective coastal and marine spatial planning.

Question 6. After the Task Force issues its final recommendations to the President, what are the next steps and what are the different options that the President could pursue to implement the recommendations?

If the Task Force recommendations are implemented, what concrete changes would we see regarding the Federal Government's involvement in regional ocean governance efforts like the West Coast Governors'Agreement?

Answer. The Interim Framework for Effective Coastal and Marine Spatial Planning (Interim Framework) will soon be completed and will be issued for public review and comment. Once comments are received and considered, the Task Force will finalize its recommended framework and then combine it with the final recommendations for a national policy, policy coordination structure, and priority objec-

All potential mechanisms would be considered to implement that Task Force's recommendations for the near, medium, and long-term. If established, the National Ocean Council (NOC) would also develop strategic action plans for the priority objectives identified in the Interim Report, which could also identify necessary implementation mechanisms.

The September Interim Report highlights the need to improve the coordination and collaboration with state, tribal, and local authorities, and regional governance structures (e.g., West Coast Governors' Agreement on Ocean Health, Gulf of Mexico Alliance). The proposed governance structure includes a new advisory committee to formally engage state and tribal authorities, and regional governance structures over the long term.

Question 7. The United Nations released a report called "Blue Carbon" which recommended a global blue carbon fund for the protection and management of coastal and marine ecosystems and ocean carbon sequestration similar to the way credits are offered for green carbon such as rainforests. Would the Administration support this recommendation and be willing to actively work to establish this type of funding domestically and internationally?

Answer. As discussed in the response to question number 4, a comprehensive national policy should improve policy coordination and inform the Administration's budget process, including setting priorities within available resources, identifying new areas of investment, and proposing new sources of revenue. The proposed National Ocean Council (NOC) structure expressly contemplates formulation of an annual budget guidance memorandum on ocean, coastal, and Great Lakes priorities consistent with the goals and objectives of the National Policy.

Question 8. Under the Task Force's proposed National Ocean Council structure, how would the Council interact with fisheries management under the already-exist-

ing Regional Fisheries Management Councils?

Many of my constituents in the commercial fishing industry are very worried that we may be adding another layer of bureaucracy that will override the current fisheries management system—even in instances and places where fisheries management is working well, like the North Pacific. What is your response to these con-

cerns?

Answer. The proposed National Policy will maintain existing authorities, such as the Magnuson-Stevens Fishery Conservation and Management Act, but seeks to improve the coordination, collaboration, and effectiveness of existing structures and processes by providing a unifying context within which they would operate. Thus, we fully expect that NOAA would continue to interact with the Fishery Management Councils through its existing structure as it works to further the National Policy.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK BEGICH TO HON. NANCY SUTLEY

Question 1. One initial reaction to the draft policy paper was that it lacked attention to the economic importance of our oceans to the Nation. In my opening remarks I noted that Alaska waters provide over half of all U.S. seafood harvests—over 4 billion pounds annually worth almost \$2 billion. The seafood industry is the largest private sector employer in the State and coastal communities from the southeast panhandle to the Aleutian Islands depend on the bounty of the sea. Alaska waters are critical shipping routes between the west coast states and Asia, and with the diminishing Arctic ice pack, new, shorter trade routes to Europe will soon open via the Northeast and Northwest passages. More than a million visitors cruise our waters annually to enjoy our spectacular scenery and clean waters. And locked beneath our Arctic waters is the promise of a substantial supply of oil and clean burning natural gas to help our Nation meet the energy needs of future decades.

As an ocean-dependent state, Alaskans care very deeply about the health of the ocean and sustainable resource management. How will the economic aspects of the

ocean be addressed this in the final report?

Answer. The Interim Report responds to the President's June 12, 2009 memorandum requesting the Task Force to develop recommendations for a national policy and a policy coordination framework "to improve the stewardship of the ocean, our coasts, and the Great Lakes." As such, the report includes a National Stewardship Policy for the Ocean, Our Coasts, and the Great Lakes. Improved stewardship will support healthier and more resilient ocean, coastal, and Great Lakes ecosystems and services, and benefit the economies (e.g., commercial and recreational activities) and communities that rely on them. The Task Force believes that economic growth and improved stewardship of the marine and Great Lakes environment are inextricably linked. While the Interim Report did not single out individual sectors for discussion, the Task Force recognized the significant economic importance of the ocean, our coasts, and the Great Lakes.

Question 2. Concerns have been raised about how the budget for the work envisioned in the oceans policy would be funded, and whether it would come from shifting program funding from existing responsibilities that are equally necessary such as fisheries enforcement, search and rescue, and the like? Could you comment on funding for the new oceans initiative and how that would impact existing agency funding?

Answer. A comprehensive national policy should improve policy coordination and inform the Administration's budget process, including setting priorities based on available resources, identifying new areas of investment, and proposing new sources of revenue. The proposed National Ocean Council (NOC) structure expressly contemplates formulation of an annual budget guidance memorandum on ocean, coastal, and Great Lakes priorities consistent with the goals and objectives of the National Policy. The NOC would also have the responsibility to help ensure agencies are maximizing the effectiveness of existing resources across the Federal Government, including partnerships among Federal agencies, and with state, local, tribal authorities, and the private sector. These actions should move us toward better investments in, and stewardship of, the ocean, coasts, and Great Lakes.

Question 3. This new policy would establish a National Ocean Council with 25 members including cabinet members and agency heads. This Council has seats for HHS, Agriculture, Labor, Attorney General, even NASA has a seat on the Oceans Council but the one agency nominally charged with oceans, NOAA, does not. How does this Council and policies thereof affect the role of this Nation's ocean agency, NOAA? How will the National Oceans Council, co-chaired by CEQ and OSTP interact with NOAA?

Answer. The Task Force considered a variety of options for improving the governance and management of our Nation's ocean, coasts, and the Great Lakes. The Task Force believed that the Executive Office of the President, CEQ and OSTP, should lead the National Ocean Council (NOC) and provide the necessary high level engagement identified as a key goal of an improved governance structure.

The Department of Commerce, in which NOAA resides, would be a member of the NOC. NOAA is a key agency when it comes to the ocean and we fully anticipate it will play a significant role implementing the National Policy, coordinating with the NOC, and supporting the priority objectives, including coastal and marine spatial planning.

Question 4. Fishermen's concerns about ocean zoning are similar to those they've experienced on land, which hasn't always been good. Many fishermen have seen waterfront property taken away by condo and restaurant developers. Sen. Collins has introduced the Working Waterfront Preservation Act to protect such traditional uses.

What assurances can you give fishermen that Marine Spatial Planning will include fisheries and that their livelihoods won't be zoned out of existence? How do I address my constituency's concerns that a one-size-fits-all National Ocean Policy will be implemented in the U.S. EEZ off Alaska which lacks regional relevance and utility?

Answer. The Task Force was charged with developing a framework for effective coastal and marine spatial planning. As such, it would not contain zoning maps, or identify areas either accessible or off limits to any particular activity. Rather, the framework would set the stage for a collaborative, regionally-based process for coastal and marine spatial planning around the country. In developing the Interim Framework, the Task Force received a number of comments on the importance of providing flexibility and accounting for regional differences, and the need to provide for extensive stakeholder and public participation.

Question 5. Currently, the Bering Sea Integrated Ecosystem Research Program is funded through the National Science Foundation and the North Pacific Research Board to study the effects of climate change on the Bering Sea ecosystem. At the Task Force's hearing in Anchorage, the U.S. Arctic Research Commission suggested that the work of the Bering Sea Program be expanded to research in the Chukchi and Beaufort seas. How will the new Ocean Policy promote climate change and ecosystem research in the Arctic? Will an integrated Arctic research plan be a part of the new National Ocean Policy?

Appendix The Task Force Interview Popent expressly recognizes the regidly changing

Answer. The Task Force Interim Report expressly recognizes the rapidly changing environment in the Arctic and the vulnerabilities and opportunities this creates. The Task Force report has identified specific suggestions pertaining to this important region. The Interim Report provides that the strategic action plan to be developed by the National Ocean Council for the Arctic address "[i] mprovement of the scientific understanding of the Arctic system and how it is changing in response to climate-induced and other changes." Working with all stakeholders, including Alaska Native communities, the Task Force recognizes that it has the opportunity to develop proactive plans, informed by the best science available, to manage and encourage use while protecting the fragile Arctic environment.

Question 6. During witness testimony on the second panel of the November 4th Subcommittee Hearing, Matt Paxton gave an example of the Bush Administration's use of the Antiquities Act to set aside the Mariana Trench as a no fishing zone to illustrate outcomes that can result from extra-statutory Federal ocean policy. What assurances do ocean stakeholders, who rely on the sea for their livelihood, recreation, and cultural and spiritual wellbeing, have that the National Ocean Council will not implement restrictions that are not explicitly contemplated, conceived and authorized in law?

Answer. There are no regulations or restrictions proposed in the Interim Report, nor does the proposed National Policy create new or alter existing authorities. Rath-

er it seeks to ensure improved collaboration and coordination among them and the agencies that administer them.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO HON. JANE LUBCHENCO

Question 1. Harmful Algal Blooms wreak havoc on coastal communities. In Washington State, a massive toxic algae bloom has killed over 8,000 seabirds over the last 2 months near Neah Bay—the largest-ever-recorded kill of seabirds on Washington's coast. Other than studying the issue more, what else should we be doing

Answer. NOAA greatly appreciates the efforts of this Committee, and the Committees on Science and Technology and Natural Resources of the U.S. House of Representatives, to focus on this issue through reauthorization of the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 (HABHRCA). We strongly support reauthorization of HABHRCA. Over the last 10 years we have made enormous progress in understanding the causes and consequences of HABs and hypoxia, leading to the development of many tools and information products which, in turn, have directly improved HAB and hypoxia management, particularly in the area of prediction and mitigation. We anticipate that in the next 10 years we will continue to make progress and our ability to prevent and control, as well as mitigate, HAB events will be greatly enhanced.

In late October, NOAA, state, and university researchers joined an ongoing re-

gional effort to respond to a major seabird mortality and stranding event in the Pacific Northwest. Thousands of seabirds of multiple species appear to have been impacted by a widespread Harmful Algal Bloom (HAB) of the algal species Akashiwo sanguinea. The HAB, while believed to be nontoxic to humans, produces soap-like foam that removes the waterproofing on ayian feathers, making it harder for birds

to fly and promotes the onset of hypothermia.

In order to discuss region-specific HAB issues and begin to develop a West Coast Regional Research and Action Plan to tackle this emerging problem, NOAA organized a 2009 West Coast HAB Summit which brought together 80 leading scientists, managers, and industry representatives. At the Summit, the representatives also endorsed the vision of the West Coast Governor's Agreement on Ocean Health to establish a regional HAB monitoring, alert and response network and forecasting system. Seizing on the opportunities of new and emerging technologies and research, this system will provide advanced early warning of HABs, minimize fishery closures, protect the economy of coastal communities, mitigate the impacts to marine life and protect public health.

The West Coastal Governors' Agreement on Ocean Health and its member states are currently integrating specific actions to promote interstate coordination of HAB research and monitoring efforts. These are articulated in their recently released Action Plan, which is available at http://westcoastoceans.gov/docs/WCGA\_Action

Plan low-resolution.pdf.

Question 2. One criticism of the Interim Report from the commercial sector is that it shifts the "balance" toward environmental stewardship priorities over economic demands. One of the nine recommended principles for a national ocean policy is that decisionmaking will be guided by a precautionary approach. Can the precautionary approach be adopted as a feature of our national ocean policy without bringing use of marine resources to a halt? Could you explain how NOAA would apply the precautionary approach to ocean resource management, use and development, and how it would change how you do business?

Answer. The Interim Report responds to the President's June 12th memorandum directing the Interagency Ocean Policy Task Force to develop recommendations to "improve stewardship of the ocean, our coasts, and the Great Lakes." Improved stewardship will not only support healthier and more resilient ocean, coastal and Great Lakes ecosystems and the services they provide, but also the communities

and economies that depend upon those services

The language in the Interim Report specifically states: "Decisions affecting the ocean, our coasts, and Great Lakes should be informed by and consistent with the best available science." When full scientific certainty is not available, it is important decisions are made carefully to avoid serious or irreversible impacts. Application of a precautionary approach, as defined in the Interim Report ("w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"), is consistent with and essential for improved stewardship. Moreover, that definition is one to which the United States has formally agreed by signing and ratifying the 1992 Rio Declaration. We must ensure that when we enjoy and use ocean, coastal, and Great Lakes resources, we use the best available information to make management decisions and minimize adverse environmental effects.

