S. HRG. 107–1122

FY 2003 BUDGET AND PROGRAMS OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

MAY 1, 2002

Printed for the use of the Committee on Commerce, Science, and Transportation

U.S. GOVERNMENT PRINTING OFFICE

93–349 PDF WASHINGTON : 2005

For sale by the Superintendent of Documents, U.S. Government Printing Office
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ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

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FY 2003 BUDGET AND PROGRAMS OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

WEDNESDAY, MAY 1, 2002

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 9:50 a.m. in room SR–253, Russell Senate Office Building, Hon. Ron Wyden presiding.

OPENING STATEMENT OF HON. RON WYDEN, U.S. SENATOR FROM OREGON

Senator WYDEN. The Committee on Commerce, Science, and Transportation will come to order. Today's hearing will address the President's fiscal year 2003 budget and programs for the National Oceanic and Atmospheric Administration.

First, Admiral Lautenbacher, welcome. We appreciate your coming this morning. NOAA, a key component of the Department of Commerce, plays an important role in the everyday lives of our citizens, with numerous contributions to the country's economic and environmental health.

It is vital that the Senate continue to fund the important programs Congress has authorized, as well as to find new ways to support the Nation's economic and environmental needs. This Committee has consistently been supportive of NOAA's mission, but certainly there are a number of concerns that the Committee has with respect to the President's fiscal year 2003 budget proposal for the agency.

As Vice Admiral Lautenbacher knows, in January 2000 the Secretary of Commerce declared the West Coast groundfish fishery a disaster. There is local support from fishers and environmentalists to get the right number of fishers out there at the right time catching the right number of fish to make this industry sustainable.

As you know, Vice Admiral Lautenbacher, during your confirmation hearing last November I introduced legislation to authorize a buy-back program which would decrease the number of fishers and boats in the West Coast groundfish industry. I can find nothing in the budget to support a significant reduction of fishing capacity in the West Coast groundfish industry, so please know that the very first question you will get is why is that the case?

Another concern is with the proliferation of lawsuits against the National Marine Fisheries Service. What does this say about NMFS fisheries management, and how do they intend to handle

these costs? In addition, how are these lawsuits affecting how NMFS is making decisions? The reason the NMFS whiting decision gives me cause for concern is that NMFS is allowing the possibility of lawsuits against it to influence its decisions. This, in my view, is not a sound management strategy.

Another concern is the dramatic proposal to terminate the national sea grant college program within NOAA. This raises concerns not just for the people of Oregon but certainly many of my colleagues with sea grant programs.

Vice Admiral Lautenbacher, you are welcome here. While it is a biological imperative that you read your statement in its entirety, please know that we are going to place the whole thing in the record, and somehow if you could be enticed into summarizing your principal remarks, that would be very helpful.

STATEMENT OF VICE ADMIRAL CONRAD C. LAUTENBACHER, JR., (RETIRED), USN, NOAA ADMINISTRATOR AND UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE, DEPARTMENT OF COMMERCE

Admiral LAUTENBACHER. Thank you very much, Mr. Chairman. It is a great pleasure to be here. I appreciate the opportunity to come before you and to talk about our program and some of the priorities that I think are very important for our Nation. I am indeed grateful for your support and the support of this Committee and all of the staff members that are here today. Without their support, obviously, NOAA would not be as prominent in solving some of these problems as they are, and so again I appreciate this opportunity, and I will submit my statement for the record if agreed to and will just summarize it.

Senator WYDEN. Without objection, that will be, with pleasure, so ordered.

Admiral LAUTENBACHER. Yes, sir. If I could take just 2 minutes to talk about some of the important priorities in our budget I would be grateful for the time. This is a tight budget this year. It is roughly the same as last year's budget. It is a $3.3 billion budget. Given the priorities, the national priorities that happened after 9/11 and the changes that took place in this country, I think this is a good budget. It indicates that there is strong support with the administration for keeping the level of services and products that NOAA provides the Nation at the right level. It is a tight budget, though, and we ask for your support in maintaining these critical programs.

The NOAA budget support programs which are essentially, I would call the heart and soul of a lot of our economic foundation. There is not an individual in here that does not check the weather report before they go out in the morning. Many of our industries are totally dependent upon the types of products that the National Oceanic and Atmospheric Administration produces in the energy area, agriculture, fishing you mentioned, tourism, construction, the list goes on.

Approximately one-third of our gross domestic product is based upon decisions that are made because of data and products that are delivered from NOAA, all the way from weather to management and development of our coastal zones to management of endan-

gered species and fisheries, as we have mentioned, and so I believe this is a very important and critical part of our budget and needs to be supported.

Within that $3.3 billion there was essentially about $300 million worth of alignments, realignments, $148 million of that, what I would call program increases, and that is what I would call a very modest small number, and I would like to ask for your support for those, which I will talk about in a minute, and $129 million in what we call base adjustments, or essentially to allow for inflation and paying our people.

Now, within that $129 million is also an accounting change where money for retirement accounts was shifted out, or was shifted from OPM into NOAA's accounts, so that $70 million of that $129 million is not new programs, it is essentially just an accounting change within the Government. The rest of that is absolutely essentially for people, and I want to support the work that the NOAA folks do.

We are a source of wealth for this country. This is a storehouse of knowledge and scientific and management expertise across a large variety of scientific endeavors for observation of and management of our environment. I ask for your support for these increases as a number 1 priority.

Of the $149 million that were other program adjustments, a large portion of those are in the extreme weather and hurricane research, severe weather. In that group we are asking for $84.3 million in increases. This will improve our severe storm warnings and protecting the life and safety of Americans. I think after the incident in La Plata that you saw the other day, the value of having warning time and being able to predict some of these events with more accuracy will be quite invaluable.

Inside of that program is the money for a Clear Skies and Global Climate change Initiative that President Bush announced on February 14, and there is roughly $40 million across the Federal budget. Eighteen million for climate change are included in the NOAA budget this year. We think these are the first steps that are needed to put some teeth into the science that will help support the policies of the future and the provisions in the Clear Skies and Climate Change Initiative that the President announced.

Of the other important increases, let me mention homeland security. There is a $23 million increase for homeland security. This is a very modest enhancement, probably the minimum that I would think prudent at this point. It includes the replacement of some single points of failure in our satellite and data systems in terms of back-up computing, in terms of gateway operations, and in terms of security for some of our downlink stations, as well as increase for surveys, for ship surveys. There is another $9.9 million to support the harbor surveys of our critical ports around the Nation.

The other large increase is in the fisheries area, $90 million of increases that I think are extremely important. Half of that roughly is the second fisheries research and survey vessel, about $45 million. This is the second of the class. We are well behind in replacement of our capital assets in our survey fleet. This is not enough, but it is a start, and I encourage everyone to support this particular recapitalization.

We have also increased stock assessments by almost $10 million, because that goes into making rulings on time and ensuring that we have the right data to manage fisheries correctly. We have increased money for observers, and that is extremely important as well.

In terms of our coastal conservation activities, that totals almost $350 million. It is central to environmental monitoring, and underscores our commitment to coastal, estuarine and marine ecosystems, coastal zone management, marine sanctuaries, estuarine research reserves and marine protected areas, as well as coral reef habitat and other conservation and restoration programs, as well as the Pacific Salmon Recovery Fund and Treaty.

This concludes my opening statement. I again thank you and the Committee for giving me this opportunity, and I look forward to answering your questions.

Thank you, sir.

[The prepared statement of Vice Admiral Lautenbacher follows:]

PREPARED STATEMENT OF VICE ADMIRAL CONRAD C. LAUTENBACHER, JR., (RETIRED), USN, NOAA ADMINISTRATOR AND UNDER SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE, DEPARTMENT OF COMMERCE

Thank you, Mr. Chairman, and Members of the Committee, for this opportunity to testify on the President's FY 2003 Budget Request for the National Oceanic and Atmospheric Administration (NOAA).

Let me begin by saying that this budget supports and enhances the goals of the President and the Department of Commerce. NOAA has established itself as one of the world's premier scientific and environmental agencies. We are an agency that deals with environmental change. We are an agency whose products form a critical part of the daily decisions made by Americans across the Nation and have economic impacts which affect our Nation's Gross Domestic Product. From our climate predictions that impact farming and financial decisions, to our hydrological products that affect public utilities and energy consumption, NOAA is a critical part of our Nation's economic security.

We are experts in climate, with its cooling and warming trends. We are an agency that manages fluctuating fisheries and marine mammal populations. We observe, forecast and warn the public about the rapidly changing atmosphere and especially severe weather. We monitor currents and tides, and beach erosion. We survey the ocean bottom and provide mariners with products to maintain safe navigation. We operate the Nation's most important constellation of earth-observing satellites. Lastly, we provide all this knowledge and exploration to citizens everywhere, especially to schools and young people across our Nation through our website *www.noaa.gov*. We provide this as a result of our mission to advance environmental assessment, environmental prediction, and natural resource stewardship for our great Nation.

This budget supports products that are essential for decision makers in every part of our economy. NOAA's budget will continue to fund products that assist in protecting the health and safety of this Nation's citizens from both routine and severe environmental changes. This budget supports our research, science and services from the local weather forecast offices around the Nation to our Fisheries Research Vessels that ensure sustainable stocks of our Nation's fisheries. It provides for technology infusion and critical infrastructure protection to reduce single points of failure for our satellite and weather prediction programs; continues our special partnerships with universities, states, and local governments around the Nation; and invests in education and human resources. This budget also supports our vast infrastructure, which will allow NOAA to continue its mission in years to come.

In a period of strongly competing Presidential priorities for our national defense, and economic security, the President's FY 2003 Budget Request for NOAA is $3,330.5 million in total budget authority, and represents a decrease of $45.4 million below the FY 2002 Enacted level. Within this funding level, NOAA proposes essential realignments that allow for a total of $148.8 million in program increases, and $129.0 million in base adjustments. NOAA's request highlights critical areas such as People and Infrastructure, Improving Extreme Weather Warnings and Forecasts,

Climate Services, Modernization of NOAA Fisheries, and other key NOAA programs such as Energy, Homeland Security, Ocean Exploration, and Coastal Conservation.

People and Infrastructure: $129.0 million adjustment-to-base

NOAA's people and infrastructure are at the heart of what NOAA is and does. From our hurricane research center in Miami, FL to NOAA's weather service office in Barrow, AK, these are the underlying and interconnecting threads that hold NOAA and its programs together. Investments in NOAA's scientific and technical workforce as well as NOAA's facilities and equipment is essential for us to carry out our mission into the 21st Century. "People and Infrastructure" is about investing in the future, and about maintaining NOAA's infrastructure that has been built over the last thirty-one years.

Improving Extreme Weather Warnings and Forecasts

Critical to meeting our 21st Century mission is the continuity of NOAA's Satellites and Severe Weather Forecasts. There are few things that the Federal Government does that are as critical as issuing severe storm warnings and protecting the life and safety of Americans. Listed below is NOAA's request for this $84.3 million endeavor.

Tornado Severe Storm Research: NOAA requests a total of $1.0 million to develop new technologies for forecasting and detecting tornadoes and other forms of severe weather, and to disseminate this information to emergency managers, the media, and the general public for appropriate action. This new technology has the potential to significantly extend lead times for tornadoes and other forms of severe and hazardous weather. Coupled with advanced decision support systems, tornado lead times may double from 10 to 22 minutes using this technology. The bottom line is that this investment will help save lives.

U.S. Weather Research Program (USWRP): NOAA requests an increase of $1.0 million for a total of $3.8 million to transition research and development into operations in order to reach a USWRP goal of improving forecasts of inland heavy precipitation associated with hurricane landfalls. This increase will be used to address the improvement of the forecasts of heavy and frequent, flood-producing rains associated with hurricanes and tropical storms as they move inland.

Weather & Air Quality Research Laboratories: NOAA requests an increase of $4.2 million for a total of $48.1 million to recapitalize the laboratories that conduct weather and air quality research, which includes funding for ongoing operational scientific activities to continue operation of the Wind Profiler Network and NOAA's Space Weather Program.

Advanced Hydrological Prediction Service (AHPS): NOAA requests an increase of $4.7 million for a total of $6.2 million to accelerate nationwide implementation of improved flood and river forecasts services in the Northeast, Middle Atlantic, and Southeast regions of the U.S., including the states of: New Hampshire, Vermont, Virginia, North Carolina, and South Carolina. As implemented, AHPS will: (1) produce new information with better predictions of river height and flood potential to reduce loss of life and property; (2) deliver high resolution, visually oriented products to provide partners and customers with valuable information for life decisions; (3) refresh aging hydrologic forecasting infrastructure to support rapid infusion of scientific advances; and (4) leverage NOAA's investments in observational systems and atmospheric models to enhance accuracy and resolution of river forecasts.

Weather & Climate Supercomputing: NOAA requests an increase of $6.2 million for a total of $21.2 million to continue operations and maintenance of the current National Weather Service (NWS) supercomputer, and to transition the next generation weather and climate supercomputing system into operations. The NWS supercomputer is the foundation for all NWS weather and climate forecasts. Operational transition of the next generation supercomputer will enable the NWS to improve the resolution and forecast accuracy of the prediction models.

Radiosonde Replacement: NOAA requests an increase of $2.0 million for a total of $7.0 million to continue replacing and modernizing the upper air radiosonde network. The radiosonde network provides critical upper air observations which are a vital component of all weather forecast models. The current network is obsolete and nearing collapse, risking widespread loss of data within the next two to three years.

Aviation Weather: NOAA requests a total of $2.5 million to initiate a 7-year plan to help improve U.S. aviation safety and economic efficiencies by providing state-of-the-art weather observation and forecast products responsive to aviation user needs. Weather accounts for over 70 percent of all air traffic delays, which results in greater expenditures by both airline customers and the airlines. In addition,

an average of 200 general aviation pilot fatalities per year are caused by weather-related accidents across the U.S. This initiative will provide a means for the NWS to improve its aviation weather forecast services through 3 major components which include: (1) increasing the number and quality of aviation weather observations; (2) transitioning successful applied research efforts to operational products; and (3) developing and implementing new training programs for forecasters, pilots, and controllers. This initiative has the goal of a 10 percent reduction in National Airspace System weather-related air traffic delays, which would save $600 million annually in potential economic losses, and reduce general aviation weather related fatalities by 25 percent, or 50 lives annually.

Huntsville, AL Weather Forecast Office: NOAA requests a total of $1.4 million to pay for recurring operations and maintenance costs at the new Huntsville, Alabama Weather Forecast Office (WFO). The Huntsville WFO was established in FY 2002 at the University of Alabama at Huntsville. The $1.4 million requested will provide for NWS employee salaries, facilities rent and maintenance, and operational equipment and supplies to operate and maintain weather forecast and warning services in the Huntsville area.

Polar Orbiting Systems: NOAA requests a net increase of $64.3 million for Polar Orbiting Systems, which are comprised of NOAA Polar K–N and the National Polar Operational Earth Satellite System. The net increase requested is described as follows:

NOAA Polar K–N: NOAA requests a decrease of $15.6 million for a total of $122.9 million for the NOAA Polar K–N. The Polar K–N program is completing major procurement items and therefore does not need to continue the funding levels of previous years.

National Polar-orbiting Operational Environmental Satellite System (NPOESS): NOAA requests an increase of $79.9 million for a total request of $237.3 million for the continuation of the tri-agency NPOESS program that will replace the NOAA POES program after completion of the current NOAA K–N series of satellites. This request represents NOAA's share of the converged NOAA/DoD/NASA program. In FY 2003, funds will be required to continue the development and production of the NPOESS instruments, including the Visible Infrared Image Radiometer, the Conical Microwave Imager Sounder, the Cross-track Infrared Sounder, the Ozone, Mapping and Profiler Suite, the Global Positioning System Occultation Sensor, and the Space Environmental Sensing Suite. The continued development of these instruments is critical for their timely and cost effective delivery to replace both the Defense Meteorological Satellite Program (DMSP) and the NOAA POES spacecraft when needed.

Geostationary Operational Environmental Satellite (GOES): NOAA requests a decrease of $35.1 million for a total request of $227.4 million to support continued post launch requirements for GOES I–M; the continued procurement of the GOES–N series satellites, instruments, ground systems, and systems support necessary to maintain continuity of Geostationary operations; and planning and development for the GOES–R series of satellites and instruments. This decrease represents a program change resulting from the successful launch of GOES M, and the continued success of the GOES I–M series.

Earth Observing System Data Archive & Access System Enhancement: NOAA requests a total of $3.0 million to ensure that NOAA can fully utilize the vast amounts of new satellite-based environmental data becoming available, process and distribute that data in a variety of formats, provide stewardship for the data, and make the data accessible to users in a variety of economic, research, government, and public sectors.

Joint Center for Data Assimilation: NOAA requests an increase of $2.6 million for a total of $3.4 million for the Joint Center for Satellite Data Assimilation. NWS, the Office of Atmospheric Research (OAR), and NASA also provide funding as partners in this coordinated national effort to more fully realize the potential of the vast quantities of new satellite data that are becoming available.

Coastal Ocean Remote Sensing: NOAA requests a total of $6.0 million to develop and deploy a prototype high-resolution imaging sensor to meet long-standing NOAA requirements. This initiative will allow NOAA to work with NASA to develop conceptual design and capabilities of this instrument, which will continuously monitor coastal ocean areas for harmful algae blooms, coral reef deterioration, pollution changes, fisheries management, and navigation. This instrument will provide continuous, high resolution monitoring in unprecedented detail of terrestrial features such as vegetation changes, flooding, wild fires, volcanic eruptions, and ash cloud transport.

Satellite Command & Data Acquisition (CDA) Facility: NOAA requests an increase of $1.0 million for a total of $4.6 million to continue the Satellite CDA In-

frastructure program. Improved facilities reduce the risk of outages and service disruptions caused by failure of the supporting buildings, facilities, and infrastructure. This program minimizes the risk of spacecraft loss and data loss and allows NOAA to continue supporting worldwide requirements for critical operational satellite data and services.

Satellite Command and Control: NOAA requests an increase of $4.4 million for a total of $34.8 million for satellite command and control. This investment supports the operations of the NOAA satellite systems, the ingesting and processing of satellite data, and the development of new product applications required for continuity of operations. NOAA provides satellite command and control services on a 24 hours per day, 365 days per year schedule.

Two critical components of this initiative are:

Protecting Critical Satellite Control Facilities: NOAA requests $0.3 million to enhance security at the satellite Command and Data Acquisition ground stations by upgrading and expanding security lighting.

Satellite Command and Data Acquisition Station Operations: NOAA requests $2.2 million for the operation of the polar Satellite Command and Data Acquisition (CDA) ground station. NOAA will use these funds to obtain the appropriate technical, management, and administrative contractor support to operate and maintain the acquisition and throughput of data from NOAA and DoD polar-orbiting satellites to NOAA's Satellite Operations Control Center, and to National Weather Centers.

Product Processing and Distribution: NOAA requests an increase of $6.7 million for a total of $27.7 million to process and analyze data from NOAA, DoD, and other Earth-observing satellites; supply data, interpretations, and consulting services to users; and operate and maintain the Search and Rescue mission control center. This includes supplying satellite data that makes up approximately 85 percent of the data used in NWS numerical weather prediction models. NOAA will use the requested program increase to support the following two mission critical functions:

Reducing the Risk to Continuity of Critical Operations: NOAA requests a program increase of $3.1 million to expand on-site maintenance and staffing levels to ensure that all critical functions are performed. This ensures vital and timely information to customers and staff during times of peak workload.

