

“HEALTHY OCEANS ARE EVERYONE’S BUSINESS”

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**6/7/2011
Washington, DC**

Keynote Address at Capitol Hill Ocean Week

As prepared for delivery

Good morning everyone! Let me begin with some heartfelt thanks to the National Marine Sanctuary Foundation — Jason Patlis, Jeb Berman and the foundation staff. Your diligence and dedication have made Capitol Hill Oceans Week an important and informative June tradition.

Everyone in this room, and those of you joining us by webcast, are part of our burgeoning ocean community. Each of you has been a vital force in making healthy oceans a priority for the nation.

You are the people who understand and deliver the messages that healthy oceans matter, that healthy oceans are important for American prosperity, and that healthy oceans are everyone’s business. That is my theme today.

As we come together to talk about the oceans’ role in global security and American prosperity, it is fitting that on Thursday, President Obama declared this month National Oceans Month.

Healthy oceans are everyone’s business because our oceans are critical to life in the United States, to the nations of the world, and to our planet. Oceans are a keystone in our economic progress, our national security and our natural heritage. Whether we talk about marine commerce, sustainable commercial fisheries, recreational fishing, boating, tourism or energy production, the ocean in all of these endeavors provides people with jobs as well as the services that strengthen our economy.

So ... Just how much do the oceans contribute to the American economy? According to the National Ocean Economics Program, in 2007 the ocean economy generated over 2.3 million jobs and more than \$138 billion of the GDP of the United States. One hundred fifty six million people live in coastal counties, where they hold 69 million jobs that contribute \$7.9 trillion to the Nation’s economy.

That inseparable connection between the health of the ocean, the health of the American economy, the health of the job market and the well-being of people emerged as an indelible message from the Deepwater Horizon tragedy.

As an unprecedented environmental disaster, the Deepwater Horizon spill oiled over 1,000 miles of shoreline, 3/5 of them in Louisiana. Although the vast majority of the oil in the Gulf is now gone, oil remains close to shore in many of these Louisiana coastal areas, and the effects on Gulf ecosystems and communities will be felt for years. Communities and economies throughout the Gulf were devastated by the spill.

While a cooperative Natural Resource Damage Assessment process is well underway, it will be some time yet before we have a clear picture of the full impact of the spill.

On April 21, NOAA and the other federal and state Natural Resources Trustees for the Deepwater Horizon oil spill announced that BP will pay \$1 billion as a down payment on restoration. These efforts will reap local, regional and national benefits and build on the major commitment to restoration already demonstrated in the Gulf. Trustees will use the funds for projects such as rebuilding coastal marshes, replenishing damaged beaches and conserving fish and wildlife habitat injured as a result of the spill. They are actively working with citizens, local officials, environmental organizations and others to develop a comprehensive list of projects to be considered for early restoration.

The events of Deepwater Horizon call loudly to us for action. Deepwater Horizon says that we need to pay attention **now** to effectively manage and conserve oceans — or in Carl Safina’s words, we need to learn “to use oceans without using them up.”

And we **are** paying attention, and acting. We are entering a new era in ocean governance:

- An era when we embrace holistic, ecosystem-based management of our oceans.
- An era when our scientific understanding of the impacts of humans on coastal and ocean ecosystems is being used to inform our management decisions.
- An era when policy connects jobs, communities, and economies with healthy ecosystems.

The Nation’s first ever National Ocean Policy established last July embodies these principles. This policy — the *National Policy for Stewardship of the Oceans, Coasts, and Great Lakes* — is about good governance — governance informed by sound science. This policy says “healthy oceans matter” in black and white.

With its bold vision for more holistic, ecosystem-based management of our oceans, the National Ocean Policy fully recognizes the critical importance of partnerships — partnerships that collaborate, cooperate, and coordinate across the federal government, across state, local, regional and tribal levels, and within communities themselves.

All ocean users — from recreational and commercial fishermen, boaters, and industry, to environmental groups, scientists, and the public — will have a say in planning for, managing, and sustaining the many human uses that healthy oceans, coasts and the Great Lakes support.