Question 3. At your confirmation hearing earlier this year, I discussed scientific comments that NOAA, EPA and Fish and Wildlife Service had submitted to the Minerals Management Service on an EIS for proposed drilling in the Chukchi Sea in the Arctic Ocean. Unfortunately, MMS dismissed NOAA's scientific and environmental expertise and largely ignored the agency's advice. In your view, how should the Ocean Task Force's recommendations play into these kind of decisions on offshore oil and gas drilling?

Answer. The recommendations found in the Interagency Ocean Policy Task Force's Interim Report are draft recommendations and have not been finalized yet. It remains to be determined how and when the President would choose to act upon those final recommendations and how existing processes would then be incorporated into the implementation and execution of the National Ocean Policy.

Question 4. Some critics of the Ocean Policy Task Force's Interim Report suggest that goals such as protecting ecosystem health and biological diversity will be difficult, if not impossible, to translate into concrete action and requirements by Federal agencies. How can the Administration translate these broad goals into tangible actions in and on the water? What do you see as the greatest challenges and great-

est benefits in this regard?

Answer. The Interagency Ocean Policy Task Force's Interim Report outlines nine principles that if implemented would guide the U.S. Government in developing management decisions and actions affecting the ocean, coasts and Great Lakes. These principles include the following essential concepts: decisions should be informed by and consistent with best available science and guided by the precautionary approach; ecosystem-based and adaptive management approaches should be utilized; and current and future uses of ocean, coastal, and Great Lakes resources should be managed and effectively balanced in a way that maintains and enhances the environmental sustainability of multiple uses. The entire suite of principles, when applied government-wide, will serve to make significant changes in how we manage our oceans, coasts and Great Lakes.

One of the challenges in applying the National Policy and implementing the principles will be the need to continually improve our understanding of ocean, coastal, and Great Lakes ecosystems. Meeting this challenge will require disciplinary and interdisciplinary science, research, monitoring, modeling, forecasting, exploration and assessment to continue to improve our understanding of the consequences of management decisions on ocean, coastal and Great Lakes ecosystems, as well as the long-term health and well-being of the population, including human health and safe-ty. The ultimate benefit of this effort will be the consistent application of the policies government-wide, to achieve the vision set forth in the Task Force's Interim Report: An America whose stewardship ensures that the ocean, our coasts and the Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future gen-

Question 5. Under the Task Force's proposed National Ocean Council structure, how would the Council interact with fisheries management under the already-existing Regional Fisheries Management Councils? Many of my constituents in the commercial fishing industry are very worried that we may be adding another layer of bureaucracy that will override the current fisheries management system-even in instances and places where fisheries management is working well, like the North

Pacific. What is your response to these concerns?

Answer. Activities that affect the ocean environment will only continue to increase in the years ahead, and effective planning processes are the best way to ensure that the consequences of decisions are appropriately considered in order to minimize conflicts between these activities. As currently envisioned, the National Ocean Council would serve primarily as a coordinating and priority-setting entity, and would provide a mechanism to better coordinate activities across agencies that contribute to national goals and objectives. The structure of the National Ocean Council is intended to provide for greater participation by, and coordination of, State, tribal, and local authorities, and regional governance structures, but is not intended to impair or override existing statutory authorities. The fisheries management system must be an active participant in ocean planning to ensure the needs of fishing communities are considered, and that productive, sustainable fisheries can be maintained even as the number and diversity of activities in the ocean environment increase.

Question 5a. This Committee is dedicated to ensuring that the ending-overfishing deadlines we put into the Magnuson-Stevens Act in 2006 stand firm. Does NOAA agree that these are important deadlines to meet? To what extent will the National Ocean Policy address the need to end overfishing and ensure fishermen can stay in business?

Answer. Ending overfishing is critical to rebuilding our Nation's fish stocks and in this regard, NOAA is working hard to implement the requirements and meet the statutory deadlines of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSA). NOAA believes that the recommendations made for a National Policy, if implemented, will be consistent with the MSA requirements, and the focus on cross-agency coordination should help to address environmental issues that are affecting fishery sustainability, but are outside of the scope of the MSA (e.g., non point source pollution, destruction of coastal habitat).

Question 6. NOAA's 2008 recovery plan for the Puget Sound Southern Resident Orcas called for significant financial investments (\$15 million over the first 5 years) to help recover this critically endangered icon of the Pacific Northwest. Unfortunately, NOAA has only budgeted about \$1 million each year for FY2009 and FY2010. NOAA has made nowhere near the necessary investment. What can the Task Force or National Oceans Council can do to make up for an inadequate NOAA budget for orca recovery (or any ocean issue)? Will any of the Task Force recommendations help push recovery for endangered marine species like Puget Sound's Southern Resident Orcas?

Answer. In the cost estimates for recovery, some of the \$15 million for the first 5 years is attributed to actions for which NOAA is the lead responsible party, while many of the actions include other responsible parties as well. Given the range of threats to the population (e.g., contaminants, vessel impacts, oil spills), the recovery of Southern Resident Orcas will require coordination among a variety of government

agencies and stakeholder groups, as identified in the Recovery Plan.

The interim report of the Interagency Ocean Policy Task Force includes a number of high level national priority objectives that are consistent with recovery of Southern Resident Orcas, and will also involve a wide variety of Federal, state and local entities. For example, support for ecosystem-based management will benefit orcas by providing a framework for managing multiple resources that considers the importance of restoring fish populations, sensitive species, and habitats. Adequate understanding of the impacts of human activities and efforts to educate the public regarding those impacts and stewardship opportunities (as described in the interim report under "Inform Decisions and Improve Understanding") will also inform management and contribute to recovery of Southern Resident Orcas and their salmon prey. One of the areas of special emphasis in the report, Regional Ecosystem Protection and Restoration, specifically identifies habitat loss and degradation of ecosystem services in Puget Sound, and highlights protection and restoration of protected species.

Question 7. I'm very interested in figuring out how NOAA and other Federal agencies can play a larger role in helping local, state, and regional efforts to restore estuaries such as the Puget Sound. What concrete changes would we see under the Task Force recommendations that would increase NOAA's contribution to efforts like the Puget Sound Partnership? At the end of the day, would you agree that NOAA needs

a stronger budget to contribute to such efforts?

Answer. The Interagency Ocean Policy Task Force's suggested implementation strategy includes nine priority objectives that the Nation should pursue to implement the National Policy. Taken together, these objectives will lead NOAA and other Federal agencies to improvements on many fronts, including assisting in local, state, and regional efforts. In particular, the following principles, as described in the interim report, will help NOAA and other Federal agencies address these efforts: "Ecosystem Based Management," "Coordinate and Support," and "Regional Ecosystem Protection and Restoration." These focus areas are not new to NOAA, as the agency has a number of existing programs and efforts that work with local, state, and regional partners around the country, such as the Puget Sound Partnership.

In addition, NOAA's Regional Collaboration effort focuses and coordinates NOAA activities in eight regions around the country. The purpose of this effort is to improve NOAA's productivity and value to customers by integrating program activities to address NOAA's priorities at both the national and regional scale, while using

existing authority and accountability structures.

The Administration has many competing priorities for limited resources and must balance these priorities in developing the annual budget request. We understand your concern about this region and expect that changes instituted through implementation of the Ocean Policy Task Force's recommendations would strengthen local, state and regional efforts, such as those in the Puget Sound.

Question 8. The United Nations released a report called "Blue Carbon" which recommended a global blue carbon fund for the protection and management of coastal

and marine ecosystems and ocean carbon sequestration similar to the way credits are offered for green carbon such as rainforests. Would the Administration support this recommendation and be willing to actively work to establish this type of fund-

ing domestically and internationally?

Answer. A comprehensive national policy should improve policy coordination and inform the Administration's budget process, including prioritizing within existing resources, identifying new areas of investment, and proposing new sources of revenue. The proposed National Ocean Council (NOC) structure expressly contemplates formulation of an annual budget guidance memorandum on ocean, coastal, and Great Lakes priorities consistent with the goals and objectives of the National Policy. "Blue Carbon" acknowledges the importance of coastal and marine ecosystems to the global carbon cycle, and the opportunities to protect and manage coastal habitats for their value in sequestering carbon in addition to the other multiple benefits they provide.

Question 9. As we've explored in this subcommittee, ocean acidification has only recently been recognized within the scientific community. NOAA is largely a science-based agency, so it is at the forefront of understanding and acting on ocean acidification. What other Federal agencies will be impacted by ocean acidification or play a role in dealing with its impacts and how is NOAA coordinating with them?

Answer. It is anticipated that ocean acidification will affect all coastal and ocean ecosystems. As directed within the Federal Ocean Acidification Research and Monitoring Act of 2009, the Joint Subcommittee on Ocean Science and Technology of the National Science and Technology Council is coordinating Federal activities on ocean acidification through an interagency working group. This working group is chaired by NOAA and is comprised of senior representatives from NOAA, National Science Foundation, National Aeronautics and Space Administration, Department of the Interior, Environmental Protection Agency, Department of State, and the U.S. Navy. The interagency working group is working to further interagency ocean acidification planning and to establish mechanisms to share and exchange information on agency ocean acidification activities.

Question 10. The Ocean Policy Task Force Interim Report calls for a special emphasis on strengthening Federal and non-Federal ocean observing systems, sensors, and data collection platforms, integrating these components into a national system, and integrating that national system into observation efforts at the international level. How will NOAA use its authority under the Integrated Coastal and Ocean Observations.

serving Act to strengthen ocean observations?

Answer. As the lead Federal agency for the implementation and administration of the National Integrated Coastal and Ocean Observation System established in the Integrated Coastal and Ocean Observation System Act of 2009 (Act), NOAA is collaborating with its Federal and non-Federal partners to build a robust national Integrated Ocean Observing System (IOOS). For example, NOAA is working to integrate coastal and ocean observing capabilities among Federal agencies, and the U.S. Army Corps of Engineers placed a permanent employee in the U.S. IOOS office at NOAA to facilitate this effort. In addition, NOAA continued a competitive, merit-based funding process in FY 2009 to enhance regional observing systems and achieve three long-term goals: (1) establish coordinated regional observing and data management infrastructures; (2) develop applications and products for regional stakeholders; and (3) craft regional and national data management and communications protocols.

In order to realize the full potential of the national IOOS envisioned in the Act, NOAA is working closely with its partners to create a well-coordinated, national network of observation strategies and systems; identify gaps in our Nation's ocean observing capabilities; and provide information needed to help decision-makers improve safety, enhance the economy, and protect the environment. The Act establishes a legal framework for achieving these objectives and also supports the use of basic and applied research to develop, test, and deploy improved and innovative observing technologies, modeling systems, and other scientific and technological capabilities. NOAA plays a leadership role in coordinating and implementing the U.S. IOOS, and is collaborating with international partners to integrate U.S. ocean observations into the Global Ocean Observing System, which is the ocean component of an even larger network known as the Global Earth Observation System of Systems.

Question 11. Earlier this year, you announced the creation of a Catch Shares Task Force. Will NOAA be issuing an interim report from that Task Force? What steps is NOAA taking to ensure that this process integrates the findings and recommendations of the Ocean Policy Task Force and vice versa?

Answer. NOAA released a draft catch share policy for public review and comment on December 10, 2009. The comment period will last 120 days and NOAA will be meeting with each Regional Fishery Management Council and stakeholder groups during this period to solicit input and feedback. The Interagency Ocean Policy Task Force issued its interim report on ocean governance in September and held a 30 day comment period; a final report and recommendations are still pending. NOAA shared the draft catch share policy with the Ocean Policy Task Force, and NOAA members on the Ocean Policy Task Force have been directly involved in the formulation of the draft catch share policy. The draft NOAA catch share policy comment period is sufficiently long enough to ensure any final Ocean Policy Task Force findings and recommendations from the President and/or the Council on Environmental Quality will be accounted for in the final NOAA catch share policy.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BARBARA BOXER TO HON. JANE LUBCHENCO

Question 1. What is the NOAA's vision for rebuilding our Nation's fisheries, both using its own authorities and working in collaboration with the other member agencies of the Interagency Ocean Policy Task Force? What barriers exist to implementing strategies to restore fisheries

Answer. The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSA) mandate to rebuild overfished stocks was enacted in 1996, and the first rebuilding plans under the new law came into place in the late 1990s. Currently, we have 51 active rebuilding plans. Sixteen other plans have resulted in successful rebuilding of overfished fish stocks.

NOAA's Fisheries Service continues to work with the Regional Fishery Management Councils to implement the rebuilding provisions of the MSA. The most important factor in rebuilding most overfished stocks is adequate control of fishing mortality. NOAA's Fisheries Service believes that the annual catch limit and accountability measures required by MSA, which will be implemented in all fisheries by

2011, will improve our ability to prevent overfishing and achieve rebuilding goals.