Improved Support for Weather and Hazards: NOAA requests a program increase of $2.0 million to automate wild fire detection algorithms to speed up the delivery of information to customers, to integrate the information into geographic information systems for detailed location information, and to integrate new fire detection sensors from non-NOAA satellites.

G–IV Instrumentation: NOAA requests a total of $8.4 million to begin upgrading instrumentation aboard the G–IV aircraft. Improvements in NOAA's Gulfstream IV aircraft's remote-sensing systems will enhance NOAA's hurricane-reconnaissance capability. New technology will use remote sensors to develop 3-dimensional profiles of hurricanes from 45,000 feet down to the surface and would provide forecasters with unprecedented real-time information on size and intensity. In addition, radar-composite maps will provide critical rainfall information that is crucial to forecasters and to the emergency management community for preparedness and evacuations.

Climate Services

NOAA maintains a balanced program of focused research, large-scale observational programs, modeling on seasonal-centennial time scales, and data management. In addition to its responsibilities in weather prediction, NOAA has pioneered in the research and operational prediction of climate variability associated with the El Niño Southern Oscillation (ENSO). With agency and international partners, NOAA has also been a leader in the assessments of climate change, stratospheric ozone depletion, and the global carbon cycle. Our confidence in our recent El Niño prediction is based upon a suite of robust observing systems that are a critical component in any forecast.

The agency-wide Climate Services activity represents a partnership that allows NOAA to facilitate the transition of research observing and data systems, and knowledge into operational systems and products. During recent years, there has been a growing demand from emergency managers, the private sector, the research community, and decision-makers in the United States and international governmental agencies for timely data and information about climate variability, climate change, and trends in extreme weather events. The economic and social need for continuous, reliable climate data and longer-range climate forecasts has been clearly demonstrated. NOAA's Climate Services Initiative responds to these needs. The following efforts will be supported by this initiative:

Climate Change Research Initiative: On February 14, 2002, President Bush announced the Clear Skies and Global Climate Change initiatives. The Clear Skies plan aims to cut power plant emissions of three pollutants (nitrogen oxides, sulfur dioxide, and mercury) by 70 percent. The new Global Climate Change initiative seeks to reduce greenhouse gas intensity by 18 percent over the next decade. The President's proposal supports vital climate change research and ensures that America's workers and citizens of the developing world are not unfairly penalized. NOAA's expertise will be extremely important in the area of climate research. NOAA, along with NASA, Department of Energy, National Science Foundation, and the Department of Agriculture will implement a multi-agency Climate Change Research Initiative totaling $40 million. The following sections detail NOAA's $18.0 million request to address key priorities of the CCRI.

Climate Modeling Center: NOAA requests $5.0 million to establish a climate modeling center at Princeton, New Jersey. This center will focus on model product generation for research, assessment and policy applications. NOAA has played a central role in climate research, pioneering stratospheric modeling, seasonal forecasting, ocean modeling and data assimilation, and hurricane modeling. This core research capability will be enhanced to enable product generation and policy related research.

Global Climate Atmospheric Observing System: NOAA requests $4.0 million to work with other countries to reestablish the benchmark upper-air network. NOAA will emphasize data sparse areas, and place new Global Atmosphere Watch stations in priority sites to measure pollutant emissions, aerosols, and ozone, in specific regions.

Global Ocean Observing System: NOAA requests $4.0 million to work towards the establishment of an ocean observing system that can accurately document climate scale changes in ocean heat, carbon, and sea level changes.

Aerosols-Climate Interactions: NOAA requests $2.0 million to contribute to the interagency National Aerosol-Climate Interactions Program (joint partnership with NASA, DOE, NSF) currently under development. Specifically, NOAA will establish new and augment existing in-situ monitoring sites and conduct focused field campaigns to establish aerosol chemical and radiative properties.

Carbon Monitoring: NOAA requests $2.0 million to augment carbon monitoring capabilities in North America as well as observations of globally relevant parameters in key under-sampled oceanic and continental regions around the globe.

Regional Integrated Science Assessments Program: NOAA requests $1.0 million for the Regional Integrated Science Assessments Program (RISA). Working with the National Science Foundation (NSF), NOAA will augment its research capability in assessing climate change impacts vulnerability by utilizing the research on "Decision Making in the Face of Uncertainties" in the framework of the RISA programs, *e.g.* Pacific Northwest.

Arctic Research: NOAA requests a total of $2.0 million in support of the Study of Environmental Arctic Change (SEARCH) to improve monitoring of the elements of the Arctic environment. NOAA's SEARCH activities are part of a coordinated interagency and international program, begun in response to evidence of an alarming rate of environmental change occurring in the Arctic. The SEARCH initiative will substantially increase understanding of long-term trends in temperature, precipitation and storminess across the U.S., with potential improvements in forecasting and planning for energy needs, growth seasons, hazardous storm seasons and water resources.

University-National Oceanographic Laboratory System (UNOLS): NOAA requests a total of $2.5 million to outsource with UNOLS and other sources for ships in the Pacific to support long-time series research for Fisheries-Oceanographic Coordination Investigations (FOCI), VENTS, Oregon/Washington Groundfish Habitat and maintenance of the Tsunami moorings in the Gulf of Alaska and Pacific Ocean. The increase will enable NOAA to continue to meet research requirements in the Pacific Ocean, Gulf of Alaska, and Bering Sea utilizing time aboard UNOLS and other vessels.

Climate Monitoring and Ocean Observations: NOAA requests an increase of $5.4 million for a total of $54.6 million to recapitalize the laboratories that conduct climate research, which includes $0.6 million for purchasing equipment and improving the scientific activities that contribute to the long-term observing systems that directly support the President's CCRI initiative. These observing systems are the Global Ocean Observing System (GOOS); the Global Air Sampling Network and a gas network at four baseline observatories, and at Niwot Ridge, CO; and the Tropical Atmosphere Ocean (TAO) array which is the cornerstone of the El Niño/Southern Oscillation (ENSO) Observing System and other ocean observing systems.

NOAA requests an increase of $8.3 million for a total of $36.6 million for the Archive, Access, and Assessment programs working in Climate Services. This continued investment will be used for the following activities:

Regional Climate Services & Assessments: To develop an improved climate data and information delivery service. This will allow NOAA to improve national, regional and state linkages and make national, regional, state, and local weather and climate observing systems and data bases more accessible.

Next Generation Environmental Information: To develop a new generation of World Wide Web accessible climate information and statistics for primary use by the energy sector of our economy. This funding will allow NOAA to overhaul the current methods and procedures for computing climate information such as heating and cooling degree days, heat indices, wind chills, freezing degree days, and other related statistics with the goal of making this information more appropriate and timely for business decision-making and strategic planning purposes.

World Ocean Database: This investment will be used to update the World Ocean Database to include new sources of data and to put in place the analytical and data management infrastructure needed to transition this activity from the current research mode to a sustained, operational service mode.

Extending America's Climate Record: NOAA will use the funds to gather key paleoclimatic records to fill gaps; reconstruct climate records during pre-instrumental periods; and produce blended data sets that integrate instrumental, historical, and paleoclimatic data into a holistic climate record.

Solar X-ray Imager Archive: NOAA will use the SXI archive to derive new products to help reduce the effects of extreme space weather events on telecommunications satellites, electrical power services, and health risks to astronauts.

Modernization of NOAA Fisheries

The FY 2003 President's Budget Request for NOAA, invests in core programs needed for our National Marine Fisheries Service (NMFS) to meet its mission to manage fisheries, rebuild stocks, and protect endangered species such as sea turtles and whales. NMFS modernization funds will be allocated to ensure that existing statutory and regulatory requirements are met for fisheries and protected species management programs (including the Magnuson-Stevens Act, National Environmental Protection Act, Endangered Species Act, Marine Mammal Protection Act, and other statutory requirements). This budget request continues NOAA's effort to modernize NOAA's Fisheries. The Modernization of NMFS encompasses a long-term commitment to improve the NMFS structure, processes, and business approaches. In addition to this budget request, the Administration will propose that any reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act include authority for fishing quota systems within regional fisheries, including transferable quotas, where appropriate. This initiative focuses on improving NMFS' science, management, and enforcement programs and begins to rebuild its aging infrastructure. These improvements will result in measurable progress in the biological and economic sustainability of fisheries and protected resources. To continue this modernization program, NOAA's FY 2003 President's Budget Request includes the following program investments in Science, Management, and Enforcement.

Science: $74.8 Million Increase

Fisheries Research Vessel: NOAA requests an increase of $45.5 million for a total of $50.9 million for NOAA's second Fisheries Research Vessel (FRV2). This vessel will replace the 39-year old ALBATROSS IV in the North Atlantic. Costs of maintaining the aging ALBATROSS IV for the five years needed to construct the replacement FRV and to allow side-by-side missions for calibration purposes are escalating. Moreover, replacing the aging fleet is required to provide research platforms capable of meeting increasingly sophisticated data requirements for marine resource management.

Modernize Annual Stock Assessments: NOAA requests an increase of $9.9 million to modernize annual stock assessments. Funding will allow NMFS to conform to new national stock assessment standards of data quality, assessment frequency, and advanced modeling. An increase of $5.1 million is requested to provide for the recruitment and training of stock assessment biologists and supporting staff to produce annual stock assessments that meet the new standard for Federally managed stocks. This request would also add an increment of 260 Fisheries vessel/charter days at sea toward the balance of 3,000 days identified in the NOAA Fisheries Data Acquisition Plan at a cost of $2.4 million. The initiative includes $0.9 million for advanced sampling technologies. This element targets improvements and innovative uses of existing technologies, including the application of new and advanced sampling systems and approaches. Also, included in this request is $1.5 million to

enhance fisheries oceanography studies, principally, the Fisheries and the Environment program (FATE).

Endangered Species Act Sea Turtle Research: NOAA requests an increase of $2.0 million for a total of $6.5 million to continue the recovery of highly endangered sea turtles. Of the $2.0 million increase, $1.4 million is to provide the necessary research to recover highly endangered marine turtles. This program is designed to help us collect information on biology and habitats and share that information with other range countries. The remaining $0.6 million is requested to implement management strategies to reverse population declines, implementation of multi-lateral international agreements, and building capacity through domestic and international educational and outreach programs.

Columbia River Biological Opinion (BiOp) Implementation: NOAA requests an increase of $12.0 million to provide for the research, monitoring, and evaluation (RM&E) necessary to continue implementation of measures included in the Columbia River Biological Opinion. The RM&E program will provide the scientific information necessary to assess whether BiOp performance measures are being achieved at 2003, 2005, and 2008 check-ins. This funding also provides for the research needed to address key uncertainties identified in the BiOp in the areas of estuary and near-shore ocean survival, delayed effects related to dam passage, and the effects of hatchery programs on the productivity of naturally spawning fish.

Recovery of Endangered Large Whales: NOAA requests an increase of $1.0 million to provide resources to scientifically determine whether two key endangered whales—humpbacks and bowheads—have recovered and are candidates for delisting. This information will enable NOAA to detect changes in the status of large whales and prevent any long-term irreversible damage to these populations.

Socioeconomics: NOAA requests an increase of $1.5 million for a total of $4.0 million to support the on-going development of a multi-year comprehensive social sciences program to support NMFS policy decisions. The approach is 3-tiered, augmenting the integral components of a successful social sciences program that includes staffing ($0.6 million and 7 FTE); data collection ($0.5 million); and research activities ($0.4 million). In combination, the funding will be used to continue addressing shortcomings in economic and social assessments of policy alternatives by improving the economic and social science staff capability, and initiation of data and applied research programs.

National Observer Program: NOAA requests an increase of $2.9 million for a total of $17.0 million for the National Observer Program. Funding will be used to expand the collection of high quality fisheries and environmental data from commercial and recreational fishing vessels to assess impacts on marine resources and fishing communities and to monitor compliance with marine resource laws and regulations. This request will primarily provide for approximately 4,000 observer sea days spread over 11 fisheries, most of which are currently unobserved.

Management: $6.4 Million Increase

NMFS National Environmental Policy Act (NEPA) Implementation: NOAA requests an increase of $3.0 million for a total of $8.0 million to continue striving to enhance its management of the NEPA process. This funding will provide NMFS with the necessary resources to continue to support agency-wide NEPA activities and will allow NMFS to strengthen its decision-making and documentation process to more fully take advantage of the decision making tools provided by NEPA.

Regional Fishery Management Councils: NOAA requests an increase of $1.9 million for a total of $16.0 million for the Regional Fishery Management Councils. This request will provide needed resources for the Councils to respond to increased workload in developing, implementing, and supporting management measures to eliminate overfishing and rebuild overfished stocks; identify and protect essential fish habitats; reduce fisheries' bycatch to the maximum extent practicable; minimize the impacts of fishing regulations on fishing communities; and to implement programs that result from the next reauthorization of the Sustainable Fisheries Act. These results will be achieved through the development of amendments to and creation of new Fishery Management Plans and regulations and corresponding and supporting international management measures to control fishing activities.

Statutory and Regulatory Requirements: NOAA requests an increase of $1.5 million to provide for thorough, complete, and timely environmental and economic analyses to NOAA customers and for its recovery programs. Funds will support personnel in all NMFS regions, science centers and headquarters to conduct required data gathering, analysis, and document preparation to assess the impacts of human activities that affect protected species. These include the range of Federal actions, including management of marine fisheries. This funding will also support assess-

ments of the environmental and socioeconomic impacts, costs and benefits of implementing conservation programs for protected species.

Enforcement: $9.7 Million Increase

Enforcement and Surveillance: NOAA requests an increase of $4.3 million for a total of $39.3 million to expand and modernize NMFS' fisheries and protected species enforcement programs. These programs include Alaska and west coast groundfish enforcement, protected species enforcement, state and local partnerships, specialized Magnuson-Stevens investigatory functions, community oriented policing and problem solving, and swordfish/Patagonian toothfish import investigations.

Vessel Management System (VMS): NOAA requests an increase of $5.4 million for a total of $7.4 million for additional support and continued modernization and expansion of the vessel management system (VMS) program. These resources will create a program which will monitor approximately 1,500 vessels and is readily expandable. VMS technology is an invaluable tool for modern fisheries management. It provides outstanding compliance without intrusive at-sea boardings, enhances safety at sea, and provides new tools to managers for real time catch reporting.

Other KEY NOAA Programs

NOAA is constantly pursuing areas where the expertise of our researchers, scientists, and staff can contribute to solving problems. Therefore, NOAA has other key programs that respond to these challenges. They are Energy, Homeland Security, Ocean Exploration, and Coastal Conservation.

Energy

Energy Initiative: NOAA requests a total of $6.1 million to implement a pilot program that will provide more accurate temperature and precipitation forecasts, and additional river forecast products to help the energy industry improve electrical load forecasting and hydropower facility management. Based on industry estimates, this investment will result in savings of $10 to $30 million annually in the pilot region after the second year of the demonstration. Expanding the pilot nation-wide could generate savings of over $1 billion per year.

Energy Permit Rapid Response: NOAA requests a total of $2.0 million to support the establishment and implementation of a streamlined energy permit review process. This proposal responds to an Executive Order directing Federal agencies to expedite permits and coordinate Federal, state, and local actions needed for energy-related project approvals on a national basis and in an environmentally sound manner. The goal of this request is to reduce, by 25 percent, the time required to adjust the permits of licensed energy projects/facilities. Currently, re-licensing of existing facilities takes 6–10 years. It is anticipated that the combination of regular re-licensing and permit adjustments to implement the new National Energy Policy will result in thousands of new actions for NOAA nationally.

Energy Management: NOAA requests a total of $0.6 million for Energy Management. The requested funds will be used to reduce NOAA's facility operating costs through actively pursuing energy commodities at competitive prices, identifying and implementing energy savings opportunities and applying renewable energy technologies and sustainable designs at NOAA-managed facilities. Many of the equipment retrofits that are a part of energy management have enabled facilities to recover their costs in less than five years.

Homeland Security

On September 11, 2001, the Nation experienced an unprecedented attack on the World Trade Center and the Pentagon. NOAA immediately implemented its agency-wide Incident Response Plan, and was able to rapidly deploy critical assets, capabilities, and expertise to support response and recovery efforts. NOAA personnel in weather offices, satellite and remote sensing teams, hazardous materials units, marine transportation and geodesy offices, and fisheries enforcement teams provided a wide range of products and services.

NOAA's response to the September 11 attacks was rapid and focused. However, the attack fundamentally altered the context of NOAA's incident response planning. The threats resulting from attacks on the nation may be different in nature, and larger in scale and scope. Thus, NOAA's Homeland Security efforts are focused on enhancing its response capabilities and improving internal safety and preparedness. NOAA is working quickly to improve its ability to coordinate emergency response, to evaluate its existing capabilities, and to identify products and services that will meet the challenge of new response realities. NOAA's Homeland Security activities are dedicated to advancing the coordinated efforts within the Department of Commerce, the Office of Homeland Security and assisting NOAA's many federal, state, and local partners.

In FY 2003, funding is requested to address the most immediately recognized areas of programmatic vulnerabilities to ensure the continuity of the most critical of NOAA's services and information products in the event of natural or man-made emergencies.

Vessel Lease/Time Charter: NOAA requests an increase of $9.9 million for a Vessel Lease/Time Charter. In FY 2003, NOAA will continue assisting DOD in mapping and charting key port areas. NOAA will initiate a vessel time charter to expand its hydrographic surveying capacity. While having the capability to operate throughout America's Exclusive Economic Zone (EEZ), initial emphasis during FY 2003 will be in the Gulf of Mexico. Ninety five percent of America's non-NAFTA economic trade moves through the marine transportation system. Any interruption in the flow of goods through our nation's marine transport system yields immediate and dire impact to the national economy. Four of the top seven port areas are found on the Gulf of Mexico, including: (1) New Orleans and South Louisiana, (2) Houston/Galveston, (3) Port Arthur, TX and Lake Charles, LA; and (4) Corpus Christi, TX. The combination of high traffic, hazardous cargos and vessels operating close to the ocean bottom make waterways and ports particularly vulnerable to terrorist activities including those utilizing low technology mines. Requested funding provides critical survey data to directly enhance safety of mariners, passengers, and the national economy from threats both natural or human in origin.

NESDIS Single Point of Failure: NOAA requests a total increase of $2.8 million to provide backup capability for all critical satellite products and services. This effort supports the continuity of critical operational satellite products and services during a catastrophic outage. In FY 2003, NOAA will begin the first phase of hardware, software, and telecommunications purchases; and perform initial testing of all capabilities for this backup system. The requested funding also supports installing additional communications links to connect the backup location to the NOAA Science Center in Camp Springs, Maryland.

Satellite Facilities Security: NOAA requests a total of $2.3 million, an increase of $0.3 million, to maintain enhanced security at the satellite Command and Data Acquisition ground stations. NOAA requires these funds to enhance the systems that protect these stations, reducing the risk to satellites and ground systems due to breaches in security. These satellite stations represent the backbone of the ground systems that support NOAA spacecraft programs—commanding, controlling, and acquiring data from on orbit satellites with an estimated value of $4.5 billion.

