

Keynote Address to NOAA Day on the Hill

As delivered

Congressmen Bachus and Farr, thank you for being here today and for your compelling words and support for NOAA. As you note, both the oceans and atmosphere sides of NOAA are vitally important to the nation.

Thank you, John, for your kind introduction.

And thank you all for coming. It is a pleasure to be here today.

I would also like to thank the Senate Commerce Committee, Ranking Member Eddie Bernice Johnson and the House Science, Space, and Technology Committee Minority, the House Oceans Caucus, Representative's Spencer Bachus, Jo Bonner, Sam Farr, Rush Holt, Edward Markey, Collin Peterson, and Frank Wolf, and Senators Mark Begich, Daniel Inouye, Barbara Mikulski, and Lisa Murkowski for their sponsorship of NOAA Day on the Hill.

As the Administrator of NOAA, I am very proud of the work this agency does. On a daily basis, we enrich and protect the lives of Americans through science, as we strive to understand and predict changes in our climate, weather, and oceans. This information keeps citizens informed of the changing environment around them, from harmful algal blooms in the Great Lakes, to tornadoes across the mid-west and southeastern U.S., and tsunamis that impact coastal communities world-wide.

There are close to 13,000 NOAA employees, and NOAA maintains a presence in every state. I am very proud of, and humbled by, the work they do every day to protect lives and property, and to conserve and protect our natural resources.

NOAA's roots date back to 1807, when Thomas Jefferson established the Nation's first scientific agency, the Survey of the Coast. Since then, NOAA has evolved to meet the needs of a changing country and has emerged as an international leader on scientific and environmental matters.

Indeed, building on its scientific strengths and its focus on services and stewardship, NOAA is now one of the best bargains the federal government provides to Americans. You will note that I am holding a nickel in my hand. A nickel is what each American pays for all of the services that NOAA provides. And this nickel gets you the world's best weather information and allows us to save lives and property when severe storms strike. This nickel helps make our coasts more healthy and vibrant. This nickel supports American business owners- from the fisherman on the coast to the farmer in the heartland. This nickel helps keep our homeland secure.

As the largest agency in the Department of Commerce, NOAA plays a vital role in supporting and enhancing the economy. Shippers delivering goods through our ports, energy companies making key resource decisions, and travel and tourism businesses are just a few of the businesses and industries that rely on NOAA's products and services to make sound business decisions and promote economic vitality. Each of our line offices is integral to this mission.

For example, more than 78% of the U.S. overseas trade by volume comes and goes by ship. Waterborne cargo alone contributes more than \$742 billion to the U.S. Gross Domestic Product and creates employment for more than 13 million citizens. NOAA provides critical information for safe, efficient, and environmentally sound transportation.

Weather and climate sensitive industries account for about one-third of the nation's Gross Domestic Product. NOAA provides weather and water data for analyses, predictions, and warnings for a range of conditions, including those relating to water supply, air quality, space weather and other natural hazards. Businesses, governments, and non-governmental organizations rely on these data to improve operational efficiencies, save money, and manage environmental resources.

Furthermore, billions of dollars in recreational and commercial activity depend on healthy coastal, ocean, and freshwater environments. California's coastal industries alone contribute more than \$17 billion and 370,000 jobs to the state's economy. Pressures on these systems are increasing and in some cases have already caused severe effects, such as fishery closures and degradation to coastal ecosystems. NOAA's careful monitoring of this fragile ecosystem improves our understanding of these resources and helps ensure their continued prosperity.

NOAA Fisheries is responsible for the management, conservation and protection of living marine resources in federal waters. This year marks the 35th Anniversary of the Magnuson – Stevens Fishery Conservation and Management Act, the landmark law that guides fishery management. This statute, with its regional framework and goal of sustainability, has proven to be a visionary force in natural resource management - both domestically and internationally, and will continue to be a key driver for NOAA as we deliver on our nation's commitment to ocean stewardship, sustainable fisheries, and healthy marine ecosystems.