However, there are other factors that affect fishery sustainability that are more difficult for fishery managers to control, particularly as it relates to factors related to non-fishing impacts to habitat and upland sources of habitat degradation. For example, effective management of activities that affect the quantity or quality of important habitat, particularly areas needed for successful reproduction and early life stages, is essential both to rebuilding and to long term sustainability of fisheries. NOAA believes ocean policies should ensure that protection of essential fish habitat is given high priority in ocean planning efforts. In addition, NOAA, together with the Department of the Interior and the Environmental Protection Agency, is work the Department of the Interior and the Environmental Protection Agency, is working to conserve coastal and estuarine habitats that are vital to spawning and juvenile fish rearing. The National Ocean Council structure could help achieve such ob-

Rebuilding is particularly complicated in fisheries where significant mortality occurs from international fishing, or fishing in state or territorial waters, and where there is lack of agreement on rebuilding goals or management measures among the various jurisdictions. The National Ocean Council forum, which brings together agencies and also is intended to reach out to state, tribal, and local authorities, and regional governance structures, may serve a valuable role in allowing such issues to be raised in the context of national objectives for coastal and ocean environmental

and economic sustainability.

Question 2. Will the Task Force's efforts to improve coordination of Federal ocean management authorities help to clarify the appropriate authorities for permitting offshore aquaculture operations? How is NOAA moving forward to work with the Minerals Management Service and other agencies to clarify its authority over pend-

ing offshore aquaculture proposals?

Answer. The improvements in Federal ocean management and coordination called for in the interim report of the Interagency Ocean Policy Task Force would help advance NOAA's goal of achieving a coordinated national approach to regulating aquaculture in Federal waters. NOAA is currently developing a national aquaculture policy that will take into account the need for a transparent regulatory structure that:
(1) clarifies the authorities of NOAA and other Federal agencies under multiple statutes; and (2) provides a coordinated Federal regulatory process that will both protect the environment and provide regulatory certainty to enable sustainable aquaculture to develop in Federal waters. In addition to the national aquaculture policy, NOAA has worked with the Interagency Ocean Policy Task Force to develop a draft recommended framework for effective coastal and marine spatial planning that will address activities and uses like offshore aquaculture. This Interim Framework for Effective Coastal and Marine Spatial Planning is out for public comment until February 12, 2010, after which the recommendations will be finalized for the President.

# Response to Written Questions Submitted by Hon. Mark Begich to Hon. Jane Lubchenco

Question 1. In your prepared remarks: you say if the Oceans Task Force recommendations are adopted, it "could require NOAA to modify and re-prioritize some of its missions and data gathering responsibilities." What modifications and reprioritization do you envision? How will this affect current NOAA duties in fisheries research and management? How will this reprioritization affect budgets?

Answer. The Interagency Ocean Policy Task Force's Interim Report contains an

Answer. The Interagency Ocean Policy Task Force's Interim Report contains an implementation strategy that proposes nine priority objectives. The first four, which together frame How We Do Business, represent overarching ways in which the Federal Government must operate differently or better to improve stewardship of the ocean, our coasts, and the Great Lakes (ecosystem-based management, coastal and marine spatial planning, inform decisions and improve understanding, and coordinate and support). The implementation strategy also identifies five Areas of Special Emphasis, each of which represents a substantive area of particular importance to achieving the National Policy. These priority areas of work seek to address some of the most pressing challenges facing the ocean, our coasts, and the Great Lakes (Resiliency and adaptation to climate change and ocean acidification, regional ecosystem protection and restoration, water quality and sustainable practices on land, changing conditions in the Arctic, and ocean, coastal, and Great Lakes observations and infrastructure).

For each of these priority objectives, the National Ocean Council (NOC) would be responsible for, and oversee development of, a strategic action plan within six to twelve months from its establishment. Each of these plans would focus on the obstacles and opportunities for each objective but would also include, among other things: (1) explicit identification of key lead and participating agencies; (2) identification of gaps and needs in science and technology; and (3) identification of potential resource requirements and efficiencies along with steps for integrating or coordinating current and out work hydred.

rent and out-year budgets.

It is possible that NOAA, working in coordination with the other agencies on the NOC to develop and implement these strategic action plans, may be required to make some changes or adjust priorities. However, until this planning takes place, it is unclear what the specific needs will be and whether NOAA would be required to make any adjustments (within its existing legislative mandates and responsibilities) to meet those needs.

Question 2. Additionally, you say the policy will require "Line office elements of NOAA to focus on working with the many external partners to support ecosystem-based management of the oceans." Which external partners are you talking about, what are their roles and responsibilities, how will they interact with Federal entities already working on ecosystem management such as regional fishery management councils?

Answer. Using an ecosystem-based approach to management is not new to NOAA. NOAA currently collaborates with many external parties, such as those from academia, local and state governments, tribal governments, industry and non-governmental organizations, to better understand our ocean, coastal and Great Lakes ecosystems and human uses of these ecosystems. The statement you refer to simply reflects the need to continue to reach out to partners and work cooperatively together in order to leverage resources to support our information needs for ecosystem-based management.

Question 3. I am a strong supporter of ensuring that development in our oceans is responsible and based on the best available scientific information. In your comments on the upcoming Minerals Management Service leasing plan you wrote "NOAA believes that no leasing should occur in the Arctic Seas... until additional information is gathered and additional research is conducted and evaluated regarding oil spill risk, response and preparedness to spills; and possible human dimension impacts from oil and gas exploration activities and potential oil spills." While I support such research as we move forward to responsibly develop domestic energy reserves, I am concerned that bringing our leasing program to a halt will hinder our ability to provide for the Nation's energy security. How do you justify a complete halt to leasing activity? Since scientists are always asking tough questions to im-

prove our knowledge, what level of science is enough to proceed? At what point do

we decide that enough science has been produced?

Answer. On September 21, 2009, NOAA responded to the Minerals Management Service request for comments on the Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010–2015 (DPP). This response was intended as a set of informal comments that transmitted our initial thoughts regarding the DPP, and to initiate a dialogue between the agencies on the issues identified. Since September 1997 in the initiate and initiate a dialogue between the agencies on the issues identified. tember, multiple meetings have been held between NOAA and Department of Interior leadership to discuss these and other important issues related to oil and gas leasing on the Outer Continental Shelf (OCS). NOAA appreciates the chance to work closely with the Department of the Interior to ensure that decisions concerning energy exploration and development on the OCS are based on adequate and sound science, and afford an appropriate level of protection to NOAA's trust resources.

NOAA believes that it is important to take a precautionary and well planned approach to potential development in the region due to the sensitivity of the Arctic environment and the significant stress that climate change places on systems and natural resources. A higher level of scientific knowledge about the Arctic ecosystem is critical to better understanding of the potential impacts of Federal Government management actions on Arctic ecosystem functions and services. NOAA has a direct programmatic interest in the region based on our living marine resource, coastal management, and oil spill response responsibilities. Our comments focus on this management, and oil spill response responsibilities. Our comments locus on this concern and the need to improve our understanding of the fragile and rapidly changing Arctic ecosystem, our ability to respond to potential Arctic oil and chemical spills, and our ability to measure the ecosystem impacts of development in the region. The Administration has an important focus on growing the blue-green economy and domestic energy sources, and we also have a responsibility to help shape that objective in a strategic and precautionary fashion in order to do the most we can to avoid future environmental catastrophes. Targeting the needs, gathering additional science related to the Arctic ecosystems, as well as improving oil spill response capabilities in the Arctic, are critical to enabling responsible development to proceed.

Question 4. In your September 21 letter to the MMS, you also recommend that further OCS leasing should be put on hold until the Ocean Policy Task Force has released its recommendation and directives and a comprehensive Marine Spatial Plan is complete. What time-frame do you envision for completion of the spatial plan? How will halting the lease schedule until it is complete affect our Nation's

ability to responsibly develop domestic energy reserves?

Answer. As required by the President's Memorandum, the Interagency Ocean Policy Task Force's recommendations on a draft Framework for Effective Coastal and Marine Spatial Planning was delivered to the President on December 9, 2009 and has now been released for 60 days of public comment. Following this period, the recommendations will be finalized for the President. The comments offered by NOAA to the Department of the Interior were intended as a set of informal comments that transmitted our initial thoughts regarding the draft proposed program. NOAA did not intend for the response to be viewed as a formal set of comments, or for the response to be included as part of the public record. Instead, the response was intended to initiate a dialogue between the agencies on the issues identified.

Question 5. I am a supporter of the need to bring more science to the challenges our oceans face, especially in the Arctic, but have yet to see a roadmap of just who is doing what there. To that end I introduced S. 1562, the Arctic Ocean Research and Science Policy Review Act that calls for a National Academy review of work underway and analysis of gaps in our scientific understanding. Could you comment on the need for such a review and gap analysis?

Answer. NOAA strongly agrees that there is a critical need for improved scientific information and baselines for understanding and evaluating climate change and its effects as well as impacts from increased human uses of the Arctic. Efforts to conduct a gap analysis and establish a more cohesive, coordinated, and integrated approach toward Arctic research could be very beneficial to the U.S. and international community. Commerce and other interested agencies are reviewing S. 1562.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. KAY BAILEY HUTCHISON TO HON. JANE LUBCHENCO

Question 1. I recently learned that you sent a letter on September 21, 2009, after having sent comments on September 9, 2009, to the Minerals Management Service urging the Interior Department to drastically reduce plans in the Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program (DPP) to open new areas to offshore oil and gas development. This letter also stated your position that the DPP should be consistent with the recommendations of the Ocean Policy Task Force and include marine spatial planning.

(a) Does the letter dated September 21 and the comments dated September 9 rep-

resent NOAA's official position on the DPP?

Answer. On September 21, 2009, NOAA responded to the Minerals Management Service request for comments on the Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010–2015 (DPP). This response was intended as a set of informal comments that transmitted our initial thoughts regarding the DPP. NOAA did not intend for the response to be viewed as a formal set of comments, or for the response to be included as part of the public record. Instead, the response was intended to initiate a dialogue between the agencies on the issues identified. Since September, multiple meetings have been held between NOAA and Department of the Interior leadership to discuss these and other important issues related to oil and gas leasing on the Outer Continental Shelf (OCS). NOAA appreciates the chance to work closely with the Department of the Interior to ensure that energy exploration and development on the OCS is based on sound science and affords an appropriate level of protection to NOAA's trust resources.

(b) Were these formal or informal interagency comments?

Answer. As noted in (a) above, the response was intended as a set of informal comments.

(c) Are these comments on the official docket within the DPP comment period? Is it proper for an agency to base any formal policy or rulemaking on informal comments, where the public has had no official venue to view or respond to such comments?

Answer. NOAA defers the question as to whether the comments are on the official

docket to the Department of the Interior.

A Federal agency may, as part of the inter-agency review and comment process, consider informal comments submitted by another Federal agency even though those comments have not been made available for public review. Comments of this type would likely be treated as interagency communications of a pre-decisional/deliberative nature and may be withheld from public review.

(d) Do you intend to make NOAA's comments on the DPP available to the public? Answer. Because these comments were developed as part of an ongoing discussion with another Federal agency, NOAA does not currently plan to release them to the public.

(e) How would you incorporate the Ocean Policy Task Force recommendations in the DPP?

Answer. The proposed recommendations found in the Interagency Ocean Policy Task Force's Interim Report and Interim Framework for Effective Coastal and Marine Spatial Planning have not yet been finalized. It would be inappropriate for NOAA to speculate on how and when the President would choose to act upon the Task Force's final recommendations, once completed, and how existing processes would then be incorporated into their implementation.

Question 2. Do you view marine spatial planning as a tool to create and identify new marine reserves?

Answer. Coastal and marine spatial planning is a tool to achieve ecological, economic, and social objectives. Such planning is intended to allow for the reduction of cumulative impacts from human uses on marine ecosystems, provide greater certainty for the public and private sector regarding new investments, and reduce conflicts among uses. As part of the planning process, areas of special ecological significance could be identified and considered for additional protection when weighed against other planning objectives. In addition, as part of any planning process, consideration of specific activities and uses, or any combination of activities or uses, should involve a transparent, public process to ensure stakeholders have the opportunity to provide input.

Question 3. Currently, the Fishery Management Councils have the authority to regulate the fisheries in our Exclusive Economic Zone. However, they have very limited authority to regulate fisheries in marine reserves, such as sanctuaries. If you create new marine reserves, who would have the primary authority to regulate the fisheries within the reserve boundaries?

Answer. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the primary authority for management of Federal fisheries in the U.S. Exclusive Economic Zone. Pursuant to the MSA, NOAA's National Marine Fisheries Service (NMFS) manages our Nation's domestic fisheries through fishery management plans and regulations. While fishery management councils (FMC) do not have

regulatory authority, the MSA requires that, in most cases, management decisions be based on recommendations from the FMCs.