NWS Gateway Critical Infrastructure Protection: NOAA requests a total of $3.0 million for the National Weather Service Telecommunications Gateway Backup (NWSTG). During FY 2003, this funding will enable the NWS to complete the establishment of the NWSTG facility. After scheduled deployment in early FY 2004, the continued funding level of $3.0M will cover recurring costs for NWSTG backup communications, system software licenses, systems operations and maintenance support, facility rent, and cyclical technology refreshment. This will ensure uninterrupted delivery of critical meteorological data necessary for the protection of life and property, and the economic well being of the Nation.

Weather & Climate Supercomputing Backup: NOAA requests a total of $7.2 million to implement an operational backup system for the NWS weather and climate supercomputer. The NWS weather and climate supercomputer is a critical component of NOAA's mission and is currently a single point of failure as the entire system is located in a single facility. Many of the data, products and services provided by and through the Central Computer System (CCS) directly contribute to the issuance of life saving NWS watches and warnings to the public. The NWS weather and climate supercomputing backup system is a critical part of DOC's Homeland Security Initiative and NOAA's comprehensive business continuity plan, designed to support uninterrupted data and product delivery to NOAA customers. The National Center for Environmental Prediction's (NCEP) CCS is currently the only computer system within NOAA capable of running highly complicated forecasting models in the required operational (regimented) mode. During FY 2003 the NWS will acquire the necessary backup system hardware capability, conduct site selection, and begin installation.

Commercial Remote Sensing Licensing: NOAA requests a total of $1.2 million for the Commercial Remote Sensing Licensing and Enforcement Program to ensure the timely review and processing of satellite license applications. This NOAA investment will support staff engaged in the review of commercial remote sensing licensing applications. NOAA will also support monitoring and compliance activities, which include the review of licensee quarterly reports, on-site inspections, audits, and license violation enforcement. The funds requested in FY 2003 will also support implementation of shutter control over commercial systems to ensure that our Na-

tion can respond to commercial remote sensing security issues in national security and foreign policy crisis situations.

Ocean and Coastal Programs

NOAA requests a total of $14.2 million for Ocean Exploration, this includes a small amount for adjustments-to-base. This program seeks to increase our national understanding of ocean systems and processes through partnerships in nine major voyages of discovery in FY 2003. Ocean Exploration is investment in undersea exploration, research, and technology in both the deep ocean and areas of special concern, such as the U.S. Exclusive Economic Zone (EEZ), and National Marine Sanctuaries (NMS).

NOAA's coastal conservation activities total $348.5 million, and are central to accomplishing the mission of environmental monitoring, and underscore a commitment to coastal, estuarine, and marine ecosystems. NOAA's activities include Coastal Zone Management; Marine Sanctuaries, Estuarine Research Reserves, and Marine Protected Areas; Coral Reefs, Habitat, and Other Coastal Conservation & Restoration Programs; and Pacific Salmon recovery Fund and Treaty. Many of these programs receive adjustments-to-base, and there is an increase for Cooperative Conservation and Recovery with States. NOAA requests a total of $1.0 million for Cooperative Conservation and Recovery with States to provide funds to state partners under the Endangered Species Act Section 6 cooperative conservation program. These agreements will provide the means for states and local communities to undertake local initiatives in the management and recovery of ESA-listed and candidate species by providing the legal authority to make the decisions about how best to protect species at risk of extinction. The agreements would provide funding on a matching basis to accomplish conservation activities. Funding provided to the states would support local researchers, non-governmental organizations and volunteers to accomplish monitoring, restoration, science and conservation activities.

Financial Management in NOAA

NOAA will continue to improve its core financial management responsibilities in order to meet the future needs of NOAA and its stakeholders. NOAA has placed a high priority on the proper execution and accounting of its resources. Key budgetary and financial management improvements are centered around three key areas: (1) Improved Funds Control and Execution through Automation; (2) Improved Budget Structure; and (3) Improved Outreach and Communications.

Improved Funds Control and Execution through Automation

Included in the FY 2003 request is $16.1 million for NOAA's share of the Commerce Administrative Management System (CAMS). CAMS will contribute to improved financial management in a number of significant ways, primarily by accounting for NOAA's expenditures and maintaining NOAA's clean audit opinion. While NOAA has made significant efforts to retain its clean audit opinion for a third consecutive year, it has done so with inefficient manual, error-prone business processes that are labor-intensive. Without significant amounts of overtime and creative manual resource tracking, NOAA's accounting details would be non-existent. CAMS will provide financial managers with on-line, real-time, and accurate financial information and will enable NOAA and DOC to meet statutory obligations under the Federal Managers' Financial Integrity Act (FMFIA) and the Chief Financial Officers Act (CFO Act).

Improved Budget Structure

In the FY 2003 budget, legislation is requested to establish a Business Management Fund (BMF) for corporate centralized services in NOAA. For decades, NOAA has managed its centralized services through a funding mechanism supported in its current financial management system, FIMA, known as indirect costs. The process by which funds were collected and distributed to support centralized services was convoluted at best, and fraught with inconsistencies. Three years ago, NOAA began a comprehensive effort to review its corporate funding methodologies and work toward moving its headquarters management fund into a business-like environment. A number of improvements have been realized already, including stability in corporate charges for three years in a row, returning unspent corporate costs, and reporting to customers the status of funds mid-year and at year-end. However, to complete this effort of truly realizing a business fund operation, NOAA requires legislation. No current legislation exists for NOAA to operate this fund, particularly after FIMA is replaced by CAMS. Once legislation is secured, NOAA will begin to develop budgetary documentation with the same rigor and reporting as required with appropriated funds. Already underway, in support of this effort is NOAA's initiative to implement Activity Based Costing (ABC) across all of the Office of Finance and Ad-

ministration's key business lines. ABC studies are being completed to compute costs for services such as human resources, grants, and eventually all other support services. The end result of these studies will be the ability to charge customers a fee for services, based on actual and estimated usage, and by the specific services required. This will replace the flat rate, off-the-top methodology employed today and will allow charges to be tailored to line offices' specific requirements. NOAA is committed to bringing its corporate services up to 21st century standards, and the flexibility of a business management fund is a cornerstone of our plan.

Over the past several years, NOAA has been working to respond to Congressional concerns regarding its budget structure. NOAA, in conjunction with both Congressional and Administration assistance, recently restructured the budget during the FY 2002 Appropriations process. However, this effort is just a beginning, and NOAA will continue to work with Congress to ensure that our budget is adapted to Congressional reporting needs and concerns. For example, in the FY 2003 budget, NOAA has added additional specialty tables that will allow Congress to track budgetary initiatives that cross multiple programs and/or NOAA Line Offices, and NOAA has enhanced its base narratives to be more descriptive. Also, in support of flexible budgetary reporting, NOAA is developing a budget database that moves its tracking tables from the current lotus driven environment to a database environment. This will allow for more accurate tracking, quicker response to inquires, and allow for greater flexibility in preparing budgetary charts in response to Congressional and Administrative inquires. In conjunction with OMB, NOAA has developed a simplified tracking table that clearly indicates NOAA's primary mission areas.

Finally, NOAA began an effort to conduct a position and FTE management review. This effort began in FY 2002 and was adopted during the FY 2002 appropriations process. The FY 2002 efforts focused developing an accurate baseline of FTEs based on actual usage. The baseline was completed and has been implemented. In FY 2003, NOAA's efforts will focus on ensuring that the positions associated with this new baseline are aligned properly with program requirements.

Sea Grant

I would also like to explain the Administration's proposal to transfer funding for the Sea Grant College Program to the National Science Foundation (NSF). The Sea Grant program plays an important role in marine and coastal research and is a cost-effective way to address new problems in marine research management. Under the Administration's proposal, the current Sea Grant structure would be replaced with a university-based coastal and ocean program modeled after the NSF centers, with input from researchers, educators and practitioners, through workshops. NSF will retain the Sea Grant College designation for qualified centers. The program will be open to all public and private institutions of higher education through a fully competitive process. NSF also has a lower matching requirement, so state and local funds will be freed up to address outreach and extension needs of local communities. NOAA will have a strong role in setting research objectives for the program. To ensure the program transfer does not adversely affect current awardees, NSF will transfer funds to NOAA to support the current award commitments through the duration of their grant period.

Several studies of the Sea Grant Program have noted its effectiveness, as well as its problems. In 1994, the National Research Council (NRC) found that NOAA's Sea Grant Program has played a significant role in U.S. marine science, education, and outreach. The review's recommendations included better defining the roles of the National Sea Grant Office, the Sea Grant College programs, and the Sea Grant Review Panel, and streamlining the proposal review and program evaluation processes. Many of the recommendations of the NRC report have been adopted by the program and were also incorporated in the 1998 Amendments to the National Sea Grant College Program Act. In a November 2000 study, entitled "A Mandate to Engage Coastal Users," a committee led by Dr. John Byrne of Oregon State University and the Kellogg Commission indicated Sea Grant has been effective in facilitating the Nation's sustainable development of coastal resources by helping citizens make better informed and wiser decisions. Twenty-two of the 30 state Sea Grant Programs have undergone performance evaluations by teams of outside reviewers and Sea Grant peers. Sixteen were graded "excellent" in achieving significant results. A program was graded "excellent" if it produced significant results, connected Sea Grant with users, and was not found to need improvement in areas such as long-range planning and management. Sea Grant's 1999 Hammer Award-winning program in seafood safety training and the national marina management effort are examples of other successful national programs.

Through the years, a number of successful partnerships have been established between NOAA and the National Science Foundation (NSF), such as the Teacher-at-

Sea Program, our partnerships with NSF on the U.S. Global Change Research Program and the U.S. Weather Research Program, as well as the Study of Environmental Arctic Change (SEARCH) program. And, NSF supports some applied research programs, such as the Small Business Innovation Research and Technology Transfer programs.

Conclusion

NOAA's Fiscal Year 2003 Budget request invests in people, climate, energy, homeland security, infrastructure, and high priority research, science, and services. This budget maintains NOAA on its course to realize its full potential as this nation's premier environmental science agency. NOAA is also doing its part to exercise fiscal responsibility as stewards of the Nation's trust as well as America's coastal and ocean resources. And, in the same way that NOAA is responsible for assessing the Nation's climate, we are responsible for assessing and improving our management capabilities. NOAA will continue to respond to key customers and stakeholders, and will continue to leverage its programs and investments by developing those associations that most efficiently and economically leverage resources and talent, and that most effectively provide the means for successfully meeting mission requirements. Thank you for the opportunity to present NOAA's fiscal year 2003 budget.

Senator WYDEN. Let me thank you, Vice Admiral Lautenbacher. Let me start with several issues that are important to my State. As you know, you all have jurisdiction over West Coast groundfish, fishery observers, overcapacity and buy-back disaster money, bycatch, overages, stock assessments—the list really goes on and on.

Tell me where the administration is first on West Coast groundfish buy-outs.

Admiral LAUTENBACHER. Since I came into office, which is about 4 months now, I asked the National Marine Fisheries Service to start working on a comprehensive program that would take a look at some of the alternatives that you and I discussed the last time we met. We are in the process of doing that. I am hoping to have some initiatives that will be available for discussion within the administration for the fiscal year 2004 budget. I have looked at some of the pilot programs, if you want to call them that, and our attempts to do this over the last 4 or 5 years.

We have some history of it. Some of it has worked, some of it has not worked. There needs to be a better effort to produce a comprehensive program that will satisfy these needs. I believe we have got an effort going out to accomplish that, Senator.

Senator WYDEN. I have got to tell you, these people are bleeding, Vice Admiral Lautenbacher, and I do not sense any kind of urgency at all about the way you are approaching this. I am sorry, I would like to be diplomatic here, but you just said we hope to have discussions within the administration for the 2004 budget. These people are just devastated, and to hear that somebody in Washington is having some discussions does not provide much solace to families that are just flat—is there anything you can do to give some sense that something is going to happen any time soon?

To these people, this is the longest-running battle since the Trojan War. I mean, it just kind of goes on and on, and it looks like, well, the people in Washington are having some discussions. Well, that is what they do in Washington. Everybody shows up and has some discussions and they pass around some paper, then from time to time the paper leads to some more discussions, and now you have told the U.S. Senate Committee with jurisdiction over your agency that in your view we are going to have some discussions within the administration to see if we can address this in the 2004

budget. It does not sound like anything is going to help our people any time soon.

Admiral LAUTENBACHER. I am doing the best that I can with the time and the assets that I have. I have been there for 3 to 4 months. I agree that this is a significant problem. I have discussed it with my bosses, and I have initiated action within our agency to produce plans to help with the problem.

You need to have a good solid idea of something that will work, of something that enough people can support.

Senator WYDEN. Why don't we look at the bipartisan legislation that Senator Smith and I have? That is a really good, science-based idea of something that will work.

Admiral LAUTENBACHER. We will certainly look at that.

Senator WYDEN. Is there any reason why you have not looked at it now? You could use this opportunity to endorse it and say this is something that makes some sense. This is not something we just threw together. This is a bipartisan proposal.

Admiral LAUTENBACHER. And we certainly will do that. I will certainly take that into consideration. Absolutely we will look at it.

Senator WYDEN. The combination of the groundfish disaster and the lack of a capacity reduction program has just made things worse for the fishers, and to provide some relief, I and others have tried to provide these fishing families with disaster relief money as well as to continue funding the successful groundfish disaster outreach programs.

The President's budget zeroes both of those out as well, so we have got a situation, as far as I can tell, where nothing is going to happen any time soon on the buy-backs because we are kind of studying that and the like, and the programs that help people when they are flat on their back now have been zeroed out in the budget.

Do you all have any plan for providing relief to these fishing families during this disaster now?

Admiral LAUTENBACHER. There is no money I know of available in the budget to support that right now.

Senator WYDEN. Does that bother you? Can you make the case that that ought to be changed, or in some way dealt with?

Admiral LAUTENBACHER. As I said, I am trying to produce plans which will help in the future to solve the problem. I have no immediate way at my disposal to change that at this point. The fiscal year 2003 budget has been created and sent in. It was created before I got there. I was not part of the decision process that created it, necessarily, although I am here to support it, and I am trying to support it the best that I can.

Senator WYDEN. How are you going about trying to change it? I mean, I have asked you about the buy-back program. That is a program that provided the long-term approach. Now I would just ask you about two programs, the President's budget zeroes out the groundfish disaster outreach program, and those programs that provide critical help today, and you have said you have been trying to change that. How have you been doing that?

Admiral LAUTENBACHER. Well, I think that if we can—we need to break this ping-pong cycle that we have of earmarks and the ad-

ministration taking them out. It does not really matter which administration does this. This continues back and forth.

I would like to figure out how to work in some of the critical issues that are represented here today by you, sir, in the Senate, into the programs we already have so that they can be incorporated properly and perhaps maintain their presence in the budget, shall we say, continuously as it goes back and forth, instead of each year being considered a one-term project and then eliminated and put back in as a one-time project, and we continue this game. I think we need to work together more to incorporate things into the base budget so that they do not suffer the same fate in the future.

Senator WYDEN. Well, I think that is useful. Again, it is just hard to see how anything is going to happen any time soon. I mean, the buy-back program is something you are going to discuss for the 2004 budget. We have zeroed out the disaster relief programs. Could you make available to me, so I could see it some of the memoranda or others that you have written trying to get some changes in this area? I want to see that the point person is moving with some urgency on these issues, because that is what I sense is not taking place here.

You are a decent fellow, and we appreciate working with you, but on both of these issues, the buy-back program and the programs to help people that have just seen their lives shattered, I do not get the sense much of anything is going to happen soon; and if you could get me some of the documents that you have sent, maybe information that you have transmitted to Mitch Daniels or others, making the case that these are cuts that are going to take a toll; I would like to see that, because I think we want to see that a real effort is underway to make some changes here.

Admiral LAUTENBACHER. Well, Bill Hogarth will be here next week, and I assure you that he will, I am sure, express my urgency to you as well, that he is the point man, and he is working on these things, and he understands that we are serious about trying to build some solutions that will have bipartisan support, as well as support within the administration, which is a very difficult task.

Senator WYDEN. Dr. Hogarth is a decent fellow as well, and I have had some of these conversations with him, as you know, in recent weeks as well. But my understanding is you are still the person who runs the shop, and at some point we have got to see somebody who is really trying to bring about some changes, because the problems were serious before you were in place, and they just seem to grow more serious as time goes on, and I just do not see the level of interest in this, frankly, that is warranted.

What would you think of the idea of money to fishing families for relief being triggered when certain management decisions are made, like the Pacific whiting decision?

Admiral LAUTENBACHER. I have no philosophical problems with that at all. I do not think the laws we have today are, shall we say, compatible with some things that make sense in terms of balancing the economic realities with a need to conserve and rebuild sustainable fisheries, so I have no problem with that personally at all.

Senator WYDEN. I pushed very hard for NMFS to do annual research on West Coast groundfish; and kicking and screaming at the agency is still not doing that. We found that cooperative research

funding in that area had been zeroed out as well. How is the administration going to address fisheries research, and particularly the need for increased stock assessments, and cooperative research on the West Coast and in Oregon?

Admiral LAUTENBACHER. We have added $10 million to the budget for stock assessments, and that is included. A portion, $1½ million, roughly, that will be devoted to using the latest technologies and improving the methods by which we do stock assessments and bringing in technology, so while there is not an individual piece, there are places in the budget where this research will continue at the levels that seem to be affordable at this point.

Senator WYDEN. I am also concerned about the agency's work in the bycatch area, and NMFS lost in Federal court in its protection of the bottom fish. Tell us how you are going to go about addressing this piece of the groundfish management crisis.

Admiral LAUTENBACHER. In bycatch I think we have made a number of improvements. Since we talked last we have at least a voluntary program in place for bycatch which allows the bycatch for ships that wish to have observers on board for that bycatch to be donated either to the poor or to other causes, and not being wasted and thrown back into the sea, so that is progress in the right direction.

We have also—when you look at bycatch in general across the entire industry, there have been a number of improvements over the last 5 or 6 years that are important. We continue to keep doing that. For instance, in the shrimping industry, bycatch has been reduced from a ratio of about 10 to 1 to 4 to 1, based on the turtle exclusion device development and the ability to put that into broad use in those fisheries.

The tuna fishery, of course, has had great success in reducing the incidental take of dolphins. That used to be in the hundreds of thousands 10 years ago. It is now less than 2,000 a year, so there has been incredible gains in some of these industries, certainly in the Atlantic billfish area. By a combination of closures and gear devices we are able to reduce the bycatch by 30 to 40 percent, and the landings have been maintained at the same level, so there are areas that are encouraging, and we need to do more, and I assure you that it has my attention, and we are looking at ways to improve it.

Senator WYDEN. The Ranking Member of the Oceans, Atmosphere, and Fisheries Subcommittee, Senator Snowe, has joined us. She has done good work in this area for years, and I think what I will do is ask you a couple of other questions that are important to my State for this first round of questioning, Vice Admiral Lautenbacher, and then, after I have addressed those Oregon issues, I am going to recognize Senator Snowe, and then in the second round I'll ask you some questions with respect to programs that are important nationally to finish up on the Oregon questions.

As you know, there has been great unhappiness about the whiting decision that essentially blind-sided fishing families. The law requires NMFS to consider economic impact on fishing communities in making these management decisions, but neither I nor, certainly, these fishing communities in my State that I represent can understand how the agency's decision took economic impact

into account. Does the administration support considering economic impact on fishing communities when making management decisions and, if so, what specifically can you point to that demonstrates this?

Admiral LAUTENBACHER. I certainly support it, and when you look at the economic impact you have to look at the long-term economic impact. If there is no fishery in the future, that will be a horrendous economic impact, and so if you do not take the actions that the law requires now, there will be no fishery and there will be no economy, therefore it is a full-term picture that has to be looked at, and we do consider that.

