

FY 2011 Appropriations for the National Oceanic & Atmospheric Administration (NOAA)

NOAA's FY 2011 "Blue Book" (Budget Request)

(numbers are in millions)

| NOAA | FY 2010 Estimate | FY 2011 Request | % change FY10 vs FY11 Req. | House CJS Sub. * | % change House vs. FY10 | Senate Approps Comm. | % change Senate vs. FY10 | Final | % change FY10 vs. FY11 |
|---|------------------|-----------------|----------------------------|------------------|-------------------------|----------------------|--------------------------|-------|------------------------|
| Line Offices (ORF) | | | | | | | | | |
| National Ocean Service | 522.2 | 500.6 | -4.1% | | | 537.0 | 2.8% | | |
| National Marine Fisheries | 904.5 | 907.8 | 0.4% | | | 909.0 | 0.5% | | |
| Oceanic & Atmos. Research | 438.8 | 454.5 | 3.6% | | | 438.7 | flat | | |
| National Weather Service | 892.1 | 902.5 | 1.2% | | | 919.7 | 3.1% | | |
| NESDIS (ORF & PAC) | 1,398.5 | 2,209.0 | 57.9% | | | 2,100.0 | 50.2% | | |
| Within OAR: | | | | | | | | | |
| Climate Research | | | | | | | | | |
| Labs & Joint Institutes | 54.8 | 53.8 | -1.8% | | | 53.8 | -1.8% | | |
| Climate & Data Information | 12.1 | 13.6 | 12.3% | | | 13.6 | 12.3% | | |
| Competitive Research Program | 153.2 | 173.2 | 13.1% | | | 155.0 | 1.2% | | |
| Total, Climate Research: | 225.1 | 241.5 | 7.3% | | | | | | |
| Weather & Air Quality Research | | | | | | | | | |
| Labs & Joint Institutes | 55.1 | 60.0 | 8.9% | | | 60.0 | 8.9% | | |
| Phased-Array Radar | 4.0 | 10.0 | 150% | | | 10.0 | 150% | | |
| USWRP/THORPEX | 5.5 | 5.5 | flat | | | 5.5 | flat | | |
| Total, Weather & Air Quality Research: | 69.9 | 75.5 | 8.0% | | | 75.5 | 8.0% | | |
| Ocean, Coastal & Great Lakes Research | | | | | | | | | |
| Integrated Ocean Acidification | 0 | 11.6 | new | | | 7.5 | new | | |
| Within NWS: | | | | | | | | | |
| Local Warnings & Forecasts — Base | 617.8 | 636.4 | 3.0% | | | 636.4 | 3.0% | | |
| Advanced Hydrological Prediction Services | 6.0 | 6.0 | flat | | | 6.0 | flat | | |
| Aviation Weather | 11.4 | 26.7 | 134% | | | 23.5 | 106.1% | | |
| Central Forecast Guidance | 79.5 | 80.5 | 1.2% | | | 80.5 | 1.2% | | |

| | FY 2010 Estimate | President's FY 2011 Request | % change FY10 vs FY11 Req. | House CJS Subcom* | % change House vs. FY10 | Senate Approps Comm. | % change Senate vs. FY10 | Final | % change FY10 vs. FY11 |
|--|-------------------------|------------------------------------|-----------------------------------|--------------------------|--------------------------------|-----------------------------|---------------------------------|----------------|-------------------------------|
| Cooperative Observer Network | 1.9 | 1.9 | flat | | | 1.9 | flat | | |
| NOAA Profiler Network | 4.7 | 4.7 | flat | | | 4.7 | flat | | |
| AWIPS (PAC) | 24.0 | 24.4 | 1.7% | | | 24.0 | flat | | |
| NEXRAD (PAC) | 7.9 | 11.1 | 40.5% | | | 7.9 | flat | | |
| Radiosonde Replacement (PAC) | 4.0 | 4.0 | flat | | | 4.0 | flat | | |
| Within NESDIS: | | | | | | | | | |
| GOES-R | 667.5 | 730.0 | 9.4% | | | | | | |
| Joint Polar Satellite System (formerly NPOESS) | 382.0 | 1,060.8 | 177% | | | | | | |
| COSMIC-2 | n/a | 3.7 | new | | | | | | |
| NOAA Education Programs | | | | | | | | | |
| Competitive Educational Grants & Programs | 12.0 | 20.7* | Not a real increase** | | | 28.4 | | | |
| Minority Serving Institutions | 14.3 | 14.3** | flat | | | 14.4 | flat | | |
| GLOBE | 3.0 | 0 | Under OSTP review | | | | | | |
| Total, NOAA | 4,672.0 | 5,554.8 | 17.0% | 5,543.5 | 16.7% | 5,554.8 | 17.0% | 4,520.0 | -3.0% |

* The full House Appropriations Committee has not taken up the bill.