The MSA establishes a framework for the conservation and management of fisheries, which includes preventing overfishing and recovering overfished stocks, achieving optimum yield, using the best available science, minimizing bycatch, and protecting habitat, among other things. The MSA authorizes FMCs to recommend and NMFS to implement zones where fishing is limited or prohibited, and to take

various actions to conserve target and non-target species and habitat.

Using a transparent public process, national marine sanctuaries are designated by NOAA to protect and comprehensively manage areas of the marine environment that are of special national significance. Under the National Marine Sanctuaries Act (NMSA), NOAA is authorized to regulate fishing and non-fishing activities. The NMSA requires that NOAA provide the relevant FMC with an opportunity to prepare draft NMSA fishing regulations when NOAA determines that such management measures are necessary in the Exclusive Economic Zone portion of these areas. To date, only a few national marine sanctuaries have areas within them where fishing and other forms of extraction are prohibited. Currently, there are no sanctuaries that are completely closed to all forms of extraction.

NOAA considers both the NMSA and the MSA as tools that could be used exclusively or in conjunction to meet the goals and objectives of the national marine sanctuaries, including objectives related to the establishment of marine reserves. Each national marine sanctuary is unique, and the regulatory options are evaluated by NOAA on a case-by-case basis to determine which mechanism is most appropriate to meet the stated goals and objectives of a sanctuary. National marine sanctuaries are established by NOAA through a highly transparent process that affords the public numerous opportunities to participate in the creation, and subsequent management, of the sanctuaries. This process allows for input into the articulation of a proposed sanctuary's goals and objectives prior to its establishment. Similarly, NOAA's management plan review process allows for additional public input in subsequent stages of a sanctuary's lifespan.

In an effort to better communicate NOAA's decision-making processes and improve coordination, NOAA has produced internal operational guidelines that clearly explain the process for deciding under what authority fishing regulations within sanctuaries will be effectuated. The guidelines also describe the roles that FMCs, federally-recognized Indian Tribes, state and Federal agencies, sanctuary advisory councils, sanctuary users, and other interested parties play in this process. The guidelines are available on NOAA's website at: <a href="http://sanctuaries.noaa.gov/library/">http://sanctuaries.noaa.gov/library/</a>

national/fishing 071708.pdf.

Question 4. The Interim Report proposes several new concepts to be used in ocean governance that have not been defined.

(a) How would you define Marine Spatial Planning?

Answer. The Interagency Ocean Policy Task Force's December 9, 2009, Interim Framework for Effective Coastal and Marine Spatial Planning defines coastal and marine spatial planning (CMSP) as, "A comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of ocean, coastal, and Great Lakes areas. CMSP identifies areas most suitable for various types or classes of activities in order to reduce conflicts among uses, reduce environmental impacts, facilitate compatible uses, and preserve critical ecosystem services to meet economic, environmental, security, and social objectives. In practical terms, CMSP provides a public policy process for society to better determine how the ocean, coasts, and Great Lakes are sustainably used and protected now and for future generations." NOAA supports

(b) Could you please define ecosystem based management?

Answer. Ecosystem-based management is place-based or area-based and aims to: (1) protect ecosystem structure, functioning, and processes; (2) recognize the interconnectedness within and among systems; and (3) integrate ecological, social, economic, and institutional perspectives. NOAA's ecosystem approach to management

- Adaptive: Management strategies are tailored to unique conditions and issues, and strategies are adapted and combined for an integrated approach.
- Collaborative: Mechanisms are in place to share information and receive feedback from others, and stakeholder input is considered in decision-making within ioint strategies.
- Incremental: Ecosystem-scale information continues to improve as techniques and tools are developed in research, observations, forecasting, and management.

- Regionally directed: A joint strategy plan with stakeholders is based on NOAA's 10 regional ecosystems to meet desired ecosystem productivity and benefits.
- Adaptable given ecosystem knowledge and uncertainty: Our marine resources are complex and dynamic; ecosystem approaches to management recognize that individual resources are better managed by addressing ecosystem components and processes while looking at cumulative impacts.
- Inclusive of multiple external influences: Ecosystem approaches to management encourage decisions based on environmental, social, and political factors.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAVID VITTER TO Hon. Jane Lubchenco

Question 1. Recently, the Secretary received a letter from four Gulf Governors (attached) describing their dissatisfaction with existing catch shares; with your general policy on catch shares; and with the contact you have had with them. What do you intend to do about that letter?

Answer. The Governors of Texas, Alabama, Mississippi, and Louisiana wrote to the Secretary expressing their concern about the possible impacts of catch share fisheries management programs on Gulf of Mexico recreational anglers. They requested each of the Gulf States serve a key role in the decision process as to which fisheries will have a catch share program, how they are structured, and how related commercial fishery and allocation policy decisions are made.

On December 10, 2009 NOAA issued a draft policy statement on catch shares and is soliciting public input for 120 days. Catch share programs have been shown to provide significant environmental and economic benefits when applied to suitable fisheries, but they are not a panacea for all fisheries. Although the draft policy encourages the regional Fishery Management Councils (Councils) to consider catch shares as a management option where appropriate, the Councils are not obligated to adopt catch shares for either the commercial or recreational sectors. Consistent with the Magnuson-Stevens Fishery Conservation and Management Act, Councils will need to evaluate the data, impacts, and enforceability of any potential catch share program prior to moving forward. Prior to the release of the draft policy, the Secretary responded to the Governors inviting them to actively engage in the draft NOAA catch share policy comment process and to help maintain open communications on these important recreational issues.

The reply also acknowledged that allocations between commercial and recreational fisheries are a significant concern of the recreational constituency. Catch shares, annual quotas, and days-atseas are among the many means to distribute the independently-determined allocation of the available catch among participants. In cooperation with the angling community, Councils, and states, NOAA's National Marine Fisheries Service will coordinate a recreational fisheries summit early next year to address allocation issues and other topics of concern to the recreational fishing community. Each state's active participation in this summit was requested. In addition, we encourage continued engagement by each state's fisheries director, each of whom is a voting member of the Gulf Council—where catch share allocation deci-

sions are made.

Question 2. In addition, can you please share with me NOAA's internal proposals for regional planning in the Gulf of Mexico. Whether the proposals are in the planning stage or simply internal discussions, please include: (1) catch share proposals, (2) aquaculture proposals, and (3) any plans involving any form of zoning or in any

way limiting access to resources for any group of constituents.

Answer. NOAA has authorities and requirements to manage ocean spaces through its national marine sanctuaries, estuarine research reserves, area-based fisheries, protected resource program, and system of Marine Protected Areas (MPA). NOAA protects vulnerable places primarily through National Marine Sanctuaries under the National Marine Sanctuaries Act, fishery management policies under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and critical habitat designations under the Endangered Species Act (ESA).

Under the MSA, the regional Fishery Management Councils (Councils) are responsible for considering the appropriateness of catch share programs, and deciding which, if any, sectors may benefit from their use. NOAA is not requiring catch shares in any fishery nor is NOAA setting any target number or quota for their usage. NOAA will help interested Councils, states, communities, fishermen and other stakeholders to organize collaborative efforts to design and implement catch share programs that meet their needs.

In September 2009, the Fishery Management Plan for Regulating Offshore Marine Aquaculture in the Gulf of Mexico (Gulf FMP) took effect by operation of law. While the Gulf FMP does not identify specific areas for aquaculture development, it does prohibit aquaculture operations in Federal waters of the Gulf of Mexico that encompass marine protected areas, marine reserves, Habitat Areas of Particular Concern, Special Management Zones, permitted artificial reef areas, and coral reef areas. Under the Gulf FMP, NOAA's National Marine Fisheries Service (NMFS) would evaluate all proposed sites on a case-by-case basis. An aquaculture facility would be required to obtain a Section 10 Permit for the site from the Army Corps of Engineers (USACE) and a restricted access zone would be created around each facility that corresponds to the coordinates specified in the USACE Permit. Implementing regulations for the Gulf FMP are in review and NMFS is not accepting applications for aquaculture operations in the Gulf at this time. NOAA is currently drafting a national policy for aquaculture, which will address issues related to aquaculture operations in Federal waters. NMFS will examine the Gulf FMP in the context of that policy once it is developed.

In December of 2007, the Flower Garden Banks National Marine Sanctuary Advisory Council voted to extend sanctuary protections to nine additional banks and reefs in the northwestern Gulf of Mexico. The advisory council includes members of several different stakeholder groups including oil and gas, commercial and recreational fishing, and diving. NOAA is now actively working with the advisory council and other stakeholders in the Gulf of Mexico region to evaluate and carefully consider this recommendation. We anticipate publishing a draft environmental im-

pact statement later in 2010.

Question 3. It is clear to anyone paying attention that next summer a series of major fishery resource closures will occur in the Southeast. What are you doing to do to avoid this?

Answer. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requirements to specify annual catch limits (ACL) for each managed fishery, and ensure catches do not exceed ACLs, require NOAA's National Marine Fisheries Service (NMFS) to closely monitor catches relative to ACLs and act quickly to prevent or mitigate ACL overages. Seasonal closures generally result when the commercial or recreational sector has harvested the ACL prior to the established season end date.

The Gulf of Mexico Fishery Management Council (Gulf Council) and NMFS continue to explore alternative management strategies to reduce the likelihood of unexpected seasonal closures as we work to comply with these new MSA mandates. Unfortunately, extending the duration of the fishing season generally requires further limits on the catches of individual fishermen (e.g., through restrictive trip limits, minimum size limits, bag limits, etc.), and such limitations are often viewed as an

unacceptable tradeoff.

The Gulf Council has addressed this problem in some fisheries through the use of catch share programs, which ensure eligible participants the opportunity to catch a specific proportion of the ACL during the time of year that best meets their needs. However, such programs are not appropriate for all fisheries and are particularly difficult to apply in recreational fisheries where participation is generally unrestricted. However, the Gulf Council recently formed an Ad Hoc Advisory Panel consisting of commercial and recreational representatives to consider catch share issues in both sectors of the reef fish fishery. Also, some Gulf Council members have met informally with for-hire fishermen and private anglers to discuss potential catch share alternatives for the recreational sector.

Question 4. Please identify which Environmental NGO's have been party to NOAA discussions regarding catch share and aquaculture policies in the Gulf of Mexico over the last 6 months.

Answer. NOAA's National Marine Fisheries Service (NMFS) informally communicates with environmental non-governmental organizations (ENGO), industry, academia, and members of the general public at Gulf of Mexico Fishery Management Council (Council) meetings. The following parties routinely send representatives to Council meetings:

- · Environmental Defense Fund
- Food and Water Watch
- Oceana
- Ocean Conservancy
- Pew Environment Group
- Coastal Conservation Association

- Southern Shrimp Alliance
- Southern Offshore Fishing Association
- · Several for-hire fishing associations

#### Catch Shares

On July 23, 2009, Ms. Monica Medina, Special Advisor to NOAA Administrator Dr. Jane Lubchenco and chairperson of NOAA's Catch Share Task Force, held an informational briefing with approximately 17 ENGO's on NOAA's plan to issue a draft policy on catch shares. Similar briefings were held with representatives of commercial and recreational stakeholder groups. Summaries of the briefings and a list of attendees are posted on the Internet under the title "Summaries of Stakeholder Sessions" at <a href="http://www.nmfs.noaa.gov/sfa/domes\_fish/catchshare/index.htm">http://www.nmfs.noaa.gov/sfa/domes\_fish/catchshare/index.htm</a>.

On September 11, 2009, Dr. Jim Balsiger, NMFS Acting Assistant Administrator, met with members of the Marine Conservation Network, a group of ENGO's in the Washington, D.C. area. During this regularly scheduled meeting, a status report was provided to the group on progress on the draft NOAA catch shares policy.

Additionally, the ENGO's present at Council meetings heard NMFS updates on the NOAA Catch Share Task Force/draft policy and on agency activities to implement the Council's proposed individual fishing quota program for Gulf of Mexico grouper and tilefish. Two ENGO's (Environmental Defense Fund and Ocean Conservancy) participated along with NMFS staff in a July 2009 recreational catch share workshop organized by several Council members.

The draft NOAA catch share policy currently is available for public comment period.