Senator WYDEN. And how did you do that in this case?

Admiral LAUTENBACHER. We believe the fishery was in danger, and this was the right level of stocks to preserve for the future of that fishery if you are going to make it sustainable, or for it to remain sustainable.

Senator WYDEN. Can you supply to me, then, the evidence that demonstrates that you took into consideration economic impact?

Admiral LAUTENBACHER. We will provide you with whatever you would like, sir.

Senator WYDEN. I would like just what I asked for. I would like the information that demonstrates that you took into consideration the economic impact on the fishing families. Is that what you will supply?

Admiral LAUTENBACHER. I will try to supply that. I do not know that I have seen exactly the question as you have posed it. That data, if it exists, I will bring it in. If it does not, I will also inform you.*

Senator WYDEN. One other question. With regard to Oregon, the release of the draft environmental impact opinion by the National Marine Fisheries Service from 2002 to 2012, for the Klamath project operation, has again been delayed. This biological opinion is going to determine the effects of projects operation on Klamath River coho salmon. Can you say to the Committee why this biological opinion has been delayed?

Admiral LAUTENBACHER. Well, we were on a very aggressive schedule to begin with, so I do not view when it is delayed that it is a delay that probably could be foreseen. We are trying to get all of this finished so that this year's season, both for the farmers and the endangered species, would be taken care of as soon as possible.

Right now, we are in discussions with the Bureau of Reclamation to ensure that we understand their proposal, and that our biological opinion takes into account exactly their proposed method of operating in the Klamath River Valley, and so I think we are very close to finishing that draft opinion, and it should be out within a couple of weeks, a week, perhaps.

Senator WYDEN. Let me recognize Senator Snowe, who has done so much good work on these issues over so many years.

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*The information referred to is contained in the Appendix.

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

Senator SNOWE. Thank you, Mr. Chairman. I am delighted to be here this morning. I want to welcome Admiral Lautenbacher. It is wonderful to have you here, because I know this is your first hearing since your confirmation as Administrator of NOAA. We are delighted, given your expertise and experience and managerial abilities, to have you here today. We know you will be tremendous in addressing many of the challenges your agency faces. NOAA certainly has far-reaching and wide-ranging responsibilities and obligations. We are very pleased that you are here today to address some of these issues.

Let me first mention the New England groundfish litigation, which is an issue that has significantly affected the fishing industry in Maine. This court decision is compounded by all of the uncertainty, unpredictability, and instability that has occurred in the industry in recent times. I am most concerned with the decision that was recently rendered by the D.C. circuit court last week. What do you envision NOAA will provide in terms of assistance to the industry in the aftermath of this decision?

Obviously, the reaction from the fishing industry in my state has been very negative. Rightfully so, due to the direct consequences the decision will have on the industry—particularly when you are talking about reducing the number of days at sea by at least 20 percent and it is now based on their average over the last 5 years of fishing. For some people this is going to be extremely onerous.

I know the decision could have been far worse in terms of rendering quotas, but nevertheless, this is going to have a serious impact on the groundfish industry throughout New England. Do you expect NOAA will provide any assistance, or could NOAA provide any assistance to minimize the burden that is going to be felt by the fishing industry as a result of this decision?

Admiral LAUTENBACHER. As we were discussing a little earlier, there is no specific dollars in our budget that allows for that type of thing at this point. There are provisions, if the State requests it, to declare the fishery a disaster, which has been done, I do not know, 16 times or something over the last 5 or 6 years, and then provisions for special assistance to be made available, with the agreement of the administration and Congress. There is nothing special in the budget at this point for the New England groundfishery, based upon this last issue we have had with the court.

I will say, we are appealing the court's decision, because we had an agreement between a large majority of the parties that were subject to this, the rulings, both environmentalists and sport fishermen, and the fishing industry, and so it was very disappointing to us to not get a ruling from the judge that would allow fishing to continue based on the agreement we all had. We will appeal that, obviously we will appeal that judgment. It is our belief the judge went beyond her powers in the orders that were delivered, and so we will work on that, so that is the nearest relief that I can offer at this point.

Senator SNOWE. Were you surprised by the additional regulations imposed by the judge in this decision?

Admiral LAUTENBACHER. Well, I guess—surprised? Maybe not surprised. I was hopeful that this would not happen. I guess I was not surprised, in a sense based on the original ruling that was made, which I did not agree with, necessarily. I was hoping that all the good work that went on, and the fact that she encouraged the mediation and the discussions that have taken place—and a great deal of effort had gone into this both from the good folks in the Northeast as well as NMFS to try to bring it to a conclusion successfully. That was very disappointing. I will say disappointing, more than surprising.

Senator SNOWE. Obviously, this has far-reaching consequences for the groundfish industry and the fishermen are going to be suspended in a state of uncertainty for the duration of the ruling. In the meantime, I understand they are going to have to respond to this decision. How long is it going to take for the appeals process?

Admiral LAUTENBACHER. It will probably take a while, and that is right, it does ruin the start of the fishing season. We are trying to put out an emergency rule within 10 days or so of the amount of time it takes us to do the paperwork, and then by 1 August to abide by the court decision to put a permanent rule in place, in the meantime appealing it, and so that is the game plan, and you are right, it could take a while, and it could foul up part of this fishing season for certain.

Senator SNOWE. One of the major concerns that I have had over the last few years is that, unfortunately, we are governing the fishing industry by litigation. I know I have raised this concern with NMFS and I will have the opportunity next week to talk to Dr. Hogarth about this. NMFS has routinely acted out of fear of potential litigation rather than being proactive and designing plans and programs for the industry.

We have court-based litigation that is governing the industry, which makes it extremely difficult for the people in this industry. I have seen the hardship in my state first-hand. They are constantly reeling from one decision to the next, each one of which is more onerous than the regulations or plans that were implemented by NMFS in response to potential litigation. I do not think that is the way we ought to be governing our industry and I do believe we have to be much more aggressive in designing plans and programs for the industry, so that we can preempt any potential for the type of litigation and the types of decisions that were rendered by the court last week.

Admiral LAUTENBACHER. I agree with that, and I would like not to manage by litigation. I think—well, in this budget we are asking for some more money to help us with the environmental assessments and some of the things we have done wrong in our procedure.

We have been attacked on some procedural issues which we are gradually closing the loopholes to. We are being attacked on different issues now, which are at least working down into something substantive, and I believe the best thing is to make rulings up-front that are in accordance with the law, done up-front, done with consultation with everyone, and do it without this fear of retribution and waiting until the last minute, and that has taken place in the past. I am trying to reverse that.

Part of it is, as to Senator Wyden's question on the whiting, we have tried to get ahead of that, not as well as we should, but at least it was a ruling that came out that is in a position that will not be sued, we will not be sued on that particular ruling. We need to get to the point where we can do that with all the fisheries management councils.

Plans come in late to us, and sometimes they are not in compliance. In the past, people have been shy about saying they are not in compliance, this is not going to work, and if we do not change it to match the law, then we are all out of business for a while, so I would like to get ahead of this. We have asked for some more money in our budget to help with stock assessments, to help with some of the admin procedures to make this work better, and I would appreciate support in that area.

Senator SNOWE. Most definitely.

What is NOAA doing to gain a better understanding of the socioeconomic impact on the communities and the industry? Will you be taking any steps to better evaluate what the direct effect is going to be and the consequences as a result of this decision? I think it is important, irrespective of what happens in the appeals process, to understand exactly what the socioeconomic effects are going to be. This requirement was included in the Magnuson-Stevens reauthorization a few years ago to ensure that we ascertain the impact on the community.

Admiral LAUTENBACHER. Agree. There is $4 million in this budget that is specifically directed at increasing our staff, our expertise in the socioeconomic impact of the rules and regulations under which we have to deliver and work with, so I am pushing in that direction and, with those extra resources, that will certainly help. More is needed.

As I said earlier, I am a fan of trying to balance the economic and conservation interests that we have and it needs to be done better than it has in the past, so I will try to push to make that happen.

Senator SNOWE. I appreciate that, and these issues are not mutually exclusive. Unfortunately, people see one without the other, and I do not think we can divorce those issues as we consider the whole picture for the fishing industry and for the communities involved. I think we can do both.

And finally, I would encourage an examination of the entire issue of science-based management. Another concern that I have had over the years is the failure of the agencies to invest in the kind of cooperative research that is needed to gain a better understanding of exactly what the problems are with ecosystems and with the fisheries. I think if we did more in that regard, the industry would have better confidence in the ultimate decisions that are made with respect to the stocks of the particular fisheries.

We do not do enough, and as a result of that insufficient investment, it really has imposed a hardship to the industry. Rightfully they are saying how do we know? Where is this information coming from? On what basis are you making this decision? They have to reorient their entire livelihood to respond to decisions that are not based on science and are not based on data.

I encourage you to do everything that you can in your leadership position to invest in the kind of science-based research that will lead to making the best decisions, the most effective decisions that will yield the best results for the industry and for the fish stocks.

Admiral LAUTENBACHER. I understand, and I agree completely. I am certainly dedicated to doing as you suggest.

Senator SNOWE. Thank you. Thank you, Mr. Chairman.

[The prepared statement of Senator Snowe follows:]

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

I'd like to thank the Chair for scheduling this very important hearing on NOAA's FY 2003 budget and programs.

I want to welcome you, Admiral Lautenbacher, to what I believe is your first hearing before our Committee since your confirmation. You came to NOAA with solid scientific credentials and extensive management and leadership skills—all of which made you the perfect candidate for what I believe is an incredibly important job. I know you are just getting started, but I think this is an ideal time for us to talk to you about the NOAA budget request and all of your many programs.

NOAA is a broad-ranging agency which the people of Maine depend on each and every day. In so many ways, your agency has a direct effect on their lives. In Maine we count on NOAA for everything from providing reliable weather predictions to scientifically-based fisheries management to coastal zone management to better understanding global climate change.

Of course, these needs are not unique to Maine. More than half of our country's population lives on the 10 percent of our land designated as the coastal zone. Our coastal population grows every year, placing increasing strains on coastal resources and our marine ecosystem. Our nation is facing unprecedented challenges in managing these resources, and we look to NOAA to take the lead in this management. And as you know you have a great many challenges.

Right now in Maine we are faced with a crisis in which groundfish litigation could potentially and permanently change the coastal communities and their way of life. This is an example of litigation-based management at its absolute worst. We need to take fisheries management out of the courts and instead use better and more comprehensive science. This will enable us to create sustainable fisheries management plans that are in compliance with the law and allow our fishermen to continue to earn an honest living.

I look forward to working with you and Dr. Hogarth in reversing this destructive trend. I understand that Dr. Hogarth is your point man for fisheries issues and I look forward to discussing these issues with him next week at our fisheries management hearing.

As I said we have to ensure that science is the backbone of all of our decisions. Cooperative research is one area that I believe we can bring scientists and fisherman together to produce the science we need to better understand and manage our marine resources. I can't emphasize more the importance of cooperative research.

I also believe that we need to move forward to a global ocean observing system which will provide us with critical environmental data that will be utilized to improve fisheries modeling and management, coastal planning, and harmful algal blooms management and mitigation.

In conjunction with this, I plan to introduce my Harmful Algal Bloom and Hypoxia Research and Control Act reauthorization bill soon and I look forward to working with you as we continue this extremely important program. It is clear that this problem is not going away as algal blooms are still prevalent and the dead zone still occurs each summer off the Louisiana coast. We need to better understand what causes these phenomena and how we can better control and eliminate them.

My questions and concerns today focus on a small subset of NOAA's overall responsibilities. You know that many of my natural resource concerns focus on fisheries. Rest assured that I will be diving into these issues with Dr. Hogarth next week, when we are holding a hearing on fisheries management. Today I will address overall budget issues, NOAA performance, and several programs that matter a great deal to Maine and the rest of the country.

We are all here because we are concerned about NOAA's ability to succeed in an increasingly complex world. Now more than ever, NOAA needs to be a leader in science-based management, and we all know that adequate budgets are a key component of this success.

Thank you for appearing here today, Admiral Lautenbacher. I have enjoyed working with you in the past and I appreciate your ability to provide leadership and insight on the inner workings of NOAA. I have great confidence in your ability to help us better understand how NOAA's budget affects its ability to meet its missions.

I thank the Chair again for holding this hearing and I look forward to hearing from you, Admiral Lautenbacher.

Senator WYDEN. I thank my colleague for all of her good work on these issues over so many years.

Let me turn to some concerns the Committee has with respect to the budget for the country, and some programs that we do feel strongly about, and I will start with the national sea grant college program. The applied nature of national sea grant research and the success of extension services are just two aspects that cannot be underestimated. We are proud of their use in Oregon and certainly around the country.

The President's budget proposes to terminate this program within NOAA and the Department of Commerce. With all the positive feedback about sea grant, what are the administration's reasons for moving the sea grant program, particularly in light of losing vital pieces of sea grant, such as the extension services and the applied research aspect?

Admiral LAUTENBACHER. The administration took a look at this, and they believe that managing a program such as this, which includes a great deal of basic research, would be most efficiently managed if it were included in a large-scale four-star effort such as the National Science Foundation, where they manage peer-reviewed research very well and get good grades from everyone that has looked at their program.

The efficiency of bringing it into that management scheme and into a peer review process, et cetera, was considered to be an advantage to this program. Also, it would reduce the matching requirement, which would allow the States to not have to contribute as much money to the program, but it would continue to maintain its character in the sense that the sea grant areas, sea grant officers could maintain their certification.

We also from NOAA would work with the National Science Foundation to ensure that the essential pieces of the program would continue as much as possible, given that there would be a shift from the NOAA organization to the National Science Foundation. For my part, I assure you that we think sea grant is an outstanding program. It has produced great results over the years in both education and outreach, or extension, as well as basic research. I will manage it with those same high ideals in mind and do my best to ensure that the turnover is done smoothly.

Senator WYDEN. The Mitchell Act hatchery and mass marking program has consistently been underfunded, and this has resulted in the inability of hatchery managers to mass-mark the fish, as well as in the closure of hatcheries. Why has the administration not allowed the Mitchell Act hatchery and mass-mark program to function at the level that was intended by the Congress?

Admiral LAUTENBACHER. I do not have any detailed information on that. I would like to take it for the record and provide it to you, Senator.

[The information referred to follows:]

Question. Why has the administration not allowed the Mitchell Act hatchery and mass-marketing program to function at the level that was intended by the Congress?

Answer. NOAA's FY 2003 request for Mitchell Act hatcheries is $16.5 million. The Mitchell Act funding level set by Congress in appropriations has been used exclusively for Columbia River hatchery operations and maintenance, screens and, in recent years, mass marking to allow recreational and commercial access to hatchery fish when they occur in fisheries with ESA listed salmonids. NMFS will continue to fund Columbia River hatcheries at the funding level appropriated by Congress.

Senator WYDEN. That will be fine. I want to go into some detail with respect to the Clear Skies program, the Clear Skies and Global Climate Change Initiative program, and frankly your answers are important here, since it is our understanding that the U.S. interagency Global Change Research Program has been placed under your watch in the new Climate Change Science Program Office to be headed by James Mahoney, your Assistant Secretary for Oceans and Atmosphere. Is that correct?

Admiral LAUTENBACHER. That is correct.

Senator WYDEN. OK. Now, let me turn to your testimony, if I could, and I am going to be working from—I guess you do not number your pages, but I am going to go to the second page of your Climate Services testimony under Climate Change Research Initiative and begin by asking you this. You state in the second paragraph there, the Clear Skies plan aims to cut power plant emissions of three pollutants, nitrogen oxide, sulfur dioxide, and mercury, by 70 percent. What about carbon?

Admiral LAUTENBACHER. Carbon is included in the greenhouse gas intensity. It is included in the next line, which says 18 percent reduction of intensity, meaning the percentage of pollutants over the gross domestic product, so that as the gross domestic product increases, you reduce the amount of carbon in the air, and that is an 18-percent figure over the next decade, so carbon is included in that 18 percent number.

Senator WYDEN. All right. The next sentence says, the new Global Climate Change Initiative seeks to reduce greenhouse gas intensity by 18 percent over the next decade. The international call is far greater than 18 percent, so my question is, how does this country really hold our head up here, saying we ought to have an 18-percent reduction on only three pollutants?

Admiral LAUTENBACHER. That is 18 percent, including the carbon dioxide, so you have to have that in. I am not the inventor of this calculation, but let me explain what I know about it. This comes from CEQ and from the Department of Energy, but when we looked at, or when I looked at the figures, this 18 percent goes out 10 years, and if you look at the production, or the projection, rather, of our gross domestic product increase, and you look at the reduction in the pollution in the air, greenhouse gases, when you get to the end of the 10-year period you are actually better off than you are under the Kyoto treaty.

Some people will say that the front end is not the same, but it is close, but over the 10-year period we actually do better than the Kyoto treaty does.

Senator WYDEN. I will tell you that my sense is, is that your approach means that emissions could actually increase as GDP rises, is that right?

Admiral LAUTENBACHER. But the intensity, the percentage will go down as a function of the economy, and when you look at the total, by the time you get there you are going to be less than the Kyoto protocol.

Senator WYDEN. Wouldn't the Clear Skies Initiative weaken and delay reductions on sulfur dioxide, nitrogen oxides, and mercury emissions from power plants?

Admiral LAUTENBACHER. I do not believe it would, but then again, I am not the expert. I am here to testify to the science that tells you how we make predictions. I am not the author of these figures or the regulations, so I do not want to pretend to sit here and be the administration source on these numbers, or the logic that goes behind these particular numbers.

Senator WYDEN. I think what we want is the science behind the numbers. I do not think there is science to back up the numbers, and since you all are going to be playing an increasingly important role in this area, we are just looking for the science.

Admiral LAUTENBACHER. And the science is, who has created the problem? Has man created the problem, or is this the natural variability which we cannot—nothing we do will make a difference, and I think there is great differences among scientists. You can read a number of papers that will tell you that it is not a problem, or it is a problem. We need better science on which to base these policies.

What we are trying to do within NOAA and this Climate Change Research Initiative is to get to the core science and decide what is right, and what is the carbon cycle, where is it being sequestered, how much is going into the air, how much of it is natural, how much is man-made, and where is it coming from, what countries, what particular parts of the world, how is it being transported?

Looking at the water cycle, what difference does it make? Do you actually have a cooling effect from aerosols? If you put more aerosols into the air, you actually reduce the temperature of the world.

There are an awful lot of answers, an awful lot of questions on the basic science on which these policies are based that need to be answered. That is where our $18 million is focused, and that is what the program office for climate change will be involved in.

Senator WYDEN. Well, what is your response to those people who argue nothing is going to make a real difference here? You said people argue that. What do you say in response to that?

Admiral LAUTENBACHER. I look at the data that is out there and I agree that the global average temperature has been increasing, and I think that the bulk of mainline scientists that you bring in here will agree to that, so cut out the fringes on the side who say it is not increasing, so we believe—at least I believe that the global average temperature is increasing. It has increased by a small amount, but it has done it in a relatively short period of time.

One can make a correlation with the increase in greenhouse gases and say it is due to what man has done to the environment. One can also look back at records in history and tree rings and ice core samples, and you can see other changes that took place many, many years before man showed up on the scene burning fossil fuels and putting greenhouse gases into the air that have been equally

or much more dramatic than what we have experienced today, so the issues are to decide and to find out what the physical processes involved are, and to see how much man is actually affecting them, because that will depend a lot on where you want to invest your money.