Ultimately, the goal is less waste and conflict, more efficiency, and savings for American taxpayers.

This common-sense planning helps us take care of our ocean resources. And it also creates predictability, and fosters a better climate for investment.

The National Ocean Policy opens a critical window of opportunity. But, to move forward, we must: improve alignment between our scientific understanding and decisions; reevaluate existing policies and practices to build a more sustainable future; and invest in the knowledge, institutions and partnerships that enable sustainable use.

Since July, we’ve been working hard to get the National Ocean Policy up and running by getting the federal family in order.

The Governance Coordinating Committee, a group of state, local and tribal representatives that will serve as a key coordinating body for the National Ocean Policy, has already convened and will be meeting again this month.

We also are working to develop strategic action plans for each of the priorities we've set for the oceans. Topics range from water quality to ocean observations to improving coordination of the multiple diverse entities involved in ocean management.

We released outlines for these strategic action plans for public review. Over the month of June, we hope you will provide us with your thoughts about these outlines and attend a public listening session near you. Your first chance will be the listening session this Thursday night, from 6:00-8:30 p.m., at the Women's Memorial at the ceremonial entrance to Arlington National Cemetery. As they say in the South: Y'all come!

A key upcoming event is the National Workshop on Coastal and Marine Spatial Planning, from June 21-23. Workshop participants can learn about Coastal and Marine Spatial Planning and help frame how it can be used to harmonize the often competing uses of ocean and Great Lake waters, such as national security, energy and economic security, and conservation. If you have not already signed up to attend the public day of the workshop here in Washington, D.C., on the 21st, you can catch it via live webcast at www.doi.gov/live.

And soon — stay tuned! — we will begin to work with states and tribes to create the regional planning bodies that will work on CMSP.

We realize the policy's vision will not be easy, but I am hopeful. Those of us who worked hard on it are committed to having it succeed. For example, NOAA has realigned many of its working groups to be maximally supportive and effective and is developing memoranda of understanding with other agencies to ensure strong partnerships.

Let me now turn to exploring some of the ways in which healthy oceans are indeed everyone's business — not just coastal residents', not just ocean champions' — but EVERYONE'S. I will highlight four arenas in which this is true: seafood, habitat restoration, marine commerce and energy.

Healthy oceans are everyone's business because oceans have provided people with food since the origin of coastal civilizations.

Today, a billion people worldwide depend on seafood as their primary source of protein. The concept of "food security," therefore, must include fisheries and aquaculture.

We Americans are no exception. We consume about 5 billion pounds of seafood each year.

U.S. commercial and recreational fisheries and aquaculture result in more than \$160 billion in sales and 1.9 million jobs in U.S. commercial and recreational fisheries. These 1.9 million jobs make our waterfronts working waterfronts.

Who are these workers? They are the boat captains and their crews, the oyster farmers and workers in seafood processing plants. They are the charter boat operators that make it possible for others to get out on the water to fish. They are the truckers transporting seafood from the dock to processors and elsewhere. They are the retailers selling us key ingredients for seafood dinners in our homes, and the chefs, cooks, and wait staff that serve them to us in restaurants.

Healthy oceans support healthy fisheries and food security, while supplying jobs and strengthening the economy.

Prior to 1976 — the nation's bicentennial — federal management of marine fisheries was almost nonexistent. That year, in 1976, the Magnuson-Stevens Act spurred a movement to end overfishing and

rebuild depleted stocks.

This year we celebrate the 35th anniversary of the Magnuson-Stevens Act. And thanks to its vision and courageous action, we are turning the corner on ending overfishing. The Magnuson-Stevens Act put the U.S. on track to end overfishing in federally managed fisheries, rebuild stocks, and ensure conservation and sustainable use of ocean resources.

Today, fisheries harvested in the U.S. are scientifically monitored, regionally managed, and legally enforced under 10 strict national standards for sustainability.