### Aquaculture

NMFS has not communicated with ENGO's, industry groups, academia, or other interested parties since the Council approved its proposed Offshore Aquaculture Fishery Management Plan (FMP) in January 2009 for Secretarial review and approval. However, the following ENGO's, industry groups, academics, and other parties provided NMFS comment letters prior to final agency action on the FMP:

- Food and Water Watch
- Humane Society of the United States
- National Coalition for Marine Conservation
- Ocean Conservancy
- Environmental Protection Agency
- Minerals Management Service
- 37 Members of Congress (submitted by Lois Capps, D–CA)
- Mike Thompson, Member of Congress (D-CA)
- Chairman, House Committee on Natural Resources
- Aqua Terra Strategies
- United Cook Inlet Drift Association
- American Veterinary Medical Association
- Division of Aquaculture, Florida Department of Agriculture and Consumer Services
- Southern Shrimp Alliance, Inc.
- American Soybean Association
- Ocean Stewards Institute
- Lindgren-Pitman, Inc.
- East Coast Shellfish Growers Association
- Cordova District Fishermen United
- Rosamund Naylor (Stanford University), Felicia Coleman (Florida State University Coastal and Marine Laboratory), Ian Fleming (Memorial University of Newfoundland), L. Neil Frazer, (University of Hawaii at Manoa), Les Kaufman (Boston University), Jeffrey R. Koseff (Stanford University), John Ogden (University of South Florida), Laura Petes (Florida State University Coastal and Marine Laboratory), Amy Sapkota (University of Maryland College Park), Les Watling (University of Hawaii at Manoa)
- Form letters and other comments (900+) were also submitted by members of the general public.

NMFS's Assistant Administrator, Dr. Jim Balsiger, contacted the following ENGO's on September 3, 2009, to advise them of the agency's decision to allow the FMP to take effect by operation of law:

- Food & Water Watch
- Marine Fish Conservation Network
- National Coalition for Marine Conservation
- Oceana
- Ocean Conservancy

On October 2, 2009, Food and Water Watch, Gulf Restoration Network, Inc., and Ocean Conservancy filed two separate complaints challenging the FMP in U.S. District Court.

# Response to Written Questions Submitted by Hon. Maria Cantwell to Admiral Thad W. Allen

Question 1. The Interim Report emphasizes the importance of addressing the environmental stewardship needs in the Arctic Ocean and adjacent coastal areas. You and I have discussed on a number of occasions the critical importance of the Coast Guard's polar icebreaker capabilities in the Arctic Region—in terms of national security and assertion of U.S. sovereignty; in dealing with the inevitable race to exploit the wealth of natural resources; and in providing us with the ability to perform meaningful research on global climate change.

Could you please describe the changes that the Coast Guard is witnessing in the Arctic Ocean and the implications it has for the Coast Guard? Can any National Ocean Policy succeed in environmental stewardship of the Arctic without an increase in the number of vessels capable of sustained Polar operations? Do you feel that a comprehensive approach to assessing, planning and managing marine resources in that region would help current and emerging threats to that region?

Answer. The region north of the Arctic Circle contains over 2,500 nautical miles of U.S. coastline. Historically, that region's harsh environment and frozen polar ice-cap has facilitated our security by acting as an obstacle to trade and exploitation. This is changing. The extent of the area and thickness of the permanent ice cover in the Arctic has decreased dramatically in recent years.

The growing global demand for new sources of energy and technology coupled with the reduction in sea ice now allows for exploration of parts of the region previously inaccessible. Warming ocean water temperatures are also affecting the distribution of some fish stocks by auxing them to eximpte parts.

The growing global demand for new sources of energy and technology coupled with the reduction in sea ice now allows for exploration of parts of the region previously inaccessible. Warming ocean water temperatures are also affecting the distribution of some fish stocks by causing them to migrate north in search of new coldwater habitats and potentially creating more favorable fishing conditions in the region. The world increasingly relies on the maritime domain to support the global supply chain, and the potential exists for the Arctic to become a strategic link. This past summer, two German-flagged heavy-lift vessels took advantage of the much shorter transit from Asia through Russia's Northern Sea Route to transport industrial equipment to Siberia and on to Europe.

The Coast Guard, as the principal Federal maritime enforcement agency with

The Coast Guard, as the principal Federal maritime enforcement agency with broad safety, security, and stewardship missions throughout the U.S. Exclusive Economic Zone, has already begun looking at ways to improve and better sustain operations in the Arctic region. The Coast Guard is currently undertaking a comprehensive review of its statutory missions and regulatory responsibilities in the Arctic to determine its requirements to support the objectives and implementation tasks contained in NSPD-66/HSPD-25, to include the work of the Interagency Ocean Policy Task Force. The Coast Guard will continue to work with other Federal agencies and Arctic nations through the Arctic Council, the International Maritime Organization (IMO) and other international forums to develop solutions to overcome challenges in the region.

A comprehensive, national approach, properly prioritized, planned, and supported, would help promote the entire spectrum of U.S. national interests in the Arctic region. Such a national approach should consider sustainable resource development, environmental protection, as well as other emerging economic, national, and homeland security concerns.

Question 2. One criticism of the Interim Report from the commercial sector is that it shifts the "balance" toward environmental stewardship priorities over economic demands. One of the nine recommended principles for a national ocean policy is that decision-making will be guided by a precautionary approach. Can the precautionary approach be adopted as a feature of our national ocean policy without bringing use

of marine resources to a halt? Could you explain how the Coast Guard would apply

the precautionary approach, and how it would change how you do business?

Answer. The Interim Report responds to the President's June 12, 2009 memorandum directing the Task Force to develop recommendations to "improve stewardship of the ocean, our coasts, and the Great Lakes". Improved stewardship will support not only healthier and more resilient ocean, coastal, and Great Lakes ecosystems and services, but also benefit the economies (e.g., commercial and recreational activities) and communities that rely on them. The Task Force believes that economic growth and improved stewardship of the marine and Great Lakes environment are inextricably linked.

Application of a precautionary approach, as defined in the Interim Report ("w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"), is consistent with and essential for improved stewardship. Moreover, that definition is one to which the United States has formally agreed by signing and ratifying the 1992 Rio Declaration. We must ensure that when we enjoy and use ocean, coastal, and Great Lakes resources, we use the best available information to make management decisions and minimize adverse environmental effects.

The vision of the national ocean policy should resonate with every citizen: "An America whose stewardship ensures that the ocean, our coasts, and the Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future genera-tions." "Productive" uses to promote the long-term "prosperity" of all Americans are the Nation should pursue in its ocean policy. The Coast Guard views the concept of stewardship as a rather broad one, transcending environmental protection and extending to the entire range of the best and most valuable management practices. These include making maximum, prudent benefit of all sustainable economic uses.

Question 3. Following the release of the Interim Report, you spoke to its unqualified support of U.S. accession to the U.N. Convention on the Law of the Sea as an issue of significant importance from the Coast Guard's perspective. Can you please talk about why this is an important tool for the Coast Guard, and an important

component in a National Ocean Policy?

Answer. The United Nations Convention on the Law of the Sea (the Convention) sets forth a comprehensive legal regime governing activities on, over, and under the world's oceans. Joining the Convention significantly enhances the Coast Guard's ability to manage ocean resources and protect the marine environment by providing clear, internationally agreed-upon principles for operating in and governing ocean space. The Convention will enhance Coast Guard efforts to assess security in international shipping ports; monitor and enforce U.S. sovereign rights over natural resources off the U.S. coast; confront illegal, unregulated, and unreported fishing; protect the safety of life at sea; and protect the marine environment. Being an "out-sider" to the Convention hampers Coast Guard negotiating positions at the Inter-national Maritime Organization (the IMO) as well as other forums. Furthermore, the Coast Guard relies heavily on freedom of navigation principles in the Conven-

Consistency with international law, including the legal framework contained in the Convention, is a crucial requirement in the development of the strategic action plans for the nine priority objectives of the Interagency Ocean Policy Task Force's Interim Report. The Convention strikes a careful balance between the sovereign rights of coastal and port states and the navigational rights and freedoms of other states. The proposed National Policy can be more effective with the support of the legal framework contained in the Convention.

Question 4. The Ocean Policy Task Force Interim Report calls for a special emphasis on strengthening Federal and non-Federal ocean observing systems, sensors, and data collection platforms, integrating these components into a national system, and integrating that national system into observation efforts at the international level. What role will the Coast Guard's maritime domain awareness capabilities play in this integrated system?

Answer. The Interagency Ocean Policy Task Force's Interim Report provides for increasing scientific understanding of ocean and coastal ecosystems and awareness of all that is happening, which impact these waters, including human activities.

The Coast Guard supports efforts to develop greater awareness of what is happening in waters subject to our jurisdiction and to provide interpretive products to promote our national ocean policy. A majority of Coast Guard operational units provide meteorological observations in conjunction with their normal operations, including weather, ice, and polar and near-Arctic observations. The Coast Guard cooperates with other Federal agencies, particularly through participation in the Interagency Working Group on Ocean Observations, and provides radio broadcast to mariners in accordance with an MOU with NOAA/National Weather Service (NWS) and in coordination with the Coast Guard/NWS Coordination Liaison Group. These capabilities, whether within the operational control of the Coast Guard or in other agencies, can help visualize human use and activity data on any coastal and marine spatial planning system that is to be developed. This will include static data and as well as more dynamic and timely data from MDA capabilities gleaned from a variety of organic and consolidated partner data sources. For example, the Coast Guard intends to monitor coastal and some oceanic vessel movements through the IMO-approved Long Range Identification and Tracking (LRIT) system, the Nationwide Automatic Identification System (NAIS), and other sensors. When possible, archived data will be made available to appropriate government and research institutions for safety and research purposes. It should be noted that IMO places strict controls on the dissemination of LRIT data outside of government, and other systems impose similar constraints. These and other efforts to promote MDA will enhance our national and homeland security interests and better enable the United States to be conscientious stewards of its ocean, coastal, and Great Lakes waters.

### Response to Written Questions Submitted by Hon. Maria Cantwell to Admiral Thad W. Allen

Question 1. What lessons has the Coast Guard learned since the Cosco Busan incident? What additional tools and resources could the Coast Guard use to better assist in cleanup and mitigation efforts?

The San Francisco Chronicle reported the DUBAI STAR began leaking oil at 6:48 a.m. on October 30, 2009. Some environmental groups have raised concerns about the time it took the Coast Guard to begin placing containment booms to protect sensitive shoreline. Questions have also been raised about why environmentally sensitive locations such as Robert Crown Memorial State Beach, which was in the direct path of the oil, were not immediately boomed. How long did it take for containment booms to be put in place? What steps did the Coast Guard take immediately following reports of the incident? Please provide a timeline of the response.

Answer. Improving Federal, State, and local government and stakeholder commu-

Answer. Improving Federal, State, and local government and stakeholder communications and coordination was a major focus following the COSCO BUSAN response. The recent DUBAI STAR response demonstrated that efforts to improve communications and coordination through planning activities were very effective.

communications and coordination through planning activities were very effective. The Coast Guard and other Federal, State, and local partners coordinated their activities well during the DUBAI STAR response. During the COSCO BUSAN response, the establishment of an Incident Command Post (ICP) proved difficult due to lack of pre-identified ICP locations. As a result, a list of 50 potential Incident Command Post sites was created. During the DUBAI STAR response, an ICP was established at Sector San Francisco at 0800 (a little over an hour after the initial report of the incident). The Unified Command was established in a larger Incident Command Post on Coast Guard Island in Alameda by 0930 (less than 3 hours after the initial report of the incident) with both the Federal On-Scene Coordinator and State On-Scene Coordinator OSC (California Fish & Game, OSPR) present. By 1000, Coast Guard and California Fish & Game leadership made their appropriate notifications to local municipalities, including the Mayor of San Francisco.

Another COSCO BUSAN lesson learned recognized that future responses should include a Local Government On-Scene Coordinator (LGOSC) in the Unified Command. The LGOSC represents the city or county, or potentially, multiple counties within the Unified Command. This position was deemed important because the San Francisco Bay, Delta and Central Coast Area Committee consist of 12 counties and can potentially cover three additional Northern California counties. During the DUBAI STAR response, the Unified Command LGOSC was filled by the Alameda County Fire Department.

The importance of accurate oil spill quantification and subsequent oil spill volume reporting was also identified as a critical concern during the M/V COSCO BUSAN incident. During the DUBAI STAR incident, the initial estimate from the vessel crew was approximately one gallon. A final estimated spill volume of between 400–800 gallons was determined by USCG and California Fish and Game personnel within 5 hours of the initial notification of the spill.

In both the COSCO BUSAN and DUBAI STAR incidents, the Unified Command's response posture was based on worst case discharge scenarios. Response equipment was deployed based on the worst case discharge scenario instead of the reported

spill volume. Immediately following the M/V COSCO BUSAN incident, the Coast Guard provided service-wide guidance to reinforce this response posture for future spills.

For additional comments on lessons learned from COSCO BUSAN, we recommend reviewing the recent published article on the COSCO BUSAN response in the Fall 2009 Coast Guard Proceedings of the Marine Safety and Security Council magazine. This issue can be viewed at: <a href="http://www.uscg.mil/proceedings/articles/77\_Gugg\_Reflections%20on%20the%20Cosco%20Busan%20Pollution%20Response.pdf">http://www.uscg.mil/proceedings/articles/77\_Gugg\_Reflections%20on%20the%20Cosco%20Busan%20Pollution%20Response.pdf</a>.