Do you want to invest your money in reducing greenhouse gases and ruin the economy, and then find out that it makes no difference, or do you want to find out that since it is going to happen anyway, we should invest our money in mitigation, we should invest our money in planning properly, in what we are going to do in our coastal zones. What are we going to do in our coastal zones? What are we going to do when Minnesota becomes the land of 1,000 wadis and not 1,000 lakes? What will happen to those regions? We are looking at regional assessments. We are looking at the effects of what will happen and who caused it.

Senator WYDEN. You say the agency is requesting $2 million to augment carbon monitoring capabilities in North America, as well as for observations of globally relevant parameters in key undersampled oceanic and continental regions around the globe. That is, I guess, on page 3 of the climate change area.

Again, touching on the carbon question, how come the President does not have carbon as part of the Clear Skies Initiative, but you have got $2 million for carbon monitoring?

What is so striking about all of this is that at every step of the way it just seems that we are missing opportunities, opportunities to work with the rest of the world to address these key questions that are doing so much about the climate problem. You have said that this morning. We are going to have money to monitor carbon, but we are not going to make it one of the pollutants we really seek to do something about.

Admiral LAUTENBACHER. That is not true. Well, first of all, you should, get another witness here.

Senator WYDEN. It is not one of the areas where you are going to cut power plant emissions. You are going to cut power plant emissions for nitrogen oxide, sulfur dioxides, and mercury. You are not going to do it in the carbon area. That is a matter of fact. But you are going to set up, or at least try to, to have a program to monitor carbon, which suggests that it is kind of a serious problem, so I am trying to sort out the consistency in those two positions.

Admiral LAUTENBACHER. Goals are going to be set for reducing carbon. There is a registry being set up to ensure that reporting is done. It is going to be tracked. There are going to be goals set. This registry will be set up so there will be a provision to allow for trading credits, as has been done in the past, and acid rain and other programs that we have had, and it is being initiated by some of the States, for that matter, right now.

So you are setting up a system in which people's performance, the industry's performance is going to be monitored, and how much carbon they are putting in the air, we are going to determine how much is in the air, and if we are not meeting the goals for reduction, it is 18 percent reduction, then we are going to have to have some other policies put into place, but the object here is to get voluntary reporting and monitoring going as an initial start, so it is

not that nothing is being done. I think it is a prudent way to get started on the program.

As far as the worldwide business, I just came from the APEC conference, and I am a big supporter of global observing systems. We do not have enough data on the parameters for the world system, oceans, atmosphere, that are going to allow us to actually determine what is going on with carbon.

I received a great deal of support from colleague nations around the Pacific Rim to support getting monitoring stations in place and joining with the United States in an effort to build an observing system so we can give accurate data to the policymakers of the world.

Senator WYDEN. I would be curious how you would respond to the recent NAS report. You know, this was commissioned by the administration. My understanding is that they concluded that climate change was occurring and that man-made emissions were part of the cause. How does the administration's proposal address these concerns and address them in any way that is going to get at these problems sometime soon?

Admiral LAUTENBACHER. Well, first of all, the administration's proposal is to stabilize greenhouse gases. They are rising today, and there is not anything you can do, short of everybody going to bed for the next 30 years, to stop them from rising, so the object is to stop the growth of greenhouse gases. It will stop at some point in the future. If the President's program is followed, it will stop the rise of greenhouse gases, so that is the first thing that has to be done, and there is going to be monitoring and controls in places, as you have seen on the three gases, and voluntary on carbon, so if you stop the rise of the greenhouse gases, it gives you a chance. It gives you a breathing period to start looking, making sure that the science is correct and that you are investing in the right parts of your economy.

If more drastic measures need to be taken, I am sure they will be taken. That is part of the Clear Skies program, is to review progress and to revamp the policies if necessary, so first of all you have got to stop the rise of greenhouse gases. If you follow what is in that program that the President has listed, you will stop the rise of greenhouse gases and you will do it without destroying the economies, and it is particularly important for nations of the world that do not have the money to invest, in these types of subsistence economies that do not have the money to invest in environmental improvement.

If you allow them to grow their economies but have some sort of a set-aside to assure proper conservation of resources. That is a way to keep development going and to use the resources and to provide a proper environment for the future. That is again the balance between economic development and improving the quality of life and conservation of resources.

Senator WYDEN. Let me ask one other question and again cite carbon as the area where I want to get a sense of the administration's approach; and by the way, everybody is for the research. You note that here, and it says something I certainly agree with. You want the research to be done so workers and citizens in this country are not unfairly penalized, no question about that. All of that

is very sensible. But I would like to get your sense, at what point is the administration going to say, we have studied enough here, we are going to take some action and support some specific initiatives and start with carbon?

I asked about this at the Energy Committee. I serve on the Energy Committee as well, and last year, when the administration was being pushed by other countries around the world to act on the carbon issue the response was, we are going to study it. We are going to look at it. Tell me when you think that the administration might say, we have studied this enough, we are actually going to propose some concrete actions on carbon?

Admiral LAUTENBACHER. Well, I guess there is a semantic difference here. I believe they have taken action by setting into place a system which requires people to register, and a reporting system. So there is a reporting system being set up, and there is a track of reduction targets that are being looked at for the next 12 years, or the next decade, rather, from 2002 to 2012, and therefore a system is being set up in which there will be accountability, there will be targets, and we can all look at it, everyone can look at it and say it is working or it is not working.

Senator WYDEN. If they are not met, there are no consequences, are there? What are the consequences of not doing your share? There are none, isn't that correct? Tell me what the consequences are if you do not do your share.

I think your point about reporting and monitoring and the like, it is all voluntary. I mean, if you sit it out, if you decide you are not going to be part of an effort to be responsible, I do not see any consequences because it is voluntary. What do you see as the consequences?

Admiral LAUTENBACHER. The consequences are economic, because as you start to figure out about how to reinvest in the next generation of equipment for power plants and energy distribution and automobiles, and all the things that create the carbon in the atmosphere, you are going to have to make some decisions. If the industry continues to make decisions that do not meet these targets, they know that there will be penalties. Congress will act, the President will act. There will be some changes to be made.

So you are looking at a system which hopefully there will be—given the entrepreneurial system we have in the U.S., there will be some realization that is going to happen. People will invest, and if they do not, they are going to start trading carbon credits, just like we do everything else, so you are going to be able to see some change in this system so hopefully there is some self-discipline that is imposed on the system. Now, if it does not work, everybody can see it. It will be visible, and then some action should be taken.

Senator WYDEN. Well, the world has already seen it, and that is essentially what the debate is about. We are the person sitting it out when something like 170 other countries are saying—you are saying a voluntary system is going to work, that somehow people are going to see these consequences of their actions, and I think the country is going to pay dearly for a system that really in my view has no consequences. That is the bottom line. It is voluntary. If people are irresponsible, they will pay no price. There will be no consequences.

Let me also say that I recognize that some of these issues go beyond your specific authority, but you play an important role, because of what we describe with respect to the new Climate Change Science Program Office, and I hope that in your capacity there you will be a voice for policies that are going to do more than study, they are going to lead to some action and some consequences when people are not willing to be responsible.

I support voluntary programs. I think we ought to go with them to the greatest extent possible and give them the widest possible berth. There is no quarrel there, but when they are not getting the job done, then there has to be some consequences and some other systems have got to be in place.

Let me recognize my colleague, if she has any further questions.

Senator SNOWE. Thank you. I have just a few questions to follow up on the climate change issue so that we can have a better understanding of how these programs for the short term and the long term are going to be integrated into this office. I know the President announced the creation of the Climate Change Research Initiative in June and designated the Commerce Department to be the lead agency, but given that we have declining and static budgets we need to know how the investments we will make for the short term and the long term will impact climate change.

The concern of many scientists is, we are doing things on the short term from 2 to 5 years, but it is not sufficient in helping us better understand the greater global environmental issues for the long term. I believe we need to make investments in the long term with respect to climate change. What are your views on that?

Admiral LAUTENBACHER. I agree, we need short term and long term. My impression has been, from looking at this, is that the investments that have been so far basically in the Global Change Research Program (GCRP) area have been mostly long-term investments. We have not focused on the short term, and really understanding hard-hitting issues right now, and producing products that can be used by policymakers to help with some of the issues that Senator Wyden and I just discussed, so we need—in my view, there has been too much long term, and not enough short term, but that being aside, this program office, I assure you, will be looking at both. We are very interested in being able to contribute immediately and directly to this problem, as well as ensuring that there is long-term improvements and science plans put into place.

Senator SNOWE. In conjunction with what the chairman raised, is the issue of urgency. This is a very compelling issue and it was the reason back in 1990 the Congress created the Global Change Research Program, essentially because there was no success in addressing this issue 12 or 13 years ago. It seems to me there has to be a level of urgency and a sense of purpose about the entire issue and the far-reaching consequences if we fail to address these issues.

I wonder how the work of the GCRP is going to be coordinated with this new initiative and with what we have done in the past. We need to make sure that we are not only examining these issues, but also proposing steps that can be taken to address the issue of global warming and the climate changes that have occurred.

Admiral LAUTENBACHER. The plan that is in place puts it directly on the burden of—Secretary of Commerce Don Evans is in charge, directly responsible to the President. It is a Cabinet-level group that includes all of the Cabinet agencies that are involved, or have any peripheral responsibilities with regard to climate change. It has a working group of Deputies, and then it has these program offices, one for technology and one for science change, of which Jim Mahoney, my Deputy, has been put in charge. It will include all of the same offices and incorporate the GCRP mechanisms that have been in place for 10 years.

And I do not want to be misquoted. I think that program has produced a great deal of important work. My only point was, it was more long term than it was of an urgent nature. We have learned a lot from the GCRP. It has been a good program. I do not want to sit up here and say that has been wasted. It has not been. It has been a good investment. What we are trying to do is take a look beyond the window that was in the GCRP focus.

That program looked at very specific new initiatives. It did not incorporate all of the things that have been done in the Government with regard to climate change, and I can give you an example just from NOAA, and I will let other agencies speak for their own budget.

We have, for example, $70 million of GCRP money, basically, listed as climate change. If I go through my budget and look at it, I can find at least $300 million that are related to doing climate change kinds of things, or things that will help us to understand climate change science and help to build policy documents or policymaking instruments. The same thing goes for other agencies.

So the first object of this program office is to get everything together that the Government does and put it in one place, and let us take a look at the architecture that is there. Let us take a look at the gaps that we have in science, if there are any, and start prioritizing what needs to be done. If we need to move that money into different places, then we should do it, and they are Cabinet-level agencies with Cabinet members and Secretary Evans in charge, with OMB involved, and Dr. Marburger from OSTP. Everyone is on this group. It is a high-level body that hopefully will have the empowerment to make something happen.

Senator SNOWE. Is every agency that should be involved in the issue of climate change included with this sort of task force?

Admiral LAUTENBACHER. Yes.

Senator SNOWE. Does it replace the Global Change Research Program?

Admiral LAUTENBACHER. We are going to try to run it in parallel right now, because we understand the need to meet the needs, or meet the legislative requirements of the GCRP, and so right now we have taken the GCRP organization and kind of folded it together so that we will not lose any pieces, so the GCRP steering group, and the Environment and Natural Resources Council, that structure is being matched to the structure I just outlined so we ensure we deliver the proper documents to Congress.

Senator SNOWE. Will this be coordinated? Who will be coordinating the structure?

Admiral LAUTENBACHER. It is the same people, so the same people that have been doing—the same policy leaders in each of these areas that have been working in the GCRP will be in this program, the steering part of this program office, so we are not going to discard or eliminate or do anything to downplay what has been done before. We are going to use it as the base, essentially, and broaden the scope. That is the idea.

Senator SNOWE. How much overall would you estimate is being spent on the issue of climate change by our Government? Do you have any idea?

Admiral LAUTENBACHER. Well, the figure that CEQ came up with was something like $4.7 billion. That includes the part that—the Department of Energy and clean coal and technologies for alternative fuels, that sort of thing, and so there is a big chunk. Most of that is in energy. There is about $1.7 billion in the GCRP, and I do not know, but my guess is there is at least another billion that is in science areas, maybe even more.

The trouble is, how do you count it, because many of the things that we do that are useful for climate change, they are also useful for other things, and so do you take the same satellite that I use for weather and say, that is climate, too, and how much of that satellite money counts into climate, which it certainly will, but it is there to give us day-to-day weather and to ensure we can carry on our daily economic activities.

So there are a lot of these things that are dual, multipurpose, that need to be taken into account. That is the hard part about giving you the figure.

Senator SNOWE. So with this new coordinating structure, will all of the research be conducted under this umbrella?

Admiral LAUTENBACHER. That is the idea. The idea is to have a supercoordinating office to make sure that when each budget is created, that it is created and it meshes, so when we all come to you, or when we go to the President and we come to you on the Hill you can look across this and you can see a logical program that supports climate change science, and we can deliver an architecture, which I can sit here, or Rita Caldwell can come up and say, anybody else can come up here and say, this is what we are doing, and here is how we fit together. We for the first time will have real Government coordination and cooperation.

Senator SNOWE. That is going to be positive.

On another issue related to climate change, that is abrupt climate change, the National Academy of Science issued a report in December 2001 that said that it is not only possible, but likely in the future that we could have an abrupt climate change that could have significant societal consequences. In fact, the report said, at present there are no plans for improving our understanding of the issue, no research priorities have been identified, and no policymaking body is addressing the many concerns raised by this potential for abrupt climate change.

I have asked for $6 million in the appropriations process to address this specific issue regarding climate change. What are your views? And how will this be addressed? Is it recognized that this is a serious dimension of climate change?

Admiral LAUTENBACHER. Certainly I recognize it as a serious dimension, and I am sure a number of people will join me on that, and in fact, as I wrote a list yesterday of things we need to look at, it is on my list for our program office to coordinate. Abrupt climate change is of genuine concern, and we need to spend some time looking at it, and I assure you that it will be on the agenda of this program office.

Senator SNOWE. Let's turn to another area, harmful algal blooms. I am soon going to introduce my reauthorization legislation with Senator Breaux. I see the administration's NOAA budget for 2003 appears to eliminate the funding for all types of hypoxia research.

Admiral LAUTENBACHER. I will show you—I have it that we have roughly about the same amount of money. We may be down a little bit, $700,000 left because of the sea grant going to NSF, but we have about $13 million, about $13 million in the various pieces and there is, as you know, a million here, a million there. It is $13 million that deals with harmful algal blooms. It is down about $1 million, but it is roughly the same across the programs that deal with that.

Senator SNOWE. Do you think it is about $13 million?

Admiral LAUTENBACHER. It is about $13 million in this area.

Senator SNOWE. I think this is a critical program.

Admiral LAUTENBACHER. It is.

Senator SNOWE. I think that this issue is not going to disappear any time soon. When you think about the dead zone that occurs every year off the coast of Louisiana and the types of mitigation measures that are essential to addressing this issue, we certainly should be investing in this issue and not terminating it. Is it your understanding that there will be static funding?

Admiral LAUTENBACHER. $13.8 million was enacted in 2002, and our request is $13.1 million, so that is $.7 million down. That is the sea grant migration, and so assume that that is in there, so we are down about $700,000 on a base of $13.8 million. I admit, it is a slight decrease, but the programs are fairly robustly funded, given the number of priorities we try to cover, and I agree this is a very important area, and a lot has been done that is important to investigate toxins and health and damage to the environment.

Senator SNOWE. We created a task force on this issue in 1998. Has it been effective in providing any recommendations for technical assistance on this issue?

Admiral LAUTENBACHER. My view—well, there were four task forces created as a result of this. Three of them have finished, and have produced, I think, good products that have been used to help guide the research efforts and support public knowledge of this issue.

The fourth one will be finished—it is being reviewed in 3 or 4 months, and it is going to cover coastal oceans' reactions to harmful algal blooms, as well as hypoxia and dead zone issues in the Gulf of Mexico, so these reports are good, and the fourth one is almost done. We have completed that work, essentially.

Senator SNOWE. When will that final report be released? I ask this because we are in the process of introducing the reauthorization bill. Perhaps we would want to wait to incorporate any suggestions the reports might provide.

Admiral LAUTENBACHER. I will make sure you have copies of the reports.

Senator SNOWE. Please provide any suggestions or thoughts you might have on the reauthorization as well, because it is important.

Finally, on the national ocean observation system that is being developed with hopefully a national plan, how will this system be administered? And as you know, there is an observing system in the Gulf of Maine that is working very well. It is sort of a prototype. Do you envision that this type of program will be incorporated into a national observation system?

Admiral LAUTENBACHER. My view is that it should be folded into a national observation system. We have under the NRLC, the National Research Leadership Council, a group called Ocean.US, which is a multiagency group kind of at a lower level than the climate change group that I talked about, but it includes all the agencies that deal with ocean research and ocean monitoring.

They recently had a conference among the Government agencies, also including academia, and all the folks that would be interested—actually, Gulf of Maine was represented at that conference—to build an architecture, and that is the critical part. As you know, to build a partnership between two people is hard, but to build a partnership between hundreds of people gets very difficult, but the attempt is being made.

Their report is almost ready to be published, and I spoke to this group. I think there is a great deal of unanimity that we need some kind of a national architecture, and backboned, to which the regional observing systems can tie in, data can be shared, and we can truly use it for a national purpose both for climate as well as a number of other things.

Senator SNOWE. Thank you, Admiral Lautenbacher. I appreciate you appearing before us today and answering our questions. Thank you, Mr. Chairman.

Senator WYDEN. I thank my colleague, and I think you can see, Admiral Lautenbacher, that there is a lot of concern on these issues, on the fishing questions, on the climate change questions, and what I am hoping for, and I think it is very much along the lines of what Senator Snowe is trying to address, is we want a new sense of urgency.

There are a number of these questions that just seem to have been passed on from hand to hand, and office to office, and what we are hoping is that in a very aggressive way you will pull together the people on your team and work with us on a bipartisan basis.

We will have Bill Hogarth here in a few days. I hope that Dr. Hogarth is going to talk to us very specifically about what is going to be done about a crisis in our fishing sector. Senator Snowe, I am sure, is going to have the same sorts of questions for him on the global climate change. What I think the Congress wants to do is to see a workable bipartisan plan that consists of more than study.

We support your research efforts, but at the end of the day we have got to have a chance to move on those, and in area after area. We have come up with bipartisan proposals, Senator Smith and I, in the groundfish area; Senator Craig and I in terms of carbon sequestration—there are bipartisan proposals out there that move us

beyond the research area, and you can be a force for doing that, so that is what we hope we will see.

I would like to give you the last word. If there is anything you want to add, you can feel free to do it at this time.

Admiral LAUTENBACHER. Thank you, Mr. Chairman. I appreciate the opportunity to be here and discuss these issues with you, and I am delighted that there is this interest, and I assure you that I have the same sense of urgency. To the limits of my ability I will certainly work to address these problems. I wish to work in a bipartisan manner. I do not think the oceans and the atmosphere are the purview of any one particular part of our society. I think it is important to all of the entire Nation and to everyone that we deal with these problems, and I will continue to work with you in the future in any way that I can. Thank you very much.

Senator WYDEN. Thank you. We are adjourned.

[Whereupon, at 11:10 a.m., the Committee adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RON WYDEN TO VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Question. Can you produce information that demonstrates that you took into consideration the economic impact on the fishing families?