** Minority Serving Institutions folded into Competitive Educational Grants and Programs

FY11 Update 4-15-11

Yesterday, more than six months into Fiscal Year 2011, the U.S. House and Senate approved FY11 spending legislation to fund the operations of the federal government through September 30, 2011, or the end of this fiscal year. In back-to-back floor votes, the House passed the bill with bipartisan vote of 260 to 167 while the Senate passed it by a vote of 81 to 19. President Obama supports the deal and is expected to sign the bill.

The spending bill was drafted this week based on a bipartisan plan negotiated by President Obama, House Speaker John Boehner, and Majority Leader Harry Reid, agreed to at the midnight hour on Friday, April 8, and effectively averting an imminent government shutdown. The bill cuts a total of \$38.5 billion from both mandatory and discretionary spending accounts compared to FY10 levels. Compared to other areas of the government, science agencies are subject to small reductions, reflecting the restrained fiscal climate, but also demonstrating bipartisan congressional support for R&D.

NOAA is funded at \$4.52 billion, \$152 million or 3.0% less than the level at which it was funded in FY10. Operations, Research, and Facilities is funded at \$3.185 billion, \$119 million or 3.6% less, and Procurement, Acquisition, and Construction is funded at \$1.335 billion, \$23 million or 1.7% less. Of note, funding to keep the development of the Joint Polar Satellite System (formerly NPOESS) on track was not appropriated for FY11. Development can be expected to be delayed at least 18 additional months.

NOAA is prohibited from establishing or implementing a Climate Service in FY11. As you know, NOAA has had plans for more than a year now to create a Climate Service line office that builds on current climate research capacities to provide authoritative and timely climate information and other service products to users who need help preparing for the impacts of coming climatic changes. NOAA's plans will now have to be on hold until Congress gives it the green light, either through authorizing legislation or implicit authorization in an annual appropriations bill. Funding for a NOAA Climate Service is in the President's FY12 budget request, so we expect this will be a major topic of conversation as the FY12 budget process unfolds.

FY11 Update 7-27-10 (provided by Lewis-Burke Associates):

On June 29, the House Commerce, Justice, Science Appropriations Subcommittee marked up its version of the Fiscal Year (FY) 2011 Commerce, Justice, Science (CJS) appropriations bill. The bill includes a total of \$60.5 billion in discretionary funding, which is slightly below the President's budget request and \$3.9 billion below the FY 2010 enacted level. (The decrease from FY 2010 reflects the reduction in funding for the Census Bureau following completion of the 2010 Census.) The full House Appropriations Committee has yet to take up the bill.

On the Senate side, the Senate Appropriations Committee approved its version of the FY 2011 CJS appropriations bill on July 22, but a floor vote in the Senate has yet to be scheduled. The bill includes \$60.1 billion in total discretionary funding, about \$400 million below the President's request and the House Subcommittee mark.

The Senate CJS bill would provide a total of \$5.545 billion for NOAA, which is \$2 million above the request and the House Subcommittee level of \$5.543 billion (additional line office and program detail in the House bill is not yet available). As with the President's request, the majority of the increase to NOAA in the Senate bill is slated for NOAA's satellite programs. A few smaller targeted increases are included for specific NOAA programs, likely reflecting perceived needs in light of the Gulf Coast oil spill, such as funding for integrated observing systems, species recovery, and habitat restoration.

For NOAA Research (Office of Oceanic and Atmospheric Research (OAR)), the bill would provide \$438.7 million, which is about \$16 million less than the President's request and nearly flat with the FY 2010 appropriation. The OAR amount includes \$155 million for NOAA competitive climate research programs, nearly \$2 million less than FY 2010 and significantly lower (\$18 million) than the President's request. The bill would provide roughly flat funding for the National Sea Grant College Program (\$63.1 million), NOAA's Undersea Research Program (\$8.9 million), and the U.S. Weather Research Program (\$5.515 million), and a small increase for the Ocean Exploration Program (\$23 million). With respect to NOAA's cooperative institutes (formal cooperative agreements between NOAA and universities), the report accompanying the Senate bill states, "The Committee remains concerned that NOAA is underfunding new cooperative institutes, creating partnership with the external community under false financial pretenses. The Committee provides an increase to help

bridge this gap, but expects the administration to fully fund these cooperative institutes and laboratories at appropriate levels in future years.”