The Coast Guard continuously works to improve spill response. In particular Coast Guard spill response initiatives are focused on response to High Latitude Spills, Submerged Oil, Existing Wrecks, and Spill Response Analysis. In particular, the Coast Guard requires further High Latitude spill response research due to the austere environment, lack of infrastructure, and the inadequate capability to address spills in icy conditions. As for submerged oil response, the capability to find and recover oil on the ocean floor is limited. While this type of spill is infrequent, the effects on the environment and impact on existing water intakes can be significant. Furthermore, there are thousands of submerged wrecks throughout the world containing oil or hazardous substances. The problems associated with old, leaking wrecks continue to draw international attention. The Wrecks of the World Conference, sponsored by the American Salvage Association and held in Baltimore in September 2009, was specifically organized to address this unique problem.

In response to these unique spill response challenges, the Coast Guard is reviewing the quality and quantity of its response equipment to determine when new upgrades are needed or when new technology can be implemented. The Coast Guard has identified specific analysis and research areas to include: (a) localized spill detection tools, (b) evaluation of unknown storage containers, (c) spill recovery in adverse conditions (i.e., visibility, weather, fast currents), and (d) enhanced response

tools for decisionmakers.

The DUBAI STAR vessel agent reported the spill to the National Response Center at 0734 on October 30, 2009. At approximately 0920, containment boom was placed around the stern of DUBAI STAR and recovery of spilled oil commenced. Sensitive site (protection) booming was conducted in accordance with the Area Contingency Plan booming strategies. These booming strategies effectively protected all designated sensitive sites from oil impacts. Robert Crown Memorial State Beach (a sandy beach with man-made seawall improvements) is not designated a sensitive site per the San Francisco Area Contingency Plan. Several nearby shorelines, including the Alameda Eel Grass Beds and San Leandro Bay, were boomed by 1215 on October 30.

Under the National Response System, the Responsible Party (spiller) provides notification to emergency officials, and conducts and funds clean-up operations for a discovered spill. When notified, the Coast Guard is responsible for assessing the situation and monitoring the speed and adequacy of the spiller's response actions. USCG Sector San Francisco dispatched a Station San Francisco RBS (response boat, small), Incident Management Response Team, and Port State Control personnel to investigate the reported spill. In addition, USCG Air Station San Francisco conducted a series of helicopter over flights with the Air Station and Incident Manage-

ment Response Team observers to assess the extent of the spill.

USCG Sector San Francisco ensured the California Émergency Management Agency was aware of the incident so they could make appropriate State and local emergency notifications. The USCG contacted California Fish & Game, Office of Spill Prevention and Response (OSPR) partners to coordinate required response and enforcement efforts. The Federal On-Scene Coordinator directed National Response Corporation Environmental Services (NRCES) to respond to the spill when it was determined that the Responsible Party (ship owner/operator) was not responding promptly in accordance with its Vessel Response Plan. Soon thereafter, the Responsible Party requested to assume management of the NRCES activation. Consequently, the Oil Spill Liability Trust Fund (OSLTF) did not incur costs associated with the initial Federal activation of NRCES.

Time (30OCT2009)	Action
0400 PST	DUBAI STAR initiated bunker (fueling) operation.
0734 PST	DUBAI STAR vessel agent reported oil spill and sheen to the National Response Center.
0737 PST	USCG Station San Francisco small boat diverted from another case arrived on scene to inves-
	tigate the report; multiple small boats were launched to the scene throughout the day.
0800 PST	Initial Incident Command Post established at Sector San Francisco.
0802 PST	USCG launched initial over flight.
0905 PST	National Response Corporation Environmental Services personnel on scene, commenced boom
	deployment around vessel.

Time (30OCT2009)	Action
0920 PST	National Response Corporation Environmental Services completed harbor boom deployment around the vessel and continued skimming operations. Containment Boom was placed around the stern of T/V DUBAI STAR.
0923 PST	USCGC HAWKSBILL en route to scene.
0930 PST	Unified Command was established with State of CA On Scene Coordinator (Cal Fish & Game, OSPR) on Coast Guard Island in Alameda.
0940 PST	Additional response resources begin arriving and deploying containment and protection boom in the vicinity of the spill in accordance with the Area Contingency Plan booming strategies and Unified Command direction; boom deployment continues throughout the day.
0943 PST	USCGC PIKE arrived on scene.
1000 PST	USCG and CA Fish & Game Leadership notified local municipalities including the Mayor of San Francisco.
1001 PST	Incident Management Team and Port State Control Inspectors arrive on scene.
1215 PST	Boom deployment of sensitive areas complete; further boom deployment continues.
1330 PST 2300 PST	Pacific Strike Team arrived at Coast Guard Island to assist in the Incident Command Post. Boom deployment complete.

Question 2. Please give the Committee the latest account of the events that led up to the mid-air crash between the Coast Guard aircraft and the Marine Corps helicopter. MSNBC reported that the collision occurred in military warning area airspace that is not under the control of the FAA. What is the protocol for Coast Guard aircraft operating within that airspace?

Answer. The details leading up to the mid-air crash are still under investigation. The MSNBC report is correct in that the crash occurred in a military warning area

airspace not controlled by the FAA.

For flights into warning areas, the Coast Guard follows the procedures provided in the Department of Defense Flight Information Publication AP 1/A, Special Use Airspace in addition to following any instructions provided by the FAA air traffic controller. The specific procedures for Warning Area 291 requires military aircraft to contact Beaver Control (operated under U.S. Navy Fleet Area Control & Surveillance Facility (FACSFAC) San Diego, Ca) on frequency 266.9 or 120.85 Mhz if north of the Mission Bay (MZB) VHF Omni-directional Radio Range (VOR) 247 radial or on frequency 289.9 or 118.65 Mhz if south of the MZB 247 radial.

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK BEGICH TO Admiral Thad W. Allen

Question 1. Ocean governance around Alaska is not strictly a domestic issue, especially as climate change opens more and more of the Arctic to international shipping. I introduced S. 1561 to implement the recommendations of the Arctic Council's Arctic Marine Shipping Assessment, including international cooperation on navigational aids in Arctic waters, improved Arctic navigational charts, monitoring of ocean conditions, improved oil spill prevention and response; search and rescue and maritime domain awareness, and to develop facilities for ship generated waste. I believe that implementing the Arctic Marine Shipping Assessment is important. Do you envision implementing aspects of the Arctic Marine Shipping Assessment through this Ocean Policy and, if so, how?

Answer. Yes. The Coast Guard envisions implementing aspects of the Arctic Marine Shipping Assessment (AMSA) as part of the proposed National Policy in the Interagency Ocean Policy Task Force's Interim Report. The Task Force's proposed implementation strategy identifies, as one of the nine priority objectives, for the Nation to pursue the National Policy, "Changing Conditions in the Arctic," and, specifically, to "address environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship needs in the Arctic Ocean and adjantance of climate included and other environmental stewardship need cent coastal areas in the face of climate-induced and other environmental changes." The Interim Report also calls for "consistency and coordination with the implementation of U.S. Arctic Region Policy as promulgated in National Security Presidential Directive 66/Homeland Security Presidential Directive 25 (2009)," which incorporates a number of the implementation goals and priorities found in AMSA.

Moreover, the Task Force's Interim Report includes an international component which would facilitate the implementation of the National Policy. This requires coordination with matters arising within the International Maritime Organization (IMO), Arctic Council, and other international organizations. As a product of the Protection of the Arctic Marine Environment (PAME), a subordinate body of the Arctic Council, the 2009 AMSA report represents a superb example of international cooperation. Implementing its key recommendations will also require international

cooperation, as well as a national commitment.

The Coast Guard will continue to work with other Federal agencies and with other Arctic nations through the Arctic Council, the IMO, and other international forums to develop solutions to unresolved issues in the region. These issues include navigation, extended continental shelf determinations, resource rights, search-andrescue and other emergency response capabilities, waste management, and other efforts to protect the fragile Arctic environment. The 2009 AMSA report identified and endorsed international and national efforts to tackle each of these issues.

Question 2. In a similar vein, I also introduced S. 1564, the Arctic Oil Spill Research and Prevention Act, to improve our knowledge about and ability to respond to spills in broken ice conditions. As the Coast Guard plays a major role in oil spill research and response, can you comment on the need for this research?

Answer. The findings described in Section 2 of S. 1564 provide context to the risk posed by oil spills in the Arctic and validate the need for further research. In particular, the Coast Guard requires further High Latitude spill response research due to the austere environment, lack of infrastructure, and the limited capabilities to address spills in icy conditions. The Coast Guard Research & Development (R&D) long-term strategic plan was informed by a 2004 study entitled "Advancing Oil Spill Response in Ice Covered Waters." This study was produced by an international consortium of interested organizations under the coordination of the Prince William Sound Oil Spill Recovery Institute and the U.S. Arctic Research Commission.

The USCG R&D program has identified specific areas of emphasis for Arctic and cold-weather response, which include: (a) detection of oil-in-ice and under ice, (b) tracking/monitoring of oil in ice, (c) decision tools for Federal On scene Coordinators, and (d) removal/recovery of oil in ice. The USCG also serves as the Chair of the Interagency Coordinating Committee for Oil Pollution Response (ICCOPR). In this capacity, the USCG shares and synchronizes its Arctic region R&D initiatives with those from other ICCOPR members, such as EPA, MMS, and NOAA. Collectively, the members follow the 1997 ICCOPR Oil Pollution and Research and Technology Plan and its future revisions.

Question 3. I am a strong proponent of ratification of the Law of the Sea Treaty to assert our Nation's rights to the high seas and ensure we have a seat at the table when decisions are made about international claims to the extended continental shelf areas, especially in the Arctic where vast energy reserves are believed to exist. From the perspective of a National Oceans Policy, can you comment on the need for ratification of this treaty?

Answer. The United Nations Convention on the Law of the Sea (the Convention) ensures U.S. sovereign rights over seabed resources, including a 12 nautical mile territorial sea, resources within a 200 nautical mile exclusive economic zone (EEZ) and, potentially, resources (including oil and minerals) beyond the EEZ in the extended outer continental shelf to the outer edge of the continental margin, including up to 600 miles off of Alaska. This legal regime is important for the National Policy and implementation of the priority objectives described in the Interagency Ocean Policy Task Force's Interim Report. For example, the Task Force Interim Report has as one of its nine priority objectives "Changing Conditions in the Arctic." The U.S. is currently the only Arctic country not a state party to the Convention.

Question 4. To meet maritime challenges in the Arctic, I believe we need to modernize and replace our Nation's polar icebreaker fleet. Our two Polar-class icebreakers are over 30-years-old and are in need of replacement. Can you comment on the level of icebreaking capability the Nation needs to meet the challenges of an ice diminishing and ice thinning arctic? Given the time required to construct a new vessel, how can our Nation best meet this need in the short term?

Answer. The FY2009 funded High Latitude Study was commissioned in part to address this question. Its Statement of Work directs the study to specifically include current ice breaker requirements in the high latitude regions (Arctic and Antarctic) and project future capability needs of the Coast Guard. Other agencies are also evaluating their icebreaking needs (e.g., Department of Defense Arctic Road Map) and/or acquiring new capability to traverse the Arctic (e.g., National Science Foundation's Alaska Region Research Vessel).

The reactivation of the POLAR STAR is expected to be completed in FY2012 and will provide another 7–10 years of service life. This capacity plus the existing capacity provided by Coast Guard's two other icebreakers (HEALY and POLAR SEA) will allow Federal agencies sufficient time to determine and acquire the icebreaking assets they may need.

## Response to Written Questions Submitted by Hon. Maria Cantwell to Hon. Laura Davis

Question 1. One criticism of the Interim Report from the commercial sector is that it shifts the "balance" toward environmental stewardship priorities over economic demands. One of the nine recommended principles for a national ocean policy is that decision-making will be guided by a precautionary approach. Can the precautionary approach be adopted as a feature of our national ocean policy without bringing use of marine resources to a halt? Could you explain how the Department of the Interior would apply the precautionary approach to ocean resource management, use and development within its jurisdiction, and how it would change how you do business? Answer. The Interim Report responds to the President's June 12, 2009 memo-

Answer. The Interim Report responds to the President's June 12, 2009 memorandum directing the Task Force to develop recommendations to "improve stewardship of the ocean, our coasts, and the Great Lakes". Improved stewardship will support not only healthier and more resilient ocean, coastal, and Great Lakes ecosystems and services, but also benefit the economies (e.g., commercial and recreational activities) and communities that rely on them. The Task Force believes that economic growth and improved stewardship of the marine and Great Lakes environment are inextricably linked.

