

**U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON SCIENCE AND TECHNOLOGY  
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT**

**HEARING**

**NOAA's FY 2008 Budget Proposal  
Thursday, March 22, 2007  
2:00 p.m. to 4:00 p.m.  
2318 Rayburn House Office Building**

**Purpose**

On Thursday, March 22, 2007 at 2:00 p.m. the House Committee on Science and Technology's Subcommittee on Energy and Environment will hold a hearing to examine the National Oceanic and Atmospheric Administration (NOAA) fiscal year 2008 (FY08) budget proposal.

**Witnesses**

**Vice Admiral Conrad Lautenbacher, Jr.**, Undersecretary of Commerce for Oceans and Atmosphere and Administrator, National Oceanic and Atmospheric Administration

**Dr. Len Pietrafesa**, Associate Dean, Office of External Affairs, Professor of Ocean & Atmospheric Sciences, College of Physical & Mathematical Sciences, North Carolina State University

**Background**

The President's FY 2008 budget request for the National Oceanic and Atmospheric Administration (NOAA) is \$3.96 billion, 2.7 percent below the FY 2006 appropriated funding.

NOAA's mission includes weather forecasting, climate prediction, management of fisheries and coastal and ocean resources. In addition, NOAA is responsible for mapping and charting our coastal areas and providing other navigation support services through programs of the National Ocean Service (NOS). NOAA also conducts research in support of these missions including atmospheric sciences, coastal and oceanic science, climate and air quality research, ecosystem research, and fisheries and marine mammal research. NOAA also operates a constellation of satellites that monitor and transmit data for weather forecasting, climate prediction, space weather forecasting, and earth and ocean science research through the National Environmental Satellite Data and Information Service (NESDIS).

The President's requests for NOAA routinely exclude funding for a wide array of Congressionally-mandated projects with some of this funding is re-directed to Presidential priorities. However, much of this funding is simply cut from the NOAA budget resulting in a lower funding request for NOAA. This is especially true for accounts in NOS which has the highest number of Congressionally-mandated activities.

The table below shows the six primary accounts of the agency's budget. The only line office receiving a substantial increase in the FY 2008 request is the National Weather Service (NWS). The FY 2008 request would result in funding levels below FY 2006 appropriations for all other offices, with NOS receiving the largest reduction of \$122 million, a 21 percent reduction.

**FIGURE 1: NOAA FY 2008 BUDGET REQUEST**  
(in millions of dollars)

<b>NOAA Program</b>	<b>FY06 Enacted</b>	<b>President's FY08 Request</b>	<b>FY08 Request vs. FY06 Enacted</b>	<b>% Change</b>
National Weather Service	848.2	903.5	+ 55.3	+ 6.5 %
Oceanic & Atmospheric Research	379.6	368.8	-10.8	-2.8 %
National Environmental Satellite, Data, and Information Service	952.2	978.3	+ 26.1	+ 2.7 %
Program Support	491.0	442.1	-48.9	-9.9 %
National Ocean Service*	590.5	468.5	-122.0	-20.7 %
National Marine Fisheries Service**	803.8	795.9	-7.9	-0.98 %
<b>TOTAL Direct Obligations***</b>	<b>4065.3</b>	<b>3957.1</b>	<b>-108.2</b>	<b>-2.7 %</b>

\* NOS programs are shared jurisdiction with the Resources Committee or not within the jurisdiction of the Committee on Science and Technology

\*\* NMFS is solely within the jurisdiction of the Resources Committee

\*\*\* This figure includes appropriated funds plus transfers from fisheries funds

### ***National Weather Service:***

The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, adjacent waters, and ocean areas for the protection of life and property. NWS provides a national infrastructure to gather and process data worldwide from the land, sea, and air.

The NWS is the only line office that receives a substantial increase in the President's FY 2008 request. The FY 2008 request for NWS is 6.5% higher than the 2006 enacted levels. Three areas account for most (about 84 percent) of the \$55.3 million increase: mandatory federal pay raises (\$18.3 million); operation and maintenance of the Advanced Weather Interactive Processing System (AWIPS), Automated Surface Observing System (ASOS), and Next Generation Weather Radar (NEXRAD) (\$11.3 million); and the expansion of the Tsunami Warning Network (\$17.2 million).

AWIPS is the specialized software package that enables forecasters to prepare accurate, timely forecasts and warnings. ASOS is composed of the sensors needed to measure and record significant weather conditions. NEXRAD is the radar system that shows patterns and movement of weather conditions.

The increases for the Tsunami network involves funds to repair one of the weather data buoys that add to the enhanced real-time hurricane observations and storm monitoring as well as complete the 39 DART buoy network system. The completion of the tsunami detection network expands NWS's operational capabilities.

However, this is the only area where the Administration proposes to make an investment in improved forecasting to protect life and property. If funds for the mandatory pay raise and tsunami network expansion are excluded from the FY 2008 request, the proposed NWS budget increase is a little over 2 percent. The Tsunami Hazard Mitigation Program was moved from Oceanic and Atmospheric Research (OAR) with a request of \$2.1 million.