We are on track for annual catch limits and accountability to be in place for all 528 federally managed fish stocks and complexes by the end of 2011.

With the rebuilding of fisheries underway, we are beginning to see real benefits for fishermen, fishing communities, and for our commercial and recreational fishing industries.

Rebuilding all U.S. fish stocks would add an additional \$31 billion in sales impacts, support an additional 500,000 jobs — that is a half MILLION jobs — and increase annual dockside revenues by more than 50 percent.

We must continue to invest in the science that diminishes uncertainty in fisheries and assure levels of harvest are monitored so that we maintain sustainable levels. Only then can we realize the potential of fully sustainable fisheries domestically and continue to pursue exporting these practices internationally where real challenges to our ocean's living marine resources still exist.

U.S. and worldwide demand for seafood will continue to grow as the population and consumer awareness of seafood's health benefits grow. And, as we are ending overfishing we must simultaneously build a sustainable aquaculture industry here in the U.S.

Already, aquaculture plays a far larger role in seafood supply than many people know. Approximately 84 percent of the seafood consumed in the United States is imported, and about half of that comes from foreign aquaculture. In 2009, aquaculture crossed the threshold of providing more than half of **all** seafood consumed worldwide. Yet, U.S. aquaculture provides only about 5 percent of the seafood consumed in the United States. Driven by imports, the U.S. seafood trade deficit has grown to over \$9 billion annually — the highest it's ever been. There is clearly an opportunity for growth in this industry. If done wisely, aquaculture can complement wild fisheries while contributing to healthy oceans and coastal economies.

In February of this year, the Department of Commerce and NOAA jointly released draft Aquaculture Policies for public comment. The public comment period ended on April 11. Once the policies are in place, NOAA will work with partners to create initiatives that encourage growth of sustainable aquaculture.

We can see how sustainable aquaculture creates multiple benefits by taking a look at Perry Raso, an oyster farmer in Rhode Island. In 2002, Perry started his oyster farm. Two years ago, he opened a seafood restaurant next door. He now has seven full-time employees who tend the oyster farm and 130 people working in his restaurant. When asked about the future of aquaculture, Perry says, "Aquaculture ... has to be done in a sustainable manner. Otherwise, the industry will shoot itself in the foot. Whether it's inshore or offshore, aquaculture needs to be well thought out, sustainable and accepted by all the user groups, including coastal property owners, fishermen, boaters and others." Perry is also involved in

a restoration project to bring the oysters back to a local pond.

Perry Raso shows us one way that working waterfronts help rebuild America.

Healthy oceans are everyone's business because healthy coasts and oceans are the *sine qua non* for vibrant coastal communities.

Habitat restoration presents another golden opportunity to create jobs and restore the plethora of benefits that come from healthy coastal habitats. Habitat restoration is stimulating the local economy in the small town of Bayou la Batre in Alabama.

Bayou la Batre sits in the southwestern tip of Alabama in Mobile County. You may know it from the movie *Forrest Gump*. Bayou la Batre is a seafood processing harbor serving hundreds of shrimp and fishing boats, shipbuilding, and locally owned and operated shipyards.

Even before Hurricanes Katrina, Rita, Gustav and Ike left their marks on Bayou le Batre, coastal wetlands and fishery resources were declining. In 2011, Deepwater Horizon struck yet another blow.

Bayou la Batre was selected to receive Recovery Act funding from NOAA for habitat restoration. Partnered with The Nature Conservancy, the Dauphin Island Sea Lab, and the University of South Alabama, the town installed a submerged breakwater reef along two stretches of shoreline, protected more than 18 acres of habitat for submerged aquatic vegetation and created almost two acres of oyster reef.

The project director, a Bayou la Batre native and former oysterman, hired out-of-work oystermen to construct and place reefs. That project director was a real skeptic. He didn't think the project would work. Fast forward to today: Lo and behold, fishermen are bringing in large catches of flounder near the restored reef, and biological monitoring shows early evidence of fish and oyster recovery at the site. Real jobs and more fish changed the project director's mind.