Unlike OAR, the National Weather Service (NWS) would receive a substantial increase in the Senate bill. The NWS operations and research budget would receive \$817 million, which is \$17 million over the President’s request and \$27 million over the FY 2010 level. The increases appear to be slated for the Local Warnings and Forecasts base (an increase of \$18.5 million over FY 2010) and Aviation Weather programs (an increase of \$12 million over FY 2010, but \$13 million below the President’s request).

Likely in response to the restoration and conservation needs of the Gulf of Mexico as a result of the oil spill, the Senate bill includes targeted increases for programs within NOAA’s National Ocean Service (NOS) and National Marine Fisheries Service (NMFS). NOS’s Office of Response and Restoration (the body within NOAA taking primary responsibility for NOAA’s response to the Gulf oil spill) would receive \$31.6 million in the Senate bill, which is \$7 million more than the President’s request and \$3.5 million more than FY 2010. Within NMFS, Protected Species Research and Management programs would receive \$213 million, a \$3.3 million increase over the President’s request and \$9.6 million more than FY 2010.

For the National Environmental Satellite, Data and Information Service (NESDIS), the Senate bill includes \$1.918 billion for acquisition and construction of NOAA’s satellites and climate sensors (lumping GOES, JPSS, DSCOVR, Jason-3 and COSMIC-2 together). This is \$100 million less than the President’s request, but \$719 million over FY 2010 (it is unclear from the report where the \$100 million would be taken from). While the Senate bill largely endorses the President’s request for NOAA satellite programs, with respect to the Obama Administration’s proposed restructuring of the National Polar-orbiting Operational Environmental Satellite System (NPOESS), now dubbed the Joint Polar Satellite System (JPSS), the report accompanying the bill states, “the Committee is not convinced that the legacy of cost overruns and enormous administrative overheads associated with this inflated and failed program have been entirely exorcized.” Further, the report reads, “The Committee directs NOAA to provide a smaller, less expensive path forward for JPSS in a detailed budget plan no later than 30 days after enactment of this act, and directs NOAA to provide monthly programmatic and procurement status reports to the Committee.”

Detail on the President’s FY 2011 Budget Request (2-1-10)

On February 1st, President Obama submitted to Congress an unprecedented \$3.8 trillion FY 2011 budget request. The proposed budget, which includes a renewed emphasis on job creation and economic growth, provides significant increases for education, scientific research and development, and innovation programs.

Highlighting the prioritization of these programs, the increases would be provided despite the White House instituting a three-year freeze in overall spending for non-security domestic discretionary programs projected to save \$250 billion over the next decade.

The President’s FY 2011 budget request includes \$5.554 billion for the National Oceanic and Atmospheric Administration (NOAA), which is the largest request NOAA has ever received. It

represents an increase of \$806 million or 17 percent above the FY 2010 enacted level. As has been the case for the last several years, the majority of this increase would be focused on NOAA's satellite programs; in this year's case, for a major restructuring of the National Polar-orbiting Operational Environmental Satellite System (NPOESS) program. Smaller increases for NOAA research activities are also proposed. Research and operations focused on climate change would see the most significant growth under the President's proposal.

Below is a breakdown of funding according to each NOAA line office:

NOAA Research – Office of Oceanic & Atmospheric Research

The President requests \$464.8 million for NOAA's Office of Oceanic and Atmospheric Research (OAR), an increase of \$15.7 million or 3.5 percent over the FY 2010 level. Within OAR, the request includes a total of \$241.5 million for climate research, including \$173.2 million for the Competitive Research Program, a \$29 million or 20 percent increase. Within Climate Research are the following increases:

- NOAA Climate Services Portal +\$1.5M: NOAA will develop an online Climate Services Portal program to provide the public with a broad array of climate communications, outreach, and education materials. The Portal will be a central component of NOAA's commitment to the integration and delivery of climate services by providing readily accessible climate data and information.
- Earth System Modeling: Urgent Climate Issues +\$7.0M: Numerical earth system models are essential to understand past climates and predict future climates. NOAA will accelerate development and use of state-of-the-art models to address such urgent climate issues as: sea-level rise, feedbacks in global carbon cycle, Arctic climate change, and decadal prediction of extreme events.
- Assessment Services +\$10.0M: NOAA will develop and produce climate assessments at national and regional scales to meet an increasing demand for climate change decision support. The assessments will synthesize, evaluate, and report on climate change research findings, effects of climate variability in different regions, and climate vulnerabilities and uncertainties for the U.S.
- Carbon Observing and Analysis System +\$8.0M: An accurate, reliable, and independent system for tracking sources and sinks of carbon dioxide and other greenhouse gases is needed to evaluate mitigation strategies and predict future climate change and its impacts, including ocean acidification. NOAA will complete and sustain an observation and analysis system to determine regional uptake and emissions of greenhouse gases across North America.
- Arctic Watch +\$3.0M: The Arctic region is undergoing profound air, land, and sea changes related to climate change. NOAA will establish with international partners an Arctic Observing Network that integrates observations from new and existing atmospheric, coastal, and oceanographic observatories; ocean moorings; ice buoys and stations; and ship transects.
- Global Ocean Observing System +\$4.8M: A sustained global observing system is the foundation of all climate research and services. NOAA will continue implementation of the Global Ocean Observing System (GOOS), with an emphasis on improving sea level rise monitoring and understanding.