Answer. The Pacific Whiting decision was made primarily on the basis of the biology of the stock and the requirements of the Magnuson-Stevens Act (MSA). The MSA gives priority to meeting the biological requirements of the stock and preventing overfishing. As required by MSA, economic impacts are taken into account, but are not necessarily given equal weight to the biology of the stock. Economic considerations are most commonly taken into account in weighing different alternative actions that might be necessary to meet the biological requirements of the MSA, not whether to meet them at all.

The first document is the March 22 Decision Memo for the Emergency Rule to Establish 2002 Harvest Specifications for Pacific Whiting and Announcement of Overfished Status of Pacific Whiting. The Finding of No Significant Impact and the Environmental Assessment for this rulemaking are attached to the Decision Memo. The memo includes a discussion of economic impacts (see pages 4–5). Because this was an emergency rule where notice and comment was waived, it was exempt from the procedures of the Regulatory Flexibility Act.

The second document is an April 3 memo titled, Alternative Estimates of Economic Impact Associated with the Emergency Rule for 2002 Pacific Whiting Specifications. This memo responds to economic concerns expressed by the fishing industry during the public comment period at the Pacific Fishery Management Councils' March 2002 meeting.

The third document is the emergency rule* published in the Federal Register on April 15, 2002. The preamble of the rule contains a section titled Economic Impacts where the issues are defined and summarized.

MEMORANDUM FOR WILLIAM T. HOGARTH, PH.D., ASSISTANT ADMINISTRATOR FOR FISHERIES, FROM D. ROBERT LOHN, REGIONAL ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE—MARCH 22, 2002

Emergency Rule to Establish 2002 Harvest Specifications for Pacific Whiting and Announcement of Overfished Status of Pacific Whiting

I request your approval of an emergency action under authority of section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act. The Pacific Fishery Management Council (Council) requests emergency action under the Pacific Coast Groundfish Fishery Management Plan (FMP) to establish 2002 harvest specifications for Pacific whiting (whiting) before the start of the primary season on April 1, 2002. For reasons explained below, the Council's action on 2002 annual specifications for whiting were delayed until its March 2002 meeting. The harvest specifications adopted for 2001, which remain in effect until new specifications are adopted, must be replaced to prevent overfishing of the whiting stock during 2002.

This action has controversial aspects since it rejects the Council's recommended alternative for U.S. harvest of whiting of 152,400 mt and instead implements a lower harvest level of 129,600 mt. Industry participants have expressed concern about the economic impacts of the reductions in harvest. The environmental community is likely to be concerned about the low biomass levels and how quickly the stock will be restored to a sustainable level. In addition, the March 5, 2002, Ninth Circuit Court of Appeals opinion in *Midwater Trawlers Cooperative* v. *Department of Commerce*, which is a challenge to Indian treaty fishing rights by the fishing industry,

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*The Environmental Assessment and Regulatory Impact Review for the "Emergency Rule for the Pacific Whiting Allowable Biological Catch and Optimum Yield Specifications for the 2002 Pacific Coast Groundfish Fishery" has been retained in Committee files.

could result in complaints about the allocation of whiting between the tribal and non-tribal sectors of the fishery.

Background

The FMP requires the Council to develop management specifications for groundfish species or species groups that it proposes to manage, each calendar year. The 2002 Pacific Coast groundfish fishery specifications and management measures for all managed species, except whiting were published in the *Federal Register* March 7, 2002 (67 FR 10490).

NMFS and the Council realized that the whiting biomass had decreased throughout the l990s. In anticipation of a new stock assessment which was to be available in early 2002 and because only a small amount of whiting are typically landed under trip limits prior to the April 1 start of the primary season, the Council chose to delay its final whiting recommendation until its March 2002 meeting. As a result of this decision, whiting harvest specifications from 2001 were carried over into 2002 and remain in place until new specifications are established through a federal rulemaking.

In late February, the new assessment was complete and made available for examination by the Council's groundfish assessment review team (STAR) for whiting. As a result of the new whiting stock assessment, it has been determined that the stock biomass in 2001 was 0.7 million mt, and that the female spawning biomass was less than 20 percent of the unfished biomass. Because the overfished threshold under the FMP is 25 percent of the unfished biomass, the whiting stock was determined to be overfished in 2001 and 2002.

Although a large amount of juvenile fish, spawned in 1999, are expected to mature and enter the fishery in the near future, the spawning biomass is not expected to increase above 40 percent of its unfished biomass level (B40% – the MSY biomass level) for several years. Any increases in biomass will depend on the vigor of juvenile fish that mature and enter the fishery as well as the exploitation rates.

At its March 2002 meeting in Sacramento, CA, the Council reviewed the results of the new stock assessment. The Council was presented with a range of coastwide harvest levels based on three alternative harvest rates and three different assumptions about the amount (recruitment level) of juvenile fish that are expected to become part of the exploitable biomass in 2002. The three recruitment assumptions included a low recruitment of 2.11 billion fish (10 percent probability), a medium recruitment of 2.89 billion fish (80 percent probability), and a high recruitment of 3.87 billion fish (10 percent probability). At the time of the 2001 survey, the fish spawned in 1999 had only partially recruited to the fishery and were not well estimated by the model resulting in uncertainty about the effect these young fish would have on the exploitable stock biomass. As fish spawned in 1999 mature, the whiting biomass is expected to increase in size under each of the three recruitment assumptions. At the low recruitment level the biomass is projected to increase to between 25 percent and 28 percent of its unfished condition by 2003, for the range of 2002 harvest levels examined. At the high recruitment level the biomass is projected to increase to between 38 percent and 42 percent of its unfished level by 2003, using the same range of 2002 harvest amounts.

These three recruitment level assumptions represent different degrees of risk in characterizing the amount of juvenile fish entering the fishery. A low recruitment assumption is most precautionary and represents a risk adverse approach, the medium recruitment is risk neutral, and the high recruitment assumption carries more risk for a timely stock recovery. The Council's Scientific and Statistical Committee (SSC) chose to forward all three recruitment assumptions to the Council, while noting that the medium recruitment assumption was the risk neutral characterization of the incoming recruits to the fishery.

The three harvest rate proxies forwarded to the Council were F40%, F45% and F50%. A rate of F40% can be explained as that which reduces spawning potential per female to 40 percent of what it would have been under natural conditions (if there were no mortality due to fishing) and is therefore a more aggressive harvest strategy than F45% or F50%. The OYs presented to the Council were based on the ABC associated with a particular recruitment level and harvest rate as reduced by the 40/10 default harvest policy. When a stock is below B40%, the 40/10 policy is applied as a precautionary measure and is effectively a default rebuilding policy.

The allocation of the whiting resources between the U.S. and Canada is not resolved. The stock assessment was a collaborative effort between the two nations. However, the results of the new stock assessment were not available in time to hold formal negotiations with Canada before the March Council meeting. Consequently, the Council assumed continuation of the 80 percent share that the U.S. harvest levels have been set at in recent years. NMFS believes that the F40 harvest rate with

a medium recruitment assumption and a 40/10 harvest policy approach shows adequate precaution. The Council recommended that the future whiting negotiations between the U.S. and Canada be scheduled.

Following discussion and public testimony, the Council recommended adopting a U.S.-Canada Coastwide OY of 190,500 with a U.S. OY of 152,400 mt (80 percent of the coastwide OY) based on a harvest rate of F40% and assuming a medium-high recruitment scenario. I advise disapproving the Council's recommendation and recommend approving an ABC based on the risk neutral medium recruitment scenario. After consultation with the Northwest Fisheries Science Center, I believe that the risk neutral medium recruitment scenario, instead of the Council's risk accepting recommendation, is supported by the best available science. This would result in a U.S.-Canada ABC of 208,000 mt and a U.S. ABC of 166,000 mt. The U.S.-Canada Coastwide OY (the ABC with the application of the 40/10 harvest policy) would be 162,000 mt with a U.S. OY of 129,600 mt.

I believe, that a risk neutral approach, instead of one that accepts greater risk, is supported by the best available science given the current biomass estimate and the uncertainty associated with the estimates of recent year class strength. The 2002 retrospective analysis of recruitment estimates from the 1998 assessment resulted in recruitment strengths and biomass estimates being revised downward. This suggests that future stock assessments also have a reasonable expectation of revising the estimated strength of the 1999 year class to a lower value. It should be noted that the two most recent year classes prior to the 1998 assessment (at an age equivalent to the 1999 year class in the new assessment) were estimated to be about 40 percent lower in the 2002 assessment than in the 1998 assessment. Relative to the medium-high recruitment scenario recommended by the Council, the 2002 stock assessment results suggest that a lower 1999 recruitment is two to three times more likely than a higher 1999 recruitment. The STAR Panel recognized the high variance associated with forecasting recruitment and suggested caution in using the projections for forecasting future biomass levels.. The Council's choice to use a 1999 year class estimate midway between the medium and high estimates is inconsistent with the STAR Panel recommendation.

The F40% harvest proxy should remain in place for 2002. The Council's STAR panel recommended moving to a more conservative level of F45%. The SSC did not make the same recommendation, but noted that the STAR panel recommendation was a risk-adverse policy and not risk-neutral advise. The SSC identified the F40% rate as reflecting a risk neutral policy. While the F45% is by definition more conservative than the F40%, neither the STAR or SSC were presented with an analysis to evaluate the suitability of the F45% harvest rate proxy. Such an analysis was beyond the scope of the assessment. An evaluation of the harvest rate proxies for whiting should be completed before setting the 2003 harvest level.

Projections indicate that if mean levels of recruitment occurred annually, an F40% harvest policy adjusted by the 40/10 rule, would rebuild the spawning stock to B40% within seven to nine years (2009–2011). However, it must be noted that given the highly skewed nature of the historical recruitment distribution, there is less than a 50% likelihood that annual recruitments would average the long-term mean during this short period.

The U.S. OY recommended by the Council (152,400 mt) represents a 20 percent reduction from the 2001 whiting OY, while the OY which I am recommending adopting (129,600 mt)represents a 32 percent reduction from the 2001 whiting OY. In 2001, the ex-vessel value of whiting taken by all sectors was estimated to be approximately $13,415,000. Under the OY being adopted by NMFS (129,600 mt) the ex-vessel value of whiting is expected to be approximately $10,000,000, this is 25 percent less than the ex-vessel value in 2001. Reduced revenues from production will likely affect the ability of operations to not only cover their variable costs, but also their fixed costs. If it is not economically feasible for some shore-based or at-sea processors to participate in the fishery, the financial impacts of the reduction may be distributed disproportionately among recent participants. In the short term, the reduced OY is expected to have an adverse economic impact on harvesters and processors, however I believe it is necessary for the long-term health of the fishery.

Concerns about the impacts on other groundfish fisheries were considered. Participants in the shore-based whiting fleet have accounted for roughly 50 percent of the annual harvest of species in the Dover sole, thornyhead, and sablefish (DTS) species complex as well as at least 20 percent of the non-Dover sole flatfish species. Many whiting vessels target flatfish and DTS species after the whiting season. It is expected that the length of the whiting season would be reduced proportionally with the OY. Therefore, a drastically reduced OY would likely result in a shorter whiting season and increased fishing pressure on already constrained fisheries, this would

result in higher than expected landings, inseason non-whiting reductions in trip limits, and possibly early closures.

Each year, the whiting OY is allocated between the specific sectors of the fishery. The Pacific Coast Indian treaty fishing rights, described at 50 CFR 660.324, allow for the allocation of fish to the tribes through the annual specification and management process.

Beginning in 1999, NMFS has set the tribal allocation according to an abundance-based sliding scale allocation method proposed by the Makah Tribe in 1998. See, 64 F.R. 27928, 27929 (May 29, 1999); 65 FR 221, 247 (January 4, 2000) ; 66 FR 2338, 2370 (January 11, 2001) Under the sliding scale allocation method, the tribal allocation varies in relation to the level of the U.S. whiting OY, ranging from a low of 14 percent (or less) of the U.S. OY at OY levels above 250,000 mt, to a high of 17.5 percent of the U.S. OY at an OY level at or below 145,000 mt. For 2002, the Makah Tribe has requested, and the Pacific Council has recommended, a tribal allocation of 22,680 mt, using the sliding scale allocation method. No other tribes have requested allocations for 2002.

The sliding scale allocation method is the subject of two recent court decisions. In the treaty fishing rights case of *U.S.* v. *Washington*, Case No. C70–9213, Phase I, sub-proceeding No. 96–2 (W.D. Wash., April 5, 2001), the Court considered several scientific affidavits submitted by NMFS and the Makah Tribe, and found that "the allocation agreed on by the Secretary is a lawful exercise of his obligation to comply with the treaties guaranteeing Indian tribes their aboriginal right to take fish at their usual and accustomed fishing grounds." 143 F. Supp. 2d 1218, at 1224. The Court concluded: "The sliding scale allocation method advocated by the Secretary and Makah shall govern the United States aspect of the Pacific whiting fishery until the Secretary finds just cause for alteration or abandonment of the plan, the parties agree to a permissible alternative, or further order issues from this court." *Id.*

In *Midwater Trawlers Cooperative* v. *U.S. Department of Commerce*, _____F. 3d._____, 2002 WL 338406 (9th Cir. 2002), the Ninth Circuit Court of Appeals upheld the tribal treaty right to Pacific whiting, upheld the usual and accustomed fishing area of the Makah Tribe, and found that the Makah Tribe is entitled, pursuant to the Treaty of Neah Bay, "to one-half the harvestable surplus of Pacific whiting that passes through its usual and accustomed fishing grounds, or that much of the harvestable surplus as is necessary for tribal subsistence, whichever is less." However, the Court also found that the specific allocation in 1999 to the Makah Tribe was inconsistent with the scientific principles set forth in the Magnuson-Stevens Act (which requires that NMFS base fishery conservation and management measures on the best scientific information available), because the 1999 Federal Register notice announcing the 1999 allocation did not provide a scientific rationale. Accordingly, the Court issued instructions to the District Court to remand to the agency for more specific findings. On remand, NMFS will be required "to either promulgate a new allocation consistent with the law and based on the best available science, or to provide further justification for the current allocation that conforms to the requirements of the Magnuson-Stevens Act and the Treaty of Neah Bay."

The *Midwater Trawlers* decision was just issued, and the case has not yet been formally remanded to the agency by the District Court. However, prior to the formal remand, NMFS must announce the 2002 Pacific whiting allocations. NMFS has reviewed the science contained in documents in the administrative record in the *Midwater Trawlers* case, and has also reviewed scientific information submitted by NMFS and the Makah Tribe in *U.S.* v. *Washington*, Sub- proceeding 96–2. NMFS has no additional scientific analysis that alters the existing information on the distribution and migration pattern of the stock. Therefore, NMFS is relying on the existing information as the best scientific information available.

Based on the information referenced above, NMFS concludes that an allocation of 22,680 mt of Pacific whiting to the Makah Tribe in 2002 is within the tribal treaty right as described by the District Court in *U.S.* v. *Washington*, Sub-proceeding 96–2, and by the Ninth Circuit in the *Midwater Trawlers* decision. Since this is the amount requested by the Tribe, NMFS also concludes that it is sufficient to meet tribal subsistence needs for 2002, even though it may be less than the full treaty entitlement. NMFS will deal with these issues in more detail in its formal response to the Ninth Circuit decision.

The non-tribal commercial OY for whiting is 106,920 mt (the 129,600 mt OY minus the 22,680 mt tribal allocation). Regulations at 50 CFR 660.323(a)(4) divide the commercial OY into separate allocations for the non-tribal catcher/processor, mothership, and shore-based sectors of the whiting fishery. The catcher/processor sector is composed of vessels that harvest and process whiting. The mothership sector is composed of motherships and catcher vessels that harvest whiting for delivery to motherships. Motherships are vessels that process, but do not harvest, whiting.

The shoreside sector is composed of vessels that harvest whiting for delivery to shoreside processors. Each sector receives a portion of the commercial OY, with the catcher/processors getting 34 percent (36,353 mt), motherships getting 24 percent (25,661 mt), and the shore-based sector getting 42 percent (44,906 mt).

Certification

I certify that this emergency rule is consistent with the national standards and other provisions of the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws.

Determinations supporting this finding are attached.

Recommendation

I recommend that you approve this emergency action, sign and send the decision memorandum to the Under Secretary with the attached information memorandum to the Secretary, and sign the attached transmittal to the Chief Counsel for Regulation of the Department of Commerce.

Determinations

Appropriateness of Emergency Action: The harvest specifications adopted for 2001, which remain in effect until new specifications are adopted, must be replaced to prevent overfishing of the whiting stock during 2002. This action was delayed until March in order to use the latest science which was not available until late February. Because the ABC and OY are substantially lower than those adopted for 2001, this action is necessary to restrict fishing so the fishery stays within its overall harvest allocation while allowing the various sectors of the fishery the opportunity to fully harvest their sector's allocation. To delay the effectiveness of the rule beyond the start of the fishery could result in some sector allocations being exceeded and possible early closures for other sectors as a result of excessive harvest in the early season.

Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act): This rule is necessary to respond to an emergency situation and is consistent with the Magnuson-Stevens Act.

National Environmental Policy Act: An environmental assessment (EA) has been prepared that describes the impact on the environment that would result from the implementation of this rule. Three different assumptions about the amount of juvenile fish that are expected to mature and become part of the spawning biomass were put before the Council. At the time of the survey, the fish spawned in 1999 had only partially recruited to the fishery and were not well estimated by the assessment model. Therefore there is uncertainty about the effect these young fish have on growth of the spawning stock biomass. Implementing the more conservative ABC, based on a harvest rate of F40% with a medium recruitment scenario with an OY adjusted by the 40/10, is expected to result in substantial impacts to the whiting industry. I recommend you find that no significant impact on the human environment will result from its implementation.

Regulatory Flexibility Act (RFA): This rule is exempt from the procedures of the RFA, because it is not required to be issued with prior notice and opportunity for public comment.

Coastal Zone Management Act (CZMA): The Council determined that this action is consistent to the maximum extent practicable with the enforceable policies of the approved coastal management programs of the States of Washington, Oregon, and California. This determination was submitted for review by the responsible State agencies under section 307 of the CZMA on December 14, 2001. No response was received from any of the states, so consistency is inferred.

Paperwork Reduction Act (PRA): This action does not contain a collection-of-information requirement for purposes of the PRA.

Endangered Species Act (ESA): NMFS issued Biological Opinions (BOs) under the Endangered Species Act on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999, pertaining to the effects of the groundfish fishery on chinook salmon (Puget Sound, Snake River spring/summer, Snake River fall, upper Columbia River spring, lower Columbia River, upper Willamette River, Sacramento River winter, Central Valley, California coastal), coho salmon (Central California coastal, southern Oregon/northern California coastal, Oregon coastal), chum salmon (Hood Canal, Columbia River), sockeye salmon (Snake River, Ozette Lake), and steelhead (upper, middle and lower Columbia River, Snake River Basin, upper Willamette River, central California coast, California Central Valley, south-central California, northern California, and southern California). NMFS has concluded that implementation of the FMP for the pacific Coast groundfish fishery is not expected to jeopardize the continued existence of any

endangered or threatened species under the jurisdiction of NMFS, or result in the destruction or adverse modification of critical habitat.