Though the town is small, this success is a big one for them. This small example shows that restoration creates jobs, sparks economic and ecosystem benefits, while making healthy oceans and resilience real for one waterfront community.

Elsewhere across the country, \$167 million of NOAA's ARRA funds were allocated to 50 restoration projects. By the end of 2012, approximately 1,000 direct jobs will have been created by these projects. Upon completion, these projects will have restored more than 8,700 acres of habitat, opened more than 700 stream miles for fish to migrate and spawn, removed more than 850 metric tons of debris, and protected 11,750 acres to reduce threats to coral reefs — all in coastal areas around the U.S. The restored habitats, in turn, will support and sustain fishing and tourism jobs and local communities.

From the demand we saw for ARRA monies, the need for restoration funds and the jobs that come with them is clear. We received 814 applications totaling \$3 billion for shovel-ready projects and could only fund 50 of them totaling \$167 million.

Restoration is not only good for the oceans, coasts and Great Lakes, restoration is good for economic recovery.

Healthy oceans are everyone's business because the oceans are home to America's ports, part of America's core infrastructure.

Ports are the nation's centers of marine transportation and commerce, and centers of the oil and gas industry and chemical facilities. According to U.S. Department of Transportation and Department of

Energy, marine transportation is the engine of our economy. Ports move more than 77 percent of our overseas trade by weight and 48 percent by value in 2008. This includes nine million barrels of oil a day or roughly 47 percent of the oil needed to meet our annual energy requirements.

About two-thirds of the goods we buy come to us by ship. Marine transportation now contributes more than \$1 trillion and 13 million jobs to the American economy. Maritime trade has doubled over the last 50 years, and the U.S. will see continued growth as we look to marine transportation as an energy-efficient alternative to land and air transport.

This year, more than 135 ships are likely to be involved in costly ship groundings, potentially lethal collisions and other accidents. Stoppage of traffic on the Mississippi River costs approximately \$250 million per day.

Just outside of New Orleans in Jefferson Parish, the Huey P. Long Bridge crosses the Mississippi River. On a hot, hot day, the 135-foot bridge might sag 3 to 4 feet. Large ships passing under the bridge need real-time bridge clearance. And ships are bigger than they've ever been, pushing the limits of channel depth and bridge clearance.

When stoppage itself costs upwards of \$250 million per day, real-time data and round-the-clock availability are critical. NOAA's Physical Oceanographic Real-Time Systems, or PORTS, does just that. Available 24/7, 365 days a year by web or phone, PORTS provides ship pilots and mariners real-time tide, current, bridge clearance, and weather data.

During data trials of the lower Mississippi PORTS, the system's air gap technology enabled a new \$1B Navy ship, the *USS New York*, to pass safely down the Mississippi and clear the Huey P. Long bridge with two feet to spare. That's accurate!

When ports are hit by hurricanes, NOAA's rapid response hydrographic survey ships often are the first to help survey and re-open damaged port areas.

These same ships are part of NOAA's charting program responsible for surveying and mapping the 3.4 million square nautical miles of the U.S. Exclusive Economic Zone, the largest in the world.

Navigation rights and freedoms are essential for the global economy and for security.

We need accurate positioning for navigation, for flood risk determination, levee construction, emergency preparedness, air traffic control, building construction and land use planning. The grid that makes GPS work for us and accurate positioning possible is the National Spatial Reference System — a NOAA product.

Navigation services data feed the decision support tools necessary for coastal communities, ports and commercial interests to plan for and negotiate use of our oceans, coasts, and Great Lakes resources and to prepare for climate impacts, such as sea level rise, like we're seeing in Port Fourchon.