Application of a precautionary approach, as defined in the Interim Report ("[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"), is consistent with and essential for improved stewardship. Moreover, that definition is one to which the United States has formally agreed by signing and ratifying the 1992 Rio Declaration. We must ensure that when we enjoy and use ocean, coastal, and Great Lakes resources, we use the best available information to make management decisions and minimize adverse environmental effects.

The Department has long recognized the importance of managing multiple uses of our marine environment. Through our conservation and stewardship efforts, we have been able to ensure the protection of native species and their habitats while simultaneously providing recreational opportunities for the public and overseeing safe and responsible natural resource energy development. The Department appreciates the clear link between the health of our marine ecosystems and their capacity for productive use, and will continue to take precautionary measures to ensure the well-being and prosperity of our oceans, coasts, and Great Lakes.

Question 2. Science-based decisionmaking and ecosystem based management are part of the underpinnings of the Interim Report. How will the Department of the Interior incorporate science-based decision-making, ecosystem-based management, and the recommendations of the Task Force into the decisionmaking process associated with its 5-year Outer Continental Shelf Oil and Gas Leasing Program? Can you commit to me that NOAA's views will be incorporated into whatever actions the Department of Interior decides to take on this issue?

Answer. In the decision-making process for the 5-year OCS oil and gas program, the Department will continue to use science-based decisionmaking and ecosystem-based management. The Minerals Management Service's (MMS) environmental studies program has acquired over \$860 million worth of environmental research on the OCS and partners extensively with NOAA, the Navy, EPA, and others. A science and ecosystem approach will be used throughout the program, including at the 5-Year program design stages, the preparation of an EIS for an individual sale, and the decisions on an individual sale, consistent with other statutory mandates. We will continue to coordinate with NOAA and all other relevant Federal agencies during the decision-making process.

# Response to Written Questions Submitted by Hon. Barbara Boxer to Hon. Laura Davis

Question 1. As we work to develop a more comprehensive, ecosystem-based approach for managing natural resources, both in the ocean and on land, we must also continue to think about how more narrowly focused conservation efforts also relate to broader ecosystem-level goals. The Department of the Interior, acting through the Fish and Wildlife Service, manages recovery efforts for many individual endangered or threatened species, and a variety of laws have been enacted relating to the management of individual species. Do recovery efforts for individual species have broader ecosystem benefits?

Answer. Yes, recovery efforts for individual species most definitely have broader ecosystem benefits. The stated purpose of the Endangered Species Act (ESA) is to

conserve the ecosystems upon which threatened and endangered species depend. Other statutes such as the Marine Mammal Protection Act (MMPA) take a similar approach. For example the Marine Mammal Protection Act states, "The primary objective of their [marine mammals] management should be to maintain the health and stability of the marine ecosystem."

Actions taken to improve the status of listed species frequently have beneficial effects to other non-listed species and improve the integrity of the ecosystem. This is largely due to the fact that most endangered or threatened species are facing threats due to habitat destruction. The South Florida Multi-Species Recovery Plan is a good illustration of this principle. The plan covers 68 listed species, but its emphasis is on restoring 23 properly functioning ecological communities.

Question 2. I am concerned about the decline in the southern sea otter population and the impacts it may be having on Central California's kelp ecosystem. What role do sea otters play in the kelp ecosystem, and how could efforts to promote their re-

covery help improve the health of this ecosystem at large?

S. 1748/H.R. 556, the Southern Sea Otter Recovery and Research Act, would establish a research and recovery program for southern sea otters that would help identify and address some of the major stressors affecting these animals. In his testimony before the House Committee on Natural Resources, Subcommittee on Insular Affairs, Oceans and Wildlife on May 5 of this year, Acting Director of the Fish and Wildlife Service Rowan Gould outlined several of these stressors, saying, "Disease and predation, food limitation, nutritional deficiencies, and exposure to chemical contaminants are all stressors that may be influencing mortality patterns." These particular stressors are specifically called out in the legislation. Would research and recovery programs targeting these stressors have any benefits for understanding or addressing factors affecting other species in California's kelp ecosystem, such as abalone and sea urchins, other marine mammals, or fish, not to mention human

Answer. Sea otters are important predators in the nearshore marine ecosystems of the North Pacific Ocean and are generally considered to be a "keystone species" in these communities. The effects that sea otters have on their environment arise largely from predation. Sea otters consume a wide variety of nearshore marine invertebrates (including sea urchins, abalone, crabs, lobsters, clams, and mussels) and exert a strong limiting influence on their prey populations. Sea urchins are a favored prey item of sea otters. They are commonly viewed as the most important subtidal grazers of macrophytes (large algae, including kelp) in California. Overgrazing by sea urchins tends to occur when giant kelp (Macrocystis pyrifera) becomes scarce. When giant kelp is abundant, sea urchins typically feed on drift kelp, pieces of algae that break off and drift down from the canopy above. Under these conditions, sea urchins remain fairly stationary and feed opportunistically, and large numbers of sea urchins may have little effect on attached plants. However, shortages of drift kelp can cause starving sea urchins to gather together in moving "fronts," which can clear all attached macroalgae in their path. Intense grazing in areas densely populated by sea urchins can lead to the formation of sea urchin "barrens," areas that are devoid of kelp and are characterized instead by crustose coralline algal assemblages. Therefore, in areas where sea urchin grazing is limiting kelp establishment or growth, the presence of sea otters can generally be expected to result in the increased stability and persistence of kelp forest habitat.

The recovery of southern sea otters will be associated with an increase in their population size and the recolonization of their historic range. Range expansion of sea otters is expected to provide additional benefits that stem from their effects on kelp. Kelp forests provide numerous direct and indirect benefits, including reductions in coastal erosion, carbon storage that can moderate climate change, and improved habitat for numerous invertebrate and fish species. The marine environment of southern California has been dramatically affected by human activities, such as the direct removal of many of the animal components of the community and the input of pollution, making it difficult to determine the "natural" functioning of the community. The return of sea otters, top carnivores that were historically present in the ecosystem, is expected to enhance ecosystem functioning and to bring the nearshore marine ecosystem to a state more closely resembling its historic (pre-fur-trade), or "natural," condition.

With respect to the research and recovery programs targeting the stressors on the southern sea otter population-including disease and predation, food limitation, nutritional deficiencies, and exposure to chemical contaminants—these programs would have benefits for understanding or addressing factors affecting other species in California's kelp ecosystem and human health. For instance, prey specialization, which is a consequence of food limitation, appears to be functioning synergistically to cause disease in southern sea otters. The infection of sea otters with the protozoal parasites Toxoplasma gondii and Sarcocystis neurona is associated with use of particular areas of the coastline and with the selection of certain types of prey. These parasites infect and can cause mortality in a wide range of marine and other animals. T. gondii additionally poses a health risk to humans. A diet of marine snails is associated with T. gondii infection in sea otters, whereas a diet rich in abalone appears to protect sea otters from both T. gondii and S. neurona. An understanding of the precise pathways by which sea otters are exposed to these pathogens may allow the development of management interventions that will have implications for sea otters as well as other marine organisms. Similar benefits may be realized by tracking the inputs of other coastal contaminants that affect sea otters and other marine life, such as perfluorinated compounds or the toxins produced by harmful algae, such as domoic acid or microcystin that can kill sea otters as well as other marine organisms.

Response to Written Questions Submitted by Hon. Kay Bailey Hutchison to Hon. Laura Davis

Question 1. In September, I joined in signing a bipartisan letter, along with 34 other Senators, to Secretary Salazar conveying strong support for the Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program (DPP). What is the ratio of positive and negative comments on the DPP?

ratio of positive and negative comments on the DPP?

Answer. MMS received approximately 530,000 comments from citizens. It is difficult to establish such a ratio because some comments are support of or opposed to development in specific geographic areas. Others relate to the overall program. Therefore, we cannot provide such an analysis of positive or negative comments. Many comments require a judgment as to whether or not they should be considered positive or negative, particularly if the comment focuses on only one or two aspects of the DPP.

Comments can be viewed by the public on www.regulations.gov in docket MMS–2008–OMM–0045. Representative samples of group letter campaigns that were received by the MMS via mail have been posted on www.regulations.gov.

Question 2. How will the proposed National Ocean Policy impact the 2007–2012 Leasing Program and the decision to finalize the DPP?

Answer. The decisions to be made on the 2007–2012 program pursuant to the remand by the U.S. Court of Appeals, the lease sales remaining in that program, and the preparation of the new program will be made under the requirements of the OCS Lands Act (OCSLA). There is no inherent inconsistency between the requirements of the OCSLA and the Interagency Ocean Policy Task Force's proposed National Stewardship Policy for the Ocean, Our Coasts, and the Great Lakes (National Policy). The OCSLA has several requirements that could be used to carry out the principles of the National Policy, including using scientific data and analyses, consulting with other governmental entities, and opportunities for public input.

Question 3. The Interim Report states that decision-making will be guided by the precautionary principle. How will the precautionary principle impact future decisions with respect to the Outer Continental Shelf Oil and Gas Leasing Program?

Answer. Application of a precautionary approach, as defined in the Interim Report ("[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"), is consistent with and essential for improved stewardship. Moreover, that definition is one to which the United States has formally agreed by signing and ratifying the 1992 Rio Declaration. We must ensure that when we enjoy and use ocean, coastal, and Great Lakes resources, we use the best available information to make management decisions and minimize adverse environmental effects.

The Department has long recognized the importance of managing multiple uses of our marine environment. Through our conservation and stewardship efforts, we have been able to ensure the protection of native species and their habitats while simultaneously providing recreational opportunities for the public and overseeing safe and responsible natural resource energy development. The Department appreciates the clear link between the health of our marine ecosystems and their capacity for productive use, and will continue to take precautionary measures to ensure the well-being and prosperity of our oceans, coasts, and Great Lakes.

Question 4. How do you envision marine spatial planning will impact offshore energy development?

Answer. As stated in the Interagency Ocean Policy Task Forces' Interim Framework for Effective Coastal and Marine Spatial Planning provides that coastal and

marine spatial planning is intended to build upon and significantly improve existing Federal, State, tribal, local, and regional decision-making and planning processes. The OCSLA directs the Secretary to conserve the Nation's natural resources; develop natural gas and oil reserves in an orderly and timely manner; meet the energy needs of the country; protect the human, marine, and coastal environments; and receive a fair and equitable return on the resources of the OCS. The Department views coastal and marine spatial planning as a collaborative process of working with other Federal agencies, States, tribes, and diverse stakeholders to better meet its stewardship and ocean resource management responsibilities, using an adaptive and ecosystem-based approach to management. One example is that MMS and NOAA have developed a Web-based Multipurpose Marine Cadastre, which is one of several tools that can be used in a marine spatial planning process to inform this type of decisionmaking.

# Response to Written Questions Submitted by Hon. Maria Cantwell to Billy Frank, Jr.

Question 1. What does a national ocean policy mean to you?

Answer. It means the establishment of a comprehensive management framework from which we can build upon for a better future. Most importantly, a national policy should result in co-management of our shared marine resources. The Northwest Tribes believe that is national attention to ocean governance, ocean resources and issues is long past due.

Question 2. Do you think the process that the Administration is pursuing to create a national policy and develop a framework for marine spatial planning is moving the Nation forward?

Answer. Yes. The effort will result in greater management certainty for all parties engaged in marine related activities.

Question 3. If yes, what are the next steps to keep us moving forward? If no, how do we move forward?

Answer. Additional regional hearings should be scheduled upon release of the draft framework plan. The draft should include potential sites or regions where this planning process could be "test driven." The Ocean Task Force should seek further input on what, if any, additional refinements should occur in the framework and where a trial run of the planning process should be initiated.

Question 4. What role do you think that NOAA should play in implementing a national ocean policy and framework for marine spatial planning?

Answer. At a minimum, NOAA should be the lead science agency for developing a national ocean policy that addresses the ecosystem functions of the ocean. Without the benefit of the draft framework plan for marine spatial planning it is difficult to comment on whether NOAA is the appropriate lead Federal agency for the planning process envisioned.

Question 5. Mr. Frank, in your testimony, you said climate change and ocean acidification are real problems facing tribes in their daily lives. Could you explain how they are impacting tribes, and how the Federal Government can assist tribes in adapting to these changes?

Answer. The tribes have been witnessing changes across the landscape. Rainfall patterns have been shifting. Coupled with land use changes in our watersheds this change has resulted in earlier peak flows, increased frequency and intensity of floods. For the Hoh Tribe seasonal flooding and anticipated increases in sea levels have lead to relocation of tribal housing to higher ground. We are appreciative of the NW congressional delegation's efforts in helping secure this land for the tribe. Unfortunately, the Hoh Tribe probably will not be the last tribal community that will needs such relocation assistance.