While vision is seldom achieved without controversy or struggle, this 35th anniversary year marks a critical turning point in the Act's history. By law, we are required to have annual catch limits and accountability measures in place for all 528 federally-managed fish stocks and complexes by the end of this year. We are on track to do so.

Ending overfishing is a critical step in rebuilding our nation's fisheries and ensuring a strong and prosperous fishing industry that supports jobs and commerce. If all stocks were rebuilt and caught at sustainable levels, the ex-vessel value could increase by as much as \$2.2 billion, generate \$31 billion in sales impacts, and create as many as 500,000 jobs across the economy.

The dynamic, science-based fishery management process envisioned by Congress is now in place, the rebuilding of fisheries is underway, and – while challenges remain -- we are beginning to see real benefits for fishermen, fishing communities, and both our commercial and recreational fishing

industries.

Also noteworthy is NOAA's enhanced commitment to the recreational fishing industry. Just over a year ago, we hosted a Recreational Saltwater Fishing Summit to gather the recreational community, to hear their concerns. Together, we charted a course to work together to reach our common goal of vibrant, sustainable fisheries.

We created a new position within NMFS, a National Policy Advisor on recreational fishing, added a Recreational Fisheries Working Group to the Marine Fisheries Advisory Committee, and are making important progress to improve the accuracy and reliability of recreational data.

These are just a few of the things NOAA is doing to support and protect our fisheries, which are a key component of our economy.

And, of course, all fishermen rely heavily on NOAA's nautical charts, tide tables, weather and ocean condition forecasts. Indeed, the entire Nation looks to NOAA's National Weather Service for routine weather information and especially for alerts about severe storms and disasters.

Unfortunately, we have seen our share of tragedies over the past few months. From tornadoes that swept across the midwest and southeast, to the flooding along the Mississippi River, to the earthquake and resulting tsunami that devastated Japan. As devastating as these events have been, they would undoubtedly have been far worse if it were not for NOAA's timely and accurate forecasts, models and warnings that saved countless lives.

The key to NOAA's ability to provide timely warnings lies in the integration across different parts of NOAA: the satellite, weather and research branches work together to deliver information people can count on to save life and property.

I wish to draw your attention to the key role of NOAA's polar-orbiting satellites, in enabling NOAA to provide long-term forecasts and severe storm warnings. NOAA's polar-orbiting satellite, along with Europe's Metop polar-orbiting satellite are the secret weapons that enable days-in-advance warnings of severe tornadoes, hurricanes, and severe snow storms.

Lack of a NOAA polar orbiting satellite would severely compromise our ability to provide citizens, emergency managers, airlines and others the days-in-advance alerts that are so essential to minimizing loss of lives and economic disruption. Our current polar-orbiting satellite and the one we plan to launch this fall should continue to function for the next few years. However, the polar orbiting satellites NOAA planned to launch in 2014 and 2018, are now on hold due to funding limitations in the FY11 budget. The launch of these JPSS is now delayed by at least a year and a half.

As a consequence, it is now a near-certainty that a few years down the road, we will have a period of time without the vital information provided by our polar-orbiting satellites. The length of the data gap and the magnitude of the impact to National Weather Service weather prediction will depend on the final outcome of the FY 2012 appropriations process.

A data gap will lead to less accurate and less timely weather and severe storm forecasts. Such a gap places lives, property, and critical infrastructure in danger. NOAA's and Europe's polar-orbiting satellites are the backbone of all forecasts beyond 48 hours. Any forecast beyond that period – whether U.S. or global – relies almost exclusively on data from polar-orbiting satellites.

Moreover, our polar-orbiting satellites provides other key life-saving services. Response time to emergency beacons from distressed mariners, aircraft personnel and others could double during the gap without our polar-orbiting satellites. In 2010 alone, 295 lives were saved through NOAA's Search and Rescue beacon program. In the U.S., over 6,500 people have been rescued since 1982.

Polar-orbiting satellites also provide critical weather forecasting for the \$700 billion maritime commerce sector and the hundreds of millions of dollars fishing industry.