NWS also requests a \$1.9 million increase to fund operations, maintenance and transition costs associated with the planned frequency conversion and technical updating of the NOAA Wind Profiler Network (NPN). The NPN improves NWS forecast capability during tornados, winter storms, and other severe storms improving their ability to provide aviation and fire weather warnings. The NPN has been in a quasi-operational status. The funds requested will provide for the transition of the NPN to full operational status.

NOAA requests an increase of \$2.3 million for the Space Environment Center (SEC) over the FY 2006 enacted funding level. The \$6.2 million request will support SEC real-time monitoring and forecasting of solar and geophysical events. This will support the space weather alerts and warnings for disturbances that can affect satellite operations, electric utility transmission equipment, astronauts working in the space station and people in aircraft flying along polar flight paths.

This FY 2008 request increase may not be sufficient to fully cover all operational and maintenance requirements for current weather forecasting equipment especially if we experience a year with high frequency of severe weather events and hurricanes that often result in damage or loss to weather monitoring and forecasting equipment. This level of funding will not enable NWS to move new monitoring and forecasting equipment from research to fully operational mode.

***National Environmental Satellite Data and Information Service (NESDIS):***

The President's budget FY 2008 budget request would increase the overall NESDIS budget increased by 3% (\$26 million increase). The budget for NESDIS is dominated by the procurement, acquisitions and construction (PAC) accounts for the polar and geostationary satellite systems.

The Operations, Research and Facilities (ORF) account for NESDIS contains the programmatic funding for management, processing, analyzing, and archiving the data received from all of NOAA's weather monitoring equipment – both ground-based and space-based. This program account includes funds for data processing and analyses at data centers located in Kentucky, North Carolina, Maryland, and West Virginia.

This account also supports a number of regional climate centers. The FY 2008 request for these accounts is \$20 million below the FY 2006 enacted levels. The FY 2008 request also eliminates \$4 million in funding for NOAA-NASA Partnerships to facilitate the transfer of research to operations. The Data Centers and Information Services accounts are reduced by \$18 million from the FY 2006 enacted levels.

***NESDIS Procurement, Acquisitions and Construction (PAC) Accounts:***

NOAA operates two satellite systems that collect data for weather forecasting. The polar satellites (Polar-Orbiting Environmental Satellites -- POES) orbit the earth and provide information for medium to long-range weather forecasts. The geostationary satellites (GOES) gather data above a fixed position on the earth's surface and provide information for short-range warnings and current weather conditions. Both of these systems are scheduled for replacement through the NPOESS and GOES-R programs, respectively. Because of the long time period required to design and develop new satellite series, the procurement of a new series begins years before the current series has completed its production cycle. Therefore, NOAA's procurement budget in this area includes both funds to complete and launch current weather satellites (POES and GOES) and funds to design and develop the next generation of weather satellites (NPOESS and GOES-R).

The current series of Geostationary Operational Environmental Satellites (GOES-N, O and P) are nearing completion. GOES-N was launched last May. The FY 2008 request of \$80.4 million will support the continued development, procurement and launch of the remaining GOES satellites scheduled for April 2007 and October 2008, respectively. The request for GOES-R, the new series of geostationary satellites (\$279 million) has been reduced from the original FY 2008 estimate (\$532 million) to reflect changes in the program's content (reducing the number of

instruments and planned number of satellites) and to provide additional time to re-structure the program.

The current series of Polar-Orbiting Environmental Satellites (POES) is nearing the end of its production cycle. There is one remaining satellite in this series to be launched (POES N-Prime). This satellite was damaged in production in 2003. Problems with the new series of polar satellites, National Polar Orbiting Environmental Satellite System (NPOESS) has resulted in a delay for the first launch of an NPOESS satellite. To decrease the risk of gaps in weather data from these satellites, the last POES satellite will now be launched in 2009. The original planned request for POES in FY 2008 was \$62 million. The FY 2008 request is \$43 million above the original estimate for FY 2008 provided in the FY 2007 request. The extra funds are to cover costs for rebuilding and storage costs for N-Prime, support for testing of a European satellite, installation of NOAA instrumentation on a European satellite, and to restore N-Prime funding that was re-directed to POES-N due to an unplanned delay in the launch of the POES-N satellite.

The request for NPOESS, the new polar satellite series, is \$331 million. This is \$13 million less than the planned FY 2008 request included in the FY 2007 budget. The funding will cover the continued development, production and risk reduction activities for the four key instruments to be included on the test satellite, the NPOESS Preparatory Project (NPP), scheduled for launch in 2010. Funding for this program will be officially re-evaluated and estimated and the prime contract will be re-negotiated later this year.

### ***Oceanic and Atmospheric Research:***

The office of Oceanic and Atmospheric Research (OAR) is the primary research arm of NOAA that provides the scientific information and tools needed for better understanding of the oceans and atmosphere. OAR conducts the scientific research, environmental studies, and technology development needed to improve NOAA's operations. OAR consists of seven internal research laboratories and manages extramural research at 30 National Sea Grant colleges and universities. Therefore, OAR contains over half of the research programs at NOAA. These programs are reduced by nearly \$11 million below the FY 2006 enacted levels an approximate 3 percent reduction.