Port Fourchon, Louisiana sees 13 to 15 percent of all oil imported into the nation, while providing passage for crude oil to 50 percent of the nation's refineries. The coastal wetland where Port Fourchon sits is under severe stress. Regional land subsidence, erosion and inundation from coastal storms have taken their toll. Louisiana Highway 1 (LA 1) is the only highway access to Fourchon. Sea level rise and subsidence rates add up to about 9.23 mm per year, likely increasing in the future. The unelevated portion of this highway will see frequent flooding and closures in 15 to 17 years with almost complete

loss of the highway in subsequent years. To estimate sea level rise, Port Fourchon is using NOAA's elevation data at historical tide stations along LA 1. The information will be used to evaluate the need to raise the highway.

Anticipating sea level rise can bring economic benefit in this way.

These examples show some of the roles that port safety, navigation and mapping play in national security and energy security, while creating jobs and economic sustenance to the nation.

Healthy oceans are everyone's business because the nation's energy security depends on them.

Energy security depends on gaining oil independence. According to its *Blueprint for a Secure Energy Future*, the White House set a goal of reducing the nation's use of oil by one-third by a little more than a decade from now. And by 2035, 80 percent of our electricity must come from clean energy sources, including renewables like wind, solar, and ocean.

As President Obama said, "The United States of America cannot afford to bet our long-term prosperity, our long-term security on a resource that will eventually run out, and even before it runs out will get more and more expensive to extract from the ground. We can't afford it when the costs to our economy, our country, and our planet are so high."

Wind, solar, and biomass/biofuels are the most rapidly growing renewable energy sectors in the U.S. They promise to be a significant portion of the total U.S. energy supply. We will rely on the ocean for siting for wind farms and as an alternative energy source.

NOAA is responsible for assessing the potential effects of these ocean-based, energy-generating technologies on marine trust resources and existing coastal and ocean uses of concern, and response and restoration if trust resources are harmed.

Coastal and marine spatial planning will be an important tool for regional planning for use of the ocean for this purpose.

Renewable energy sources depend on improved weather and cloud forecasts to be economically viable and successfully integrated into the U.S. electrical grid system.

Proposed ocean-based renewable energy technologies, including hydrokinetic energy and ocean thermal energy conversion, require research and information about ocean conditions and processes before they can be developed. We also need better atmospheric and oceanic observations, models, forecasts and analysis tools to reap the benefits of renewable energy. Clearly, these areas of research and technology development for energy production are ripe for innovation.

We are making progress on renewable energy research. For example, to improve wind farm energy production, NOAA researchers and colleagues just launched a study to better understand and predict how gusts and rapid changes in wind direction affect turbine operations and how turbine wakes behave. This research will help improve design standards, increase efficiency, and reduce the cost of energy.

NOAA and the Department of Energy (DOE) signed a Memorandum of Understanding in January 2011 to work together on enhancing the use of weather-dependent and oceanic renewable energy technologies and infrastructure.

NOAA also just signed a landmark agreement with Interior's Bureau of Ocean Energy Management,

Regulation and Enforcement (BOEMRE) to increase coordination and collaboration for environmentally sound offshore energy development.

Now, it should be clear from my remarks thus far — looking across governance, seafood, habitat, commerce, and energy — that we have come a very long way.

We are entering a new era in ocean governance with the first-ever National Ocean Policy.

We are turning the corner to end overfishing and rebuild stocks.

We are about to launch a national aquaculture policy that will open new doors for a sustainable aquaculture industry.

We are restoring habitats and revitalizing coastal communities to keep working waterfronts sustainable.

We are protecting our ports and supporting marine transportation and commerce in the present and anticipating future needs of climate change. And we are developing greater scientific understanding and innovating tools and technologies for clean energy.

Through all of these activities, we are creating jobs and strengthening the economy and infrastructure, while making the oceans more resilient.

Yes, we have come a long way. But we still have a long way to go.

The time has come to reach out, grow our ocean community, build on the great efforts to date, but make a quantum leap in the level of activity.

The time has come to act now to make healthy oceans everyone's business – everyone's business.

Let's ensure that healthy oceans stay a high priority on today's agenda and on tomorrow's.

Healthy oceans are indeed everyone's business, but keep in mind that they are much more. Healthy oceans matter in large part because they are an expression of our commitment to one another and to the rest of life on the planet.