The satellites also save some \$200 million per year for the aviation industry in volcanic ash forecasting alone and provide drought forecasts worth \$6-8 billion to farming, transportation, tourism and energy sectors. Obviously, we deem it a matter of public safety, national preparedness and economic benefit to get JPSS back on track.

And, speaking of preparedness for severe storms, the Atlantic Hurricane Season is just around the corner. And NOAA predicts it will be above-normal. This prediction is based on three key factors:

- Since 1995, the ocean and atmospheric conditions have been conducive to more active Atlantic hurricane seasons. This trend continues.
- The sea surface temperatures where storms often develop and move across the Atlantic are up to two degrees Fahrenheit warmer-than-average.
- La Niña, which continues to weaken in the equatorial Pacific Ocean, is expected to dissipate later this month or in June, but its impacts such as reduced wind shear are expected to continue into the hurricane season.

All of this crucial knowledge comes together to inform our predictions.

State-of-the-art satellites provide the data we need when hurricanes are forming and moving. Without these observations, advance warning of extreme events would be significantly diminished, as would the understanding of storm surge and flood potential – making it more difficult to conduct safe and strategic evacuations of residents.

And delaying the construction and launch of JPSS does not make financial sense. For every \$1 we do not get in 2011, it will cost \$3-5 in coming years, and these additional funds would not prevent a data gap.

The President's FY 2012 Budget request includes \$1.070 billion for JPSS. These funds are critical to ensuring that NOAA can continue to provide the timely and accurate weather data and forecasting that is so crucial to our economy and to saving lives and property.

The scientific expertise housed at NOAA not only helps us prepare for disasters, but to respond to them

as well.

Just over a year ago, the worst oil spill in our country's history occurred in the Gulf of Mexico. NOAA has five primary roles in oil spills: conduct science, keep seafood safe, protect wildlife, assess damage, and restore habitat. Our expertise and science, paired with long-standing partnerships with other federal, local, nongovernmental and academic organizations, continues to serve critical needs for the long-term recovery of the Gulf, its economy, and its people.

Just a few hours after the rig caught fire on the night of April 20, 2010, our scientific efforts began with situation reports and trajectories of oil on board the still-burning rig, coupled with oceanographic and weather data critical to the U.S. Coast Guard's search and rescue operations. Soon after, we expanded our efforts to provide risk maps and other products vital to protecting coastal resources, marine life, and human health. Using satellites in space, planes in the air, buoys and ships on the water, and gliders beneath the waves, NOAA was actively imaging, tracking, modeling and forecasting the movement of the oil to inform the response activities.

Over the months that followed, every arm of NOAA played a role in our response. And the response continues. We are currently progressing through the Natural Resources Damage Assessment, or NRDA process.

The goal of NRDA is to compensate the public for injuries to natural resources and the loss of the ecological services they provide and the public's loss of use of those resources. NRDA combines science, economics, and law. It is a restoration-focused, legal process that must be conducted strategically and jointly with both federal and state trustees.

NOAA is one of three Federal trustees for the NRDA process, helping to identify and quantify short- and long-term impacts to the Gulf of Mexico's ecosystems.

In looking to assess the impacts of this spill, we cannot look only at adult populations or only individual species in isolation. We must also focus on impacts to vulnerable juvenile stages, interactions among species, and the ecosystem services provided to the people of the Gulf. And of course, critical ecosystems are not limited to those right along the shore, but must include the open ocean and deep sea portions of the Gulf. Assessing these impacts will take time, dedication, and perseverance.

Today, you are hearing from four panels that will highlight some of what NOAA does on a daily basis and how important that work is to our economy and safety, but, in truth, we would need much more than one NOAA Day to cover it all.

I extend heartfelt thanks to the panelists, hosts, and everyone in attendance today. We greatly appreciate you taking the time out of your busy schedules to participate, to learn, and to share information.

As I have said, I am extremely proud of the work that this agency does, and it is only because of the support of Congress and the dedication of our staff and volunteers that we are able to accomplish it all.

This is team work, the way that the federal government is supposed to work!

Thank you and I hope you enjoy the presentations today.