NMFS has re-initiated consultation on the Pacific whiting fishery associated with the (whiting DO) issued on December 15, 1999. During the 2000 whiting season, the whiting fisheries exceeded the chinook bycatch amount specified in the whiting BO's incidental take statement's incidental take estimates, 11,000 fish, by approximately 500 fish. In the 2001 whiting season, however, the whiting fishery's chinook bycatch was well below the 11,000 fish incidental take estimates. The re-initiation will focus primarily on additional actions that the whiting fisheries would take to reduce chinook interception, such as time/area management. NMFS is gathering data from the 2001 whiting fisheries and expects that the re-initiated whiting DO will be completed by April 2002. During the reinitiation, fishing under the FMP is within the scope of the December 15, 1999, whiting BO, so long as the annual incidental take of chinook stays under the 11,000 fish bycatch limit.

Marine Mammal Protection Act: I have determined that fishing activities conducted under this rule will have no adverse impact on marine mammals.

Administrative Procedure Act: For the reasons described below, there is good cause to waive the proposed rule requirement under 553 (b)(B). The Pacific Coast Groundfish FMP requires that fishery specifications be evaluated each year using the best scientific information available. A stock assessment for whiting was prepared in early 2002, using the most recent survey data. Because of the timing of the resource survey upon which the assessment is based, it was not available for use in a stock assessment that could be ready for the September-November management cycle when the rest of the groundfish specifications were set. In addition, the survey for this species is done only every three years. Therefore, the Council and NMFS decided it was best to delay the adoption of the 2002 ABY and OY in order to use the newest data, rather than use 4 year old data from the prior survey. The preliminary indication from survey data was that the biomass had declined in recent years and the ABC and OY recommended for 2002 would be substantially lower than 2001. Therefore, for resource conservation purposes, it was particularly important to delay in order to use the most recent data. Finally, since the major fishery for whiting does not start until April 1, there was time to delay the adoption of the new ABC and OY, until the new information was available in March.

Last year's whiting specifications were carried over in the interim for 2002 and were announced in a final rule published on March 7, 2002 (67 FR 10490). In the final rule, it was explained that the specification would be adjusted following the Council's March meeting and announced in the *Federal Register* as an emergency rule. This action has been publicized widely through the Council process. Because the ABC and OY are substantially lower than those adopted for 2001, this emergency rule is necessary to restrict fishing so the fishery stays within its overall harvest allocation while allowing the various sectors of the fishery the opportunity to fully harvest their sectors allocations. To delay the rule beyond the start of the fishery could result in some sector allocations being exceeded and possible early closures for other sectors as a result of excessive harvest in the early season.

The reasons described above, pursuant to 5 U.S.C. 553(d)(3), constitute good cause to waive the 30-day delay in effectiveness, so that this rule may become effective before the fishery begins on April 1, 2002.

Executive Order 12866 (E.O. 12866): Pursuant to the procedures established to implement section 6 of E.O. 12866, the Office of Management and Budget has determined that this emergency rule is not significant.

Executive Order 13132 (E.O. 13132): This action does not contain policies with federalism implications under E.O. 13132.

Essential Fish Habitat (EFH): This action will affect fishing in areas designated as EFH by Amendment 11 to the FMP. This action reduces the whiting OY for 2002 from the 2001 level which is currently in place for the fishery. The potential effects of these changes are not currently quantifiable, but the changes are expected to have either no adverse effect on EFH, or to have a positive effect resulting from reduced fishing.

MEMORANDUM FOR WILLIAM T. HOGARTH, PH.D., ASSISTANT ADMINISTRATOR FOR FISHERIES, FROM D. ROBERT LOHN, REGIONAL ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE—APRIL 1, 2002

Finding of No Significant Impact on the Environmental Assessment of the Pacific Whiting Allowable Biological Catch and Optimum Yield for the 2002 Pacific Coast Groundfish Fishery

To manage and conserve the whiting resource in the exclusive economic zone off Washington, Oregon and California, NMFS is implementing the Pacific whiting (whiting) allowable biological catch (ABC) and optimum yield (OY) for 2002 by emergency rule. The attached environmental assessment (EA) analyzed a range of alternatives for setting the whiting specifications. The alternatives considered in the EA included the 2001 specifications based on a 1998 assessment and a range of ABCs and OYs based on a new assessment that was completed in February 2002. The alternatives based on the new assessment considered a range of recruitment assumptions and exploitation levels

On March 13, 2002 the Pacific Fishery Management Council (Council) made a recommendation intermediate to Alternatives 4 and 5 in the EA. The Council's recommendation was for a U.S.-Canada coastwide whiting OY of 190,500 mt with a U.S. whiting OY of 152,400 nit (80 percent of the U.S.-Canada coastwide OY). The Council recommended ABC was to be based on a F40% harvest rate with a medium-high recruitment scenario.

NMFS is disapproving the Council's recommendation to adopt an ABC and OY based on F40% with a medium-high recruitment scenario. NMFS will instead implement Alternative 4, which is an ABC based on F40% with a medium recruitment scenario and an OY that is adjusted by the 40/10 harvest policy as a precautionary measure (U.S. OY of 129,600 mt). I believe that the risk neutral medium recruitment scenario, instead of one that accepts greater risk, is supported by the best available science given the current biomass estimate and the uncertainty associated with the estimates of recent year class strength. An analysis of the expected impact on the human environment from the U.S. ABC and OY recommended by the Council was prepared and is included in Appendix A to the EA.

Finding of no Significant Impact

Based on the EA, review of the National Environmental Policy Act (NEPA) criteria for significant effects, and my knowledge of the expected impacts, I have determined that this action would not have a significant effect upon the quality of the human environment. Therefore, preparation of an EIS on the final action is not required under Section 102(2)(c) of the NEPA or its implementing regulations. This determination is based on the following factors:

1. As discussed in section 4.2 of the EA, the preferred alternative is not expected to jeopardize the sustainability of any target species that may be affected by the action. The whiting ABC will be based on a risk neutral medium recruitment scenario instead of one that accepts greater risk. Added precautionary measures built into the OY are expected to further reduce the risk of overfishing and allow the whiting biomass to increase. Incidental catch of species other than whiting are minor (generally less than 3 percent of the total catch by weight). The total take of other groundfish species are expected to be within the 2002 OYs specified. for those species. As discussed in sections 4.2 and 5.7 of the EA, incidental take of salmonids are expected to stay within the threshold in the biological opinions for the whiting fishery.

2. As discussed in section 5.1 of the BA, the preferred alternative will affect fishing in areas designated as essential fish habitat by Amendment 11 to the FMP. This action reduces the whiting OY for 2002 from the 2001 level which is currently in place for the fishery. The potential effects of these changes are not currently quantifiable, but the changes are expected to have either no adverse effect on EFH, or to have a positive effect resulting from reduced fishing.

3. As discussed in section 4.3 of the EA, the preferred alternative is not expected to have a substantial effect public health or safety.

4. As discussed in section 5.7 of the EA, the preferred alternative will not adversely affect endangered or threatened species or critical habitat.

5. As stated in section 4.4 of the BA, the preferred alternative is not expected to result in cumulative adverse effects that could have a substantial effect on target and non-target species.

6. As discussed in section 4.2 of the EA, the preferred alternative is not expected to jeopardize the sustainability of any non-target species. The bycatch of non-target species in the whiting fishery is expected to be minimal.

7. As discussed in section 4.2 of the EA, the preferred alternative is not expected to have a substantial impact on biodiversity and ecosystem function.

8. As discussed in Section 4.3 of this BA, the preferred alternative is expected to result in significant social or economic impacts. However, the proposed action is not expected to result in significant physical or biological impacts. Therefore, there are no significant social or economic impacts interrelated with significant natural or physical environmental impacts.

9. The preferred alternative has controversial aspects since it rejects the Council's recommended alternative for U.S. harvest of whiting of 152,400 mt and instead implements a lower harvest level of 129,600 mt. Industry participants have expressed concern about the economic impacts of the reductions in harvest. In addition, the March 5, 2002, Ninth Circuit Court of Appeals opinion in *Midwater Trawlers Cooperative* v. *Department of Commerce*, which is a challenge to Indian treaty fishing rights by the fishing industry, could result in complaints about the allocation of whiting between the tribal and non-tribal sectors of the fishery. The environmental community is likely to be concerned about the low biomass levels and how quickly the stock will be restored to a sustainable level.

In view of the analysis presented in this document, the proposed whiting specifications are not expected to significantly affect the quality of the human environment, with specific reference to the criteria contained in Section 6.02 of NOAA Administrative Order NAO 216–6, Environmental Review Procedures for Implementing the National Environmental Policy Act (NEPA).. Accordingly, the preparation of a Supplemental Environmental Impact Statement for the proposed action is not necessary.

Response to the remaining written questions to Vice Admiral Conrad C. Lautenbacher, Jr. was not available at the time this hearing went to press.

WRITTEN QUESTIONS SUBMITTED BY HON. ERNEST F. HOLLINGS TO VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Vulnerability of Protected Resources

The total Administration FY 2003 budget request included $157.2 million for Protected Resources Research and Management Services. However, almost half of this is spent on Pacific and Atlantic salmon. Research and management for all other species, including endangered species such as Steller Sea Lions, Right Whales, some sea turtles, as well as other marine mammals such as whales, porpoises and pinnipeds must share the remainder. Most of these other species require substantial additional research or assessment information to meet future management and compliance needs according to a recent internal management review.

Question 1. Why is so little being spent on protected resources other than salmon?

Question 2. Should funding be given to the Marine Mammal Commission to conduct the research and assessments that are so critically needed for future management, and compliance with the MMPA?

Question 3. What would be needed to get sufficient marine mammal and sea turtle population information to meet our conservation and management needs?

Question 4. What are the risks of not having such information?

National Polar-Orbiting Operational Environmental Satellites (NPOESS) and DoD

In May 1994 the Department submitted a proposal to converge the Department of Defense (DoD) and Department of Commerce (DOC) polar orbiting environmental satellite systems, to be administered by NOAA Integrated Program Office (IPO). The reason for the combination was to control costs and ensure on-time deployment—but the approach is still experimental.

Question 5. Can you identify any cost savings from this approach? What are they?

Question 6. The last we heard, the launch of the first NPOESS satellite will be in December 2008. Are you still on track for that launch date?

Question 7. What are your contingency plans if there is a launch failure?

Question 8. I understand that a primary satellite command and control facility has yet to be identified, but that DOD is urging selection of a site *outside* the U.S. In such a time of national security, don't you think such a decision would be unwise?

Question 9. Can the existing U.S.-based facilities provide the same or equivalent coverage?

Question 10. We specifically chose NOAA as administrator of this program. What role is DOD playing in the decisionmaking and administration?

Shrimper Issues

The U.S. has some of the strictest marine protection laws in the world. It is important that NOAA and the Department of State continue to pursue international agreements in order to level the playing field.

With respect to regulation of shrimpers, Congress in 1990 enacted Section 609 of P.L. 101–162, which restricts the import of shrimp harvested in a way that harms sea turtles. Under this law, nations must be certified as having a regulatory program to protect sea turtles in their shrimp trawl fisheries that is comparable to the U.S. program in order to obtain access to U.S. shrimp markets. Evidence observed during an inspection by the National Marine Fisheries Service (NMFS) at the port of Mazatlan, Mexico, November 13–16, 2001 revealed serious compliance and enforcement issues with respect to the use of Turtle Excluder Devices (TEDs).

Question 11. Such TED violations in Mexico come at a time when NMFS is considering a rule that would impose more stringent regulations on U.S. shrimpers. Is it justifiable to hold U.S. shrimpers to strict standards while taking a flexible approach to compliance in Mexico?

The antibiotic, Chloramphenicol, has recently been detected in shrimp products exported by Thailand, Vietnam and China and from Southeast Asia to the European Union and Canada, resulting in steps to severely restrict imports to the EU and Canada from these countries. Despite these countries being the first, second and fifth largest exporters of shrimp to the U.S. respectively, the U.S. has taken no such steps.

Question 12. I understand the U.S. Food and Drug Administration does not have testing protocols sufficient to detect the levels of Chloramphenicol found in EU and Canadian imports, yet the U.S. prohibits this antibiotic in imports. Have you discussed options to address this shortfall with the USFDA?

Question 13. Have you offered the expert services of your agency to fill testing gaps for imports?

Question 14. What steps have you taken to level the playing field for U.S. shrimpers, who's products do not threaten the safety of citizens?

NOAA Fleet Recapitalization

The 1992 NOAA authorization bill called for a 15-year program to replace and modernize the NOAA fleet. Approximately $200 million has been spent thus far for new ships, converting surplus navy ships, reactivating and modernizing inactive NOAA ships, and modernizing data collection systems. Another $30 million has been spent for repair projects to keep NOAA ships reliable. You have previously indicated sharp support for recapitalizing the fleet.

Question 15. In view of the growing needs of NOAA's ocean exploration mission, have you considered the advantages of a dedicated vessel to meet this mission?

Question 16. What is NOAA's plan for modernization and replacement of the NOAA fleet?

Of the FY 2003 planned ship operating days, NOAA ships are scheduled for 3776 days of operation, while 4449 days of agency need will be outsourced to other vessels. In FY 2002 NOAA will spend $59.5 million operating its fleet and $48.6 million outsourcing for ships or ship collected data.

Question 17. Now that recapitalization of the fleet is underway and more information in hand on cost of outsourcing, can you identify the relative costs and benefits of using NOAA assets as opposed to contractor or outsourced vessels for certain of NOAA missions?

Spending for Pacific Salmon

Total spending for Pacific Salmon restoration and other activities is provided through the National Marine Fisheries Service, land management agencies like Fish and Wildlife Service, and water management agencies like the Bonneville Power Administration and Army Corps of Engineers (FY 2002 enacted $445.5 million—FY 2003 proposed $448.6 million). NOAAs pacific salmon funding (FY 2002 enacted

$231.3 million—FY 2003 proposal $195.9 million) comes through the Pacific Coastal Salmon Recovery Fund, funds established under the Pacific Salmon Treaty, and through a number of base funding accounts. To date there has been very little accounting of how much of these funds have been spent on research into stock assessments, habitat restoration, or other mandates under ESA; or what progress has been made with these expenditures.

Question 18. Can you provide to me an accounting of NOAAs pacific salmon expenditures? How much of these funds have been spent on ESA related issues in each affected state?

Question 19. Does the allocation of monies to states under the Pacific Salmon Recovery Fund match the restoration needs of those states under ESA?

Question 20. What progress has been made in recovering salmon stocks with these funds? How is performance measured in relation to the expenditures to date?

Question 21. I understand that a large portion of funding appropriated under the NW Forest Plan in the mid 1990s was spent on Salmon related research and habitat restoration in Northwestern states. How much was spent in total, in what states, and on what issues? What have been the results of those expenditures on salmon restoration?

Question 22. Does the agency evaluate hydropower impacts in determining the potential in recovery of salmon stocks? Has sufficient progress been made on reducing hydropower impacts to allow restoration funds to have an effect?

WRITTEN QUESTIONS SUBMITTED BY HON. JOHN F. KERRY TO
VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Sea Grant

Established in 1966, the National Sea Grant College Program is the marine version of the research and extension activities at the country's land grant universities. In 1970, the program was transferred from the National Science Foundation to NOAA when that agency was created and placed in the Department of Commerce, where it has since flourished. Sea Grant's legislative charge is to "increase the understanding, assessment, development, utilization, and conservation of the nation's ocean and coastal and Great Lakes resources by providing assistance to promote a strong education base, responsive research and training activities, and broad and prompt dissemination of knowledge and techniques, and multi disciplinary approaches to environmental problems."

The President's FY 2003 budget proposes the program be transferred to NSF "to promote more rigorous, merit-based competition among researchers." However, Sea Grant is not merely a science grant program—it performs a range of services, including outreach and technical advice to coastal communities.

Question 1. Why did the Administration propose such a transfer when Congress has repeatedly, and unanimously, authorized its operation within NOAA?

Question 2. To the best of my understanding NSF does not have the authority to perform all the functions of Sea Grant, such as the outreach and extension services? What current Sea Grant activities would this proposal deny to our coastal communities?

Question 3. In today's hearing you stated that "NOAA would work with the National Science Foundation to ensure that the essential pieces of the program would continue as much as possible" How would NOAA assistance be possible considering outreach and extension services makeup one third of the program and NOAA will no longer be authorized any appropriations to carry-out these services?

Reducing Capacity

The need for capacity reduction has grown over the last 5 years just as discretionary funding is shrinking—particularly after 9/11. The NMFS 2001 Preliminary report, "Identifying Harvest Capacity and Over-Capacity in Federally Managed Fisheries" states that *"over-capacity exists in more than half (55 percent) of all federally managed fisheries."* While this is a striking statistic, it confirms what countless experts and managers have been telling us since the late 1980s. In 1996 we thought we had addressed the problem by creating a capacity reduction program under section 312(b) of the Magnuson Act. However, we cannot identify a *single* capacity reduction program that has been implemented pursuant to the process we created. Even now, each fishery's request requires a trip to Capitol Hill and faces an extremely uncertain future.

Question 4. Why has the 312(b) process failed—even when fishermen are willing to bear the burden of paying back federal loans?

Question 5. How could we streamline the process?

Question 6. How would you propose to fund capacity reduction programs?

Right Whales

With respect to rules aimed at protecting right whales, the Seasonal Area Management ("SAM") and the Dynamic Area Management ("DAM") rules recently issued by NFS both have serious shortcomings. The SAM rules allow floating line to be used between traps. The DAM rule places major burdens on fishermen to remove gear within only 48 hours, and by the time the rule is triggered, the whales may already be out of the area, or worse, already entangled in gear that was in the area prior to the rule taking effect.

Question 7. How long will it take for NFS to put into place a gear modification rule for protecting right whales that would allow one or more types of approved gear to remain in the water? What are the chances that NFS could work on an even more expedited basis to developed an interim rule allowing modified gear to be used in the areas where the "Dynamic Area Management" program is triggered?

Litigation Burden and Crisis Management

Concern has grown over the number of lawsuits being brought against NOAA fisheries because of the increased workload and resource drain, impact on management decisions, and the shortfalls highlighted by the litigation. Initially, when the first lawsuits were filed, it appeared that NMFS was failing to win cases because of failure to meet procedural requirements (*e.g.*, NEPA), and understand that efforts are focused on creating uniform processes to rectify this. However, recent analysis suggests substantive management decisions may be responsible for such losses.

Question 8. Has there been a determination of why NMFS has lost recent cases, on procedural requirements or substantive management grounds?

Question 9. What steps have been taken to address cases brought on procedural grounds?

Question 10. What steps have to taken to identify needed changes to address substantive challenges?

Question 11. How will you, as a senior management official, ensure that the agency is prepared to meet legal mandates and respond to litigation requests while carrying on the routine management activities of the agency?

Question 12. What is the role of the Department of Justice in decision making, and how would you suggest improving its understanding of the legal and technical issues involved in fishery management decision making?

EPA/NOAA Coastal Health Report and Status of Monitoring

The recent EPA/NOAA National Coastal Condition Report represents the existing knowledge on the condition of the nation's coastal waters, and further identifies some important and significant regional differences. No overall assessments were completed for Alaska, Hawaii, or the island territories.

Question 13. How can we as a nation possibly know where we're going or take the necessary steps to accomplish our goals, when we don't even know the current condition of a significant (and economically important) portion of our coastal environment?

Question 14. What is being done to fill in these gaps in the existing data sets and to establish some baseline conditions for these areas?

Question 15. How is NOAA, the nation's civilian ocean agency, taking the lead and ensuring we get routine and timely coastal trends information?