The change in rainfall pattern has also put a strain on well water supplies across the region. The Makah Tribe has had to watch more closely their yearly freshwater supply as a result. This is a growing trend across the region. Communities will be looking to increase their holding capacity or bring additional water supplies on line. The Federal Government needs to prepare to deal with water supply and allocation in the near future.

The change in weather patterns is reducing our snow pack and glaciers. This is negatively affecting habitat for salmon and steelhead by changing flow patterns and water temperate. We need to increase the speed and scope of our efforts to restore stream buffers and riparian areas to provide adequate shade and deep pools to counter this trend. Our salmon need this to have a chance to thrive into the future.

We are seeing shifts in abundance and distribution of fish in our oceans. Southern species such as mackerel and Humboldt squid are becoming more prevalent off our coast. The frequency and severity of hypoxic dead zones off the outer coast has increased. The same can be said for toxic algae blooms leading to seabird deaths. We do not know whether this is caused more by climate change or shifts in ocean acidification. We are afraid these subtle changes are making our region more welcoming to invasive species. Federal action is required to begin to address the root causes for these problems and establish better safeguards for our environment (e.g., reducing nitrogen and phosphates levels in freshwater, prohibiting nearshore ballast dis-

Question 6. I know that the Northwest Indian Fisheries Commission considers ecosystem-based management a priority in its role as a co-manager of ocean fisheries. What can the Federal Government do to help tribal governments achieve the

mutual goal of ecosystem-based management for our fisheries resources?

Answer. Ecosystem-based management should be made a priority for NOAA. Provide adequate funding for NOAA Fisheries and the Regional Science Centers to increase their efforts toward this goal. Establish a pilot project for the Northwest Region to work with the coastal tribes and the State of Washington to implement an ecosystem-based approach for rockfish populations off the Washington Coast.

Question 7. What mechanisms for co-management tend to work which tend to be less successful, based on your experience?

Answer. Tribes are sovereign governments and should be dealt with on a government-to-government basis. What works best is the establishment of a management framework that treats each manager equally in stature and status. An approach where each manager is represented at the table and has an equal voice in the decisionmaking process. This approach is accompanied with adequate funding for all managers to allow them to fully engage in the process at all levels—data gathering resource monitoring, assessment, and policy development. A framework and approach where each manager has the opportunity for input throughout the process from start to finish.

What doesn't work is the establishment of a tiered framework, where not all the managers are seated or fully represented at the table. An approach where engagement for one set of managers comes only in the form of consultation and input is only sought on the final decision. This tiered representation can occur where funding is limited to the extent that it hampers or prohibits full participation in the process. Tribes must be engaged early and often in the decisionmaking process.

Question 8. What are some of the barriers preventing us from implementing ecosystem-based management with the Federal Government and tribal governments as

functional co-managers?

Answer. The biggest barrier for ocean resources is funding constraints prohibiting the gathering of data in the frequency and resolution necessary for implementing such an approach. In addition, the current Federal management framework doesn't provide the tribal or state managers complete participation in the resource assess-

ment decisionmaking process.

A different set of barriers exist for our steelhead and salmon resources. The complexity of the management structure is the biggest barrier from truly implementing effective ecosystem-based management. The fragmentation of management and regulatory responsibilities is a hindrance given the multitude of agencies that have authority over the fishery resource and its marine and freshwater habitat. Coordinates tion of effort is difficult and increased funding to facilitate better coordination is needed. Even with the umbrella of the Endangered Species Act not all Federal agencies—most notably Department Agriculture—have consulted on their impacts to list-ed species within Puget Sound. Even NOAA, in carrying out Coastal Zone Management Act compliance review activities, has yet to fully assessed impacts to ESA Chinook Salmon recovery plans within Puget Sound.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO DENNIS TAKAHASHI-KELSO, Ph.D.

Question 1. What does a national ocean policy mean to you?

Answer. A national ocean policy is a governance framework for all U.S. federal waters that establishes goals and mandatory standards, provides mechanisms for implementation, supports scientific research, and requires effective monitoring and assessment. A science-based national ocean policy can help maintain the health of our oceans so that we and future generations may continue to benefit from its myriad services. The ocean is critical to our well-being, and it is vital that we protect, maintain, and restore the ecosystems that make it productive. A strong national ocean policy with ecosystem health as a priority goal is crucial to ensuring that the ocean can continue to provide the economic, environmental, social, and spiritual

benefits that are so important to us.

Today, our coasts, ocean, and Great Lakes are governed by more than 20 Federal agencies and over 140 Federal laws, not to mention state, tribal, and local laws as well as international agreements that affect ocean governance. While individual agencies may practice good ocean management and administer individual statutes and regulations well, the overlapping and uncoordinated nature of ocean governance cries out for a more coordinated policy. The President recognized this in calling for a National Ocean Policy based on ecosystem-based management and using marine spatial planning as a tool. I strongly support this initiative.

Question 2. Do you think the process that the Administration is pursuing to create a national policy and develop a framework for marine spatial planning is moving

the Nation forward?

Answer. The Administration's initiative is an important step in moving the Nation forward, and so is your committee's interest and involvement in the process. It will be vital to have the support of both the Administration and the Congress as the United States develops and implements a national policy for our ocean, coasts, and Great Lakes. The current situation is untenable, and we must find ways to protect, maintain, and restore ecosystem health so the ocean can continue to provide the im-

portant services on which we all rely.

Environmental non-governmental organizations have strongly supported and continue to endorse the Administration's efforts. Many of these groups jointly submitted comments on the Interim Report, and some of these comments address issues that you raise in subsequent questions. We look forward to reviewing the draft policy on coastal and marine spatial planning (CMSP) now that it has been released for comment. It will also be essential to remain engaged in the process—for us, for Congress, for the Administration, for other stakeholders, and for the public—as policy formulation and implementation move forward, both through actions by the Administration and, importantly, through legislative efforts.

Several critical issues must be addressed: achieving full policy implementation;

ensuring accountability, transparency, and broad, participatory decision-making; providing adequate funding; and making sure that the policy accomplishes the Nation's goals. The policy must establish as a primary goal the protection, maintenance, and restoration of ecosystem health; and, in concert with that goal, the policy

should promote sustainable economic development now and into the future.

Question 3. If yes, what are the next steps to keep us moving forward? If no, how do we move forward?

Answer. Existing statutory authorities give Federal agencies a significant amount of discretion to consider marine ecosystems as well as present and future uses of the ocean in making decisions. The Administration should move quickly to issue an Executive Order that would ensure that Executive Branch agencies exercise this latitude in a manner consistent with the Ocean Policy Task Force recommendations. As discussed below, we also encourage Congress to consider legislation.

Specifically, my organization, along with a coalition of environmental non-governmental organizations, has suggested how to move forward with a national ocean policy that uses marine spatial planning as a tool for ecosystem-based management to protect, maintain, and restore healthy ocean ecosystems. Our recommendations in-

- Planning on a regional basis and, insofar as possible, on an ecosystem basis, and adopting a governance structure that is led by a Federal body with not only protection, maintenance, and restoration of ecosystem health but also agency coordination at the core of its mission. The proposed National Ocean Council structure is appropriate for management and approval of regional planning ef-
- Ensuring that regional planning includes robust participation of tribes, non-Federal government entities, stakeholders, and the general public and is structured to compel responsibility, transparency, and accountability;
- Providing adequate resources to ensure that marine spatial plans are based on high-quality scientific information and expertise, including traditional and local knowledge.

In addition, we recommend specific steps to create, adopt, implement, monitor, and adapt marine spatial plans. These steps are based on research and recommendations from case studies of marine spatial planning initiatives that have been adopted throughout the world—from Australia's Great Barrier Reef to the Belgian and German North Sea coasts to Great Britain's comprehensive ocean legislation to CMSP initiatives in Rhode Island and Massachusetts. The steps include:

- · Identify planning needs and preliminary planning objectives;
- · Assemble data for analysis and planning;
- Conduct regional ecological and socio-economic assessments and identify data gaps;
- Determine the conflicts and compatibilities between human uses of ocean resources on the one hand and ecosystem health on the other, as well as among human uses;
- Develop plans to implement the goals of the National Ocean Policy and specific national management objectives and to address regional objectives to the extent that they are consistent with these goals and objectives;
- Adopt the coastal and marine spatial plans and make them binding;
- Implement the final regional plans through the existing regulatory authorities of individual Federal agencies (or through new legislation) and monitor progress toward meeting the plans' objectives; and
- · Revise and adapt plans as needed.

Together these steps should lead to important progress in national ocean policy using Executive Branch discretion under existing legislative authorities and mandates. Progress toward the goal of healthy ecosystems and sustainable uses of ocean resources could be even more substantial if Congress were to enact strong ocean policy legislation.

Question 4. What role do you think that NOAA should play in implementing a national ocean policy and framework for marine spatial planning?

Answer. The importance of NOAA's role in implementing a national ocean policy and CMSP framework cannot be overstated. NOAA has vast expertise and experience in science-based ocean management and policy. Among our recommendations for national ocean policy, we urge that NOAA play a central role and have a seat at the table as a principal level National Ocean Council member.

NOAA's scientific expertise will be vital to the regional CMSP process. Assess-

NOAA's scientific expertise will be vital to the regional CMSP process. Assessment and compilation of existing data, as well as research to fill data gaps, is an essential element of coastal and marine spatial planning. NOAA's role in this process will be integral to its success.

Question 5. I know that you are supportive of the work of the Ocean Policy Task Force, but the Task Force is focused largely on how the Federal Government can do a better job under existing authorities, and relies heavily on interagency processes. . . . What are some of the limits of an interagency approach as proposed under the National Oceans Council? By relying so heavily on interagency processes within the Administration, isn't it likely that ocean issues will be handled in very different ways as Presidential administrations change? Do you see a need for legislation to implement the recommendations of the Task Force?

Answer. Your questions get to the heart of the issue. Yes, a policy based so heavily on Executive Branch action is subject to change under different administrations. Consequently, in answer to your second follow-up question, implementing the Task Force recommendations through legislation could ensure their continued priority regardless of changes in the executive branch.

Before I address the ways in which legislative action could provide lasting, effective implementation of the national ocean policy, however, I would like to discuss what could be accomplished through action by the Administration, with Congressional support.

As Dr. Lubchenco noted during her testimony, there is much that Federal agencies can do under existing authorities, including ocean mandates like the Magnuson-Stevens Fishery Conservation and Management Act, the National Marine Sanctuaries Act, the Coastal Zone Management Act, the Marine Mammal Protection Act, and environmental mandates like the National Environmental Policy Act, among others. Use of existing authority can help implement regional spatially explicit planning, especially because many of the existing mandates allow for interagency coordination, although they do not necessarily require it.

Nonetheless, there are definitely limits to what can be done under existing authority. An executive order could address some of these limitations by directing agencies to use their discretion under existing authority for the purpose of implementing coastal and marine spatial planning, and by directing them to work in a coordinated fashion. Executive orders can be quite comprehensive and specific. For example, Executive Order 13508 (12 May 2009) for Chesapeake Bay Protection and Restoration promotes a comprehensive, coordinated approach to restoring the health

of this important estuary. With committed, adequate, and sustained financial supor this important estuary. With committed, adequate, and sustained infancial support from Congress, an executive order that is sufficiently compulsory and specific would allow for a positive start to regional marine spatial planning. While administrations can and do change—and with them, the Executive Branch priorities—once programs and policies are in place and successful, they have a certain self-sustaining momentum that can help ensure their continued application.

As you noted, however, not all executive orders have the same staying power. Legislation could create a comprehensive framework for implementing CMSP in a binding and lasting manner. It could cut through the myriad statutes and regulations

ing and lasting manner. It could cut through the myriad statutes and regulations affecting ocean policy and could overcome the fragmented, sector-based system that currently exists. New legislation could address these issues for the long term. While legislation, too, can be changed, it provides greater certainty that policies will be implemented, supported, and sustained. We are committed to working with you in the coming year to determine areas where legislation can help fill existing gaps in authority and solidify national policy to meet the goal of protecting, maintaining, and restoring ocean ecosystems that support healthy economies and help satisfy our Nation's other needs—social, traditional, environmental, and spiritual. We support your working to adopt comprehensive ocean legislation to establish a national ocean policy that uses ecosystem-based management through marine spatial planning as a tool to accomplish those goals.

Congress's role extends beyond passage of legislation. Effective coastal and marine spatial planning requires adequate and sustained funding. Congressional support in the appropriations process is crucial. Your efforts with Ranking Member Snowe to increase NOAA's budget are an important step. Coordinating national, tribal, and state planning efforts will also require financial assistance to enable participation and to serve as incentives for tribes and states, as well as local governmental enti-

ties, to engage as active planning partners.

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