NOAA's FY 2008 budget request for Climate Research increases by \$23 million (13.5 percent) over FY 2006 enacted funding. Most of this increase is in the competitive research program and is accomplished by redirection of funds from Congressionally-mandated projects. This includes \$50 million for Laboratories and Cooperative Institutes and Climate Data and \$133 million for the Competitive Research Program. A portion of this increase of \$5 million will enhance our understanding of the link between ocean currents and rapid climate change. An additional \$1 million in funding will provide additional computational support for assessing abrupt climate change.

The administration's FY 2008 NOAA budget reflects an increase in requested funds for ocean activities included in the Ocean Action Plan (OAP) and the recently released Ocean Research Priorities Plan (ORPP). The FY 2008 NOAA budget includes \$143 million to support three major areas outlined in the OAP: (1) Enhanced ocean science and research; (2) Protection and

restoration of sensitive marine and coastal areas; and (3) Ensuring sustainable use of ocean resources.

The FY 2008 budget includes funding for several important ocean and coastal programs for the first time and the FY 2008 budget request is higher than the FY 2007 request. However, the \$143 million provided in the Ocean Action Plan represents a decrease of over \$200 million from the FY 2006 request for ocean, Great Lakes, and fisheries programs at NOAA. The Integrated Ocean Observing System (IOOS) receives a request of \$11.5 million for regional observations.

The Administration's budget once again cuts the Ocean, Coastal, and Great Lake Research account below previous years' funding. The FY 2006 appropriation level is reduced from \$127 million to \$105 million, a 17 percent decrease for these programs.

Sea Grant receives a very small increase (\$166 thousand), and the Administration requests an increase for Ocean Exploration of about \$14 million. The Administration proposed last year to merge the National Undersea Research Program (NURP) with the Ocean Exploration Program. The budget appears to reflect this proposal. All funding for NURP is eliminated (\$9 million). Again, the largest reduction comes through the elimination of Congressionally-mandated projects under the category of Other Partnership Programs.

The FY 2008 budget request for programs authorized in the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA) is \$8.9 million, a \$9.5 million decrease from FY 2006 funding. HABHRCA authorizes funding for research on harmful algal blooms (HABs) and hypoxia to advance scientific understanding and our ability to detect, assess, predict, control, and mitigate these events.

Weather and Air Quality research accounts are reduced in the FY 2008 request by \$21 million dollars (30% decrease) from the FY 2006 enacted levels. The Laboratories and Joint Institutes would receive about \$6 million above FY 2006 enacted levels, but the other Partnership Programs are reduced by \$25 million with the elimination of over a dozen Congressionally-mandated projects.

The OAR budget also contains funding for the High-Performance Computing and Communication (HPCC) program. NOAA relies upon sophisticated computer models to make major improvements in NOAA's ability to forecast the weather and climate and to model ecosystems and ocean processes. The FY 2008 budget request proposes \$12.97 million, a \$6.6 million increase for this program.

### ***National Ocean Service:***

The National Ocean Service (NOS) protects the National Marine Sanctuaries and is an advocate for coastal and ocean stewardship. It also introduced electronic nautical charts which they combine with Global Positioning Systems (GPS) to enhance the safety and efficiency of navigation of U.S. waterways. The President's FY 2008 request for NOS would reduce funding

for NOS programs by over 20 percent. The largest reductions are in the Ocean Assessment program (\$36 million) and in the Response and Restoration program (\$13 million) of the Ocean Resources, Conservation and Assessment accounts.

Funding for Navigational Services including mapping and charting and geodetic surveys (measuring and monitoring the size and shape of the earth and locating points on its surface) would be reduced by over \$5 million in the FY 2008 request.

The Ocean and Coastal Zone Management accounts would receive about \$4 million additional in funding primarily through an increase in the request for funds in the Marine Sanctuary program.

***Program Support:***

The Program Support account includes funding for corporate services and agency management. This is the Under Secretary's office, the office of the Chief Financial Officer, and the Program, Planning and Integration Office.

The Program Support account also includes the NOAA Education Program. Overall, the Program Support account is reduced by about 10 percent as compared to the FY 2006 enacted level. Most of this reduction is due to a reduction in the procurement accounts.

However, the proposed funding for NOAA education programs is also reduced significantly below the \$38 million enacted for these programs in FY 2006 to a proposed funding level of \$19 million (48 percent reduction). NOAA plans to provide lower funding levels for the Hollings Scholarship (\$3.7 million); the Nancy Foster Scholarship (\$400,000); JASON Education and Outreach (\$1 million) and the Education Partnership Program (\$14 million).

With a nearly fifty-percent cut to the Education Program, the promotion of careers in environmental sciences to ensure future workforce in disciplines critical to NOAA's mission is undermined.