Question 16. What plans are in place for the agency to establish the kind of monitoring program necessary to collect and analyze data in subsequent years, establish trends, and to feed those results back into management decisions?

Question 17. How do you see coastal monitoring for trends and management decision fitting within the ocean and coastal observing system now being proposed? How does NOAA plan to ensure coordination in regional systems?

The report's assessment shows the nation's estuaries to be in fair to poor conditions, with a regional trend of poor condition in the Northeast to fair condition in the Southeast. I am deeply concerned that the Northeast scored so poorly both ecologically, with 23 percent of the sediments having degraded biology and 30 percent of the estuarine areas having impaired human uses. I'm certain that these condi-

tions are not assisting with the recovery of the many fish stocks essential to the economy of this region.

Question 18. With this data in hand, how is the agency adapting its current programmatic activities in the region to address the identified conditions?

Fisheries Modernization

The Administration's budget request includes an increase of $90.9 million for its Modernization of NOAA Fisheries Initiative, representing $74.8 million for science, $6.4 million for management, and $9.7 million for enforcement. However, a number of important elements to modernization have not been addressed that could positively impact monitoring, reporting, management and safety.

Question 19. Is the FY 2003 budget request of $5.4 million for support and continued modernization and expansion of the vessel monitoring system (VMS) program sufficient to meet our needs, particularly after September 11th?

Question 20. Why has the Administration not requested additional funding for vital modernization of the fleet such as electronic logbooks, VMS, increases in observer coverage, and bycatch reduction technologies?

Question 21. How much will it cost to really modernize fisheries management?

WRITTEN QUESTIONS SUBMITTED BY HON. DANIEL K. INOUYE TO VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Question 1. I am greatly concerned by the solicitation for mapping services that was issued by the National Ocean Service (NOS) to map and survey the benthic habitats of the Northwestern Hawaiian Islands (NWHI). Currently, there are only extremely limited data available on the NWHI for use by resource managers and policy makers during the NWHI sanctuary designation process. In these times of budgetary crisis, it is therefore essential that the mapping and surveying products arising from the solicitation be carefully tailored to meet the needs of the resource managers. How may we best work together to ensure that the best product is obtained?

Question 2. The nation has recently reached a much greater awareness of the unique and irreplaceable treasure that our coral reefs represent. Because 95 percent of the nation's coral reefs are located in the main Hawaiian Islands and the NWHI, Hawaii bears an awesome responsibility of stewardship of these precious resources. Fortunately, Hawaii is also a center of excellence for marine study, conservation, and management, where scientific expertise is complemented with a culture of respect and reverence for nature rooted in the beliefs and cultural practices of the Native Hawaiians. In light of the concentration of physical and human coral reef resources in Hawaii, what steps will the National Oceanic and Atmospheric Administration (NOAA) take to ensure that the limited funds available will be used for projects that meet the immediate needs of resource managers, including vesting more decision making authority to managers of NOAA managers in the field?

Question 3. Magistrate Judge Facciola of the United States District Court for the District of Columbia in *Hawaii Longline Association v. The National Marine Fisheries Service*, No. 01–765, issued a report and recommendations that the National Marine Fisheries Service (NMFS) is required to allow the Hawaii Longline Association to be allowed to participate in the generation of a Biological Opinion. How will the NMFS proceed with its new Hawaii longline biological opinion in light of this development?

Question 4. The NMFS has long been organized into administrative "regions." The coastal and marine areas of the United States face unique issues based on geography and culture, and the NMFS regions emerged as the most effective way to handle this diversity. By vesting decision-making authority in localities, the NMFS ensures that it can be responsive to the special needs of those localities. What are your thoughts on developing a similar structure for the NOS?

WRITTEN QUESTIONS SUBMITTED BY HON. MAX CLELAND TO VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Question 1. I have been informed by Georgia officials that the trawl fisheries have been closely monitored for stray turtle catches, and I support this monitoring. However, also off the coast of Georgia, I have heard from officials that shark drift gillnet fisheries in Georgia waters, at the height of the season this year, operated unmonitored. Why have steps not been taken to protect sea turtles from shark drift

gillnet fishery at a time when Georgia has recorded high sea turtle mortality rates? Is there a reason that the prohibition was not evenly applied to both the trawl fisheries as well as the shark drift gillnet fisheries?

Question 2. What measures are you taking to ensure that prohibitions are applied across the board?

Question 3. Do you have records of any of the shark drift gillnet fisheries been documented to take sea turtles in recent months?

WRITTEN QUESTIONS SUBMITTED BY HON. JOHN MCCAIN TO VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Question 1. It was reported in the April 12 edition of Science Magazine that you and Dr. Marburger of the White House Office of Science and Technology Policy outlined a plan to shift the U.S. Global Climate Change Research Program from a scientific steering group to the Department of Commerce. Many researchers fear that this would undermine the quality of research in the $1.7 billion program. This report is consistent with discussions the Committee had last year on the possibility of having a political appointee head the program. Can you identify the merits of having the program housed within the Department of Commerce and headed by a political appointee?

Question 1a. Why would the Department of Commerce be a better choice than NASA, which has over the half the funding for the program?

Question 2. You have mentioned that the President's Global Climate Change Initiative seeks to reduce greenhouse gas intensity by 18 percent over the next decade. Can you explain the greenhouse gas intensity and its importance?

Question 2a. Last year, the President stated that his climate change policy would be based upon sound science. What is the scientific basis for the 18 percent reduction?

Question 2b. Will the greenhouse gas intensity eventually make actual reductions in the amount of greenhouse gases in the atmosphere?

Question 3. The Global Climate Change Initiative is a multi-agency effort between the Departments of Commerce, Energy, and Agriculture, NASA, and the National Science Foundation. Who will have lead agency responsibilities?

Question 3a. Will the lead agency's responsibility include budgetary control over the other agencies participation?

Question 3b. How will this effort complement the existing efforts of the multi-agency U.S. Global Climate Change Research Program?

Question 4. NOAA has requested $5 million each for the Global Climate Atmospheric Observing System and the Global Ocean Observing System. The recent Senate-passed Energy Reform Act calls for a plan for the establishment of a National Climate Service for climate monitoring and prediction. Will these two programs be considered part of a National Climate Service?

Question 5. In its fiscal year 2003 budget request, the Administration proposed to move the Sea Grant Program from NOAA to the National Science Foundation (NSF). The Sea Grant Program was specifically placed in the Department of Commerce by an act of Congress after the creation of NOAA in 1970 to pair the applied research conducted by Sea Grant with regional resource and management needs. This program has been very successful in bridging the gaps between research, education, and applied management issues at the local level and there does not appear to be any compelling reason to move it. There is wide support throughout Congress for maintaining the existing structure of the Sea Grant Program within the Department of Commerce. Can you elaborate on the rationale for moving this program to NSF?

Question 6. According to the President's FY 2003 budget, "NOAA has over two-thirds of the Department's congressionally directed earmarks—74 projects costing over $160 million." How does Congressional earmarking affect NOAA's ability to fund its strategic goals and priorities?

Question 7. In your statement, you mentioned that without significant amounts of overtime and creative manual resource tracking, NOAA's accounting details would be non-existent. For fiscal years 1999, 2000, and 2001, NOAA received an unqualified (or clean) opinion from an audit of its financial statements. Can you elaborate on NOAA's achievement despite the problems many other federal agencies are experiencing?

Question 8. The Department of Commerce spend about 25 percent of its annual budget for large contracts and other procurement vehicles. One of the challenges for the Department is to balance the desire to streamline the acquisition process with the need to ensure that taxpayer dollars are wisely spent and laws and regulations are followed. How do you ensure this balance is maintained within NOAA?

Question 9. According to NOAA's plans, the Polar-orbiting Operational Environmental Satellite (POES) will be phased out and replaced by the NPOESS starting in 2008. How will this phase-out affect NOAA operations in Wallops Island, Virginia, and Fairbanks, Alaska?

Question 10. Your written statement mentions the importance of the scientific and technical workforce to accomplishing your mission. In terms of workforce needs, what shortages do you have and how do you plan to address them?

Question 11. We have heard concerns from other parts of the Department of Commerce on the physical conditions of the federal facilities. Do you foresee any major future budgetary needs for the NOAA's facilities?

Question 12. As part of the Administration's Climate Change Research Initiative, NOAA requests $18 million to improve climate monitoring and modeling systems. How will this request will improve NOAA's ability to determine the effects of global warming on the Earth?

Question 13. NOAA has requested $1 million to develop new technologies for forecasting and detecting tornadoes and other forms of severe weather. It is hopeful that these technologies will increase the lead time for tornadoes and hazardous weather. Can you discuss the impact of additional lead time for the people of La Plata, MD in the tornadoes of this past weekend?

Question 13a. Which technologies will you be pursuing with this funding?

Question 14. The Administration has placed an emphasis on outsourcing and privatizing many functions which the U.S. government currently performs. How does this emphasis affect the balance between the prediction services that should be provided by the National Weather Service and the services that should be provided by commercial weather services?

Question 15. NOAA has requested $5 million to establish a climate modeling center in Prince, NJ. Assuming this is for the Geophysical Fluids Dynamic Laboratory (GFDL), what capabilities would this add to the laboratory's existing work on climate modeling?

Question 16. Can you discuss the importance of space weather forecasts to the space industry? Also, are you experiencing an increase in demand for NOAA's services in this area?

Question 17. Can you elaborate on how improved weather forecasting leads to reductions in air traffic delays and costs savings for the airline industry?

Question 18. The National Polar-orbiting Operational Environmental Satellite System (NPOESS), a multi-agency program, has been making significant progress over the years. Are they any lessons-learned from the program that may be applicable to other multi-agency development programs?

Question 19. You have mentioned the request of $8.4 million to begin upgrading instrumentation aboard NOAA's Gulfstream IV plane. This technology will allow for 3 dimensional profiles of hurricanes from 45,000 feet to the surface in real-time. When can we expect to have such capability and what is the impact of this technology on Nation's response to these weather events?

Question 20. On NOAA's Energy Permit Rapid Response program, NOAA has requested $2 million to support the establishment and implementation of a streamlined energy permit process. Can you elaborate on NOAA's role in this initiative?

Question 21. Can you discuss any vulnerabilities to the operation of the NOAA facilities due to a lack of redundancy?

Question 22. NOAA has requested $7.2 million to implement an operational backup system for the National Weather Service's weather and climate supercomputer. The current computer is a single point of failure for the entire system. Are there other single point of failures in the weather prediction system that needs to be addressed?

Question 23. The National Polar-orbiting Operational Environmental Satellite System (NPOESS) combines programs at the Department of Commerce, Department of Defense, and NASA. How was this program managed to address the different operating styles of these three agencies in order to prevent the traditional "stovepiping" problem?

Question 24. NOAA has decided to delay the launch date for the next generation Geostationary Operational Environmental Satellite (GOES–R) from 2010 to 2012, citing the successful operation of the existing GOES satellites. What factors did NOAA examine before making this decision?

Question 24a. Will NOAA use this two-year delay to review alternative system architectures for GOES–R?

Question 25. NOAA has requested $2.0 million in support of the Study of Environmental Arctic Change (SEARCH) program to improve monitoring of the Arctic environment. Currently, what are the effects of global warming upon the Arctic region?

Question 26. Do you have plans for research concerning abrupt climate change?

WRITTEN QUESTIONS SUBMITTED BY HON. OLYMPIA J. SNOWE TO VICE ADMIRAL CONRAD C. LAUTENBACHER, JR.

Question 1. The Administration's request criticizes the large number of Congressional earmarks for NOAA. NOAA has over two-thirds of the Department's earmarks—74 projects costing over $160 million. The budget request cuts many of these unrequested projects and redirects funds to core programs. How do earmarks affect NOAA's ability to do its job? NOAA may have more earmarks than other agencies, but they still amount to only 0.04 percent of NOAA's overall budget. NOAA has cut many earmarked programs from its FY 2003 request. If these earmarked programs are not otherwise funded, does this mean that NOAA's priorities do not line up with Congress' priorities? How does NOAA determine which earmarked programs to cut?

Question 2. You only recently assumed your position as the Deputy Under Secretary of Commerce and Administrator of NOAA. With your extensive managerial experience, I imagine you are taking a hard look at NOAA and its organization. We are aware that NOAA is conducting a comprehensive program review, addressing what the agency is doing and how they are doing it. This review is scheduled to be finished May 1st—the day of this hearing. What is the scope of topics and issues in this review? Is NOAA's current organization the best way to meet its mission and mandates? What can NOAA do better? What can we do to help NOAA do better? Are their programmatic obstacles that need to be removed? If the report is not available today, when can we expect the final report to be released?

Question 3. The current Harmful Algal Blooms Task Force's action plan to eliminate the Gulf of Mexico dead zone outlined a program that would cost approximately $1 billion a year. It largely focuses on regional agricultural activities to limit nutrient runoff. To what extent has NOAA incorporated the Task Force's recommendations on the dead zone into its programs and activities? Does action in this area simply require more funding, or does NOAA need to make other institutional changes to implement these recommendations? If only a portion of this dead zone funding were provided, would NOAA implement any aspects of the action plan? How would it determine priority areas and issues for action? When it comes to implementing action plans like this, what do you think is the most effective way to integrate regional and local stakeholders?

Question 4. As you know, programs throughout NOAA need basic oceanic data to improve management models. NOAA's FY 2003 budget request includes $4 million to initiate a global ocean observing system. While efforts have already begun in some regions, including through the Gulf of Maine Ocean Observation System, this is the start of the National Ocean Observation System—a coordinated national effort. The FY 2002 Senate CJS Appropriations bill included report language that requires the Administration to submit an ocean observatories plan with the FY 2003 budget request. What is the status of this plan? What are the main findings and recommendations of this plan? How will the National Ocean Observing System be administered—would it be a part of the inter-agency National Ocean Partnership Program? If so, would this program continue to be chaired by the Navy? If it will remain under the Navy's jurisdiction, how can we ensure that it takes care of NOAA's program goals and needs? As we develop legislation in support of the National Ocean Observation System, what can you tell us about funding needs for implementation and maintenance of the system? Once implemented, what will the long-term cost/benefit ratio be? What other supportive elements would you like to see in legislation?

Question 5. The Saltonstall-Kennedy Act provides a valuable source of funding for U.S. fisheries research and development, but only a small fraction of this amount seems to have actually gone for this purpose. For example, S–K funds are estimated

to be $79.1 million for FY 2003, yet NOAA estimates that only $4.1 million of this amount (5.2 percent of the total) will be used for fisheries research. The budget proposal explains that the remaining $75 million will be used to offset their Operations, Research, and Facilities account. This follows a similar trend over at least the last ten years. The budget request states that, in FY 2003, a portion of S–K grants will go toward Atlantic salmon conservation and recovery. How much will this amount to? Is this part of the $4.1 million allocated for research, or is it part of a separate allocation of S–K funds? How does NOAA make the decision about what fraction of all S–K funds will go toward research? In other words, who makes research funding cut-off decisions? What do they base their decisions on? Once the non-research component of the S–K funds is transferred to the ORF account, does NOAA track what it is spent on? If so, what does it fund? For FY 2003, NOAA requests $2.359 billion for their ORF account, and $75 million of this is proposed to come from the S–K fund. In other words, only 0.03 percent of all ORF funds are from S–K funds. How else can NOAA work around this allocation, so that more S–K funds can be freed to be used for their intended purposes? Other mandated uses of S–K funds include things like fishing gear modification, fishing community development, and permit buy-back programs. We clearly have urgent need for these programs, so shouldn't these be a top priority when allocating S–K funds? If NOAA could increase the portion of S–K funds that support research, what could NOAA do to encourage the submission of more high-quality research proposals?

Question 6. In February 2001, I re-introduced the Coastal Zone Management reauthorization bill. A hold was put on the bill, due to concerns related to the oil and gas industry. Since oil and gas interests are tied to the Department of Interior's development of an energy policy, NOAA has needed to work with Interior to resolve this impasse. Resolution of oil and gas concerns will allow the CZMA reauthorization to proceed. What has NOAA done to resolve this impasse? Has NOAA been talking to the Dept. of Interior regarding how their energy policy relates to oil and gas in the coastal zone? What are NOAA's plans for developing proposed language that can settle this controversy? What kind of time line is NOAA looking at for this?

Question 7. I have several concerns about the expanded use of marine protected areas. For example, I'm concerned about the imbalanced representation on the new MPA Advisory Committee; the overlap with protected marine environments established in other laws; and NOAA's continued housing of this program in the National Ocean Service, considering that many of the protected areas currently in place are administered by NMFS. In May last year, I outlined these concerns to Secretary Evans, requesting that they review the effects of the executive order and that the Advisory Committee fairly represent those stakeholders most affected by it. What is the status of this review? What conclusions were reached about expanding the use of MPAs? How has the proposed membership of the MPA Advisory Council been changed to fairly reflect those who will be affected by MPAs—specifically the fishermen? When will this council begin work? How much administrative overlap will there be between existing protected marine environments and any new MPAs? NOAA's FY 2003 budget request includes $3 million for MPAs and houses this program in the National Ocean Service. This was the same in FY 2002. How well does NOS interface with NMFS, which already administers many existing MPAs? How will NOAA improve the coordination between these groups? As you know, MPAs can have many purposes, and they are often misunderstood by the public. How will poor public perception affect NOAA's ability to effectively use MPAs? How is NOAA working to improve public understanding of MPAs?

Question 8. Coral reefs are one of the most biologically productive ecosystems in the world, but unfortunately they are suffering from a variety of human-induced and natural threats including storms, tourism, harvest for the aquaria trade and building materials, destructive fishing practices, ship damage, diseases, and water quality degradation impact coral reefs. In FY 2002, NOAA received a total of $28.25 million for coral reef conservation and the Administration is requesting approximately the same amount for FY 2003. Knowing the problems our coral reefs are facing, do you think the amount requested for FY 2003 is sufficient for NOAA to address this issue? What are your plans to address non-point source pollution and its effects on our coral reefs?

Question 9. Recently a report was released that stated that the coral reefs in the Northwestern Hawaiian Islands are some of the most pristine in the world, while the coral reefs in the Atlantic which includes Florida, the Gulf of Mexico, and the Caribbean are some of the most in distress. Having said that, your fiscal year 2002 spend plan allocates 74 percent of the entire coral reef conservation program to the Pacific and only 34 percent to the Atlantic. Shouldn't we be spending more of our limited funding in the regions with the greatest needs?

Question 10. To date, NOAA has dedicated very little funding for studying the socioeconomics of coral reef damage and rehabilitation—only 1 percent of the overall budget in FY 2002 and zero percent in FY 2001. Considering that the causes of coral reef decline are significantly driven by human activities, how can NOAA justify spending so little on these aspects? How can solutions for coral reefs protection be developed if the human dimensions are not given adequate study? What are NOAA's plans to integrate socioeconomics and human behavior into their overall Coral Reef Conservation Program, both now and in the long term?

Question 11. I understand that Halter Marine is constructing the new fisheries research vessel, which will be replacing the ALBATROSS IV. I also understand that Halter Marine has filed for bankruptcy protection. Will Halter Marine's bankruptcy proceedings adversely affect or delay the construction of the new fisheries research vessel? If so, how will NOAA proceed with vessel construction plans? If delivery of the new fisheries research vessel is delayed, how may this affect NOAA's ability to conduct badly-needed fisheries research?

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