Weather and Air Quality Research would receive \$75.5 million, a \$5.5 million increase. Increases include:

- Water Resources Research to Operations +\$7.7M: OAR and NWS will develop and transition to operations water forecasting services via improved quantitative monitoring and predicting of extreme precipitation events, river and stream flow, flash flooding, and storm surges.
- Multi-function Phased Array Radar +\$6.0M: NOAA working in collaboration with the FAA seeks to demonstrate that Multi-function Phased Array Radar technology can cost-effectively replace aging operational weather and aircraft-tracking radars while offering such significant service improvements, such as longer lead times for tornado warnings.

In addition, as has been the case in recent budgets, the FY 2011 request seeks to merge the National Undersea Research Program (NURP) with the Ocean Exploration Program. The requested funding for the combined program is \$27.8 million, which represents a \$2.87 million decrease when taking into account the combined funds appropriated in FY 2010 for the separate NURP and Ocean Exploration programs.

National Environmental Satellite, Data and Information Service

The FY 2011 request includes \$2.209 billion for National Environmental Satellite, Data and Information Service (NESDIS), which is \$811 million or 58 percent more than the FY 2010 enacted level. This increase can be attributed to a proposed major reorganization of the NPOESS program and new funding to get the satellite's procurement back on track. The restructuring of NPOESS, a tri-agency program between NOAA, the Department of Defense (DOD), and the National Aeronautics and Space Administration (NASA), is in response to ongoing concerns surrounding the mounting costs and scheduling delays that have compromised the success of this program up until this point. The primary change is the elimination of the tri-agency structure in 2010; NOAA and DOD/Air Force will no longer jointly procure NPOESS. Instead, civilian and military procurements will be split – NOAA and NASA will have responsibility for the afternoon orbit while DOD will take responsibility for the morning orbit. NOAA's portion will be renamed the Joint Polar Satellite System (JPSS). The agencies will continue to collaborate in areas that have been successful in the past (e.g. shared ground systems). A detailed plan for transitioning to the new structure will be released in the weeks to come. The new JPSS program would receive \$1.06 billion under the President's proposal, which is \$679 million or more than double the FY 2010 appropriation for NPOESS.

The request also includes increases or new funding for other procurement activities within NESDIS, including \$730 million for Geostationary Systems-R series (GOES-R) satellites, an increase of \$62.5 million or 9.4 percent; \$50 million for Jason-3, a \$30 million increase; \$3.7 million for the Constellation Observing System for Meteorology, Ionosphere, and Climate (COSMIC-2), which represents new funding; and \$9.5 million to refurbish the existing NASA Deep Space Climate Observatory (DSCOVR) satellite.

National Weather Service

The request includes \$1.003 billion for the National Weather Service (NWS), a \$3.3 million increase over FY 2010 (less than one percent). The request highlights a \$15 million boost, for a total budget of \$26.7 million, to fund the Next Generation Air Transportation System (NextGen) to improve aviation

weather services. The request also includes roughly flat funding for NEXRAD (\$46.4 million) and the Advanced Weather Interactive Processing System (AWIPS) (\$39.4 million).

National Ocean Services

The President's budget request includes \$550.6 million for the National Ocean Service (NOS), which is a \$28.1 million or a 5.1 percent decrease from the FY 2010 enacted level. Within NOS, the President's request would provide \$14.55 million for the Integrated Ocean Observing System (IOOS) regional observations, \$6.6 million for NOAA IOOS activities, and \$6.77 million in new money for coastal and marine spatial planning activities in response to the framework developed by a White House Task Force in December.

National Marine Fisheries Service

The President proposes \$992.3 million for the National Marine Fisheries Service (NMFS). This would represent a decrease of \$15.8 million or 3.7 percent. The request highlights \$8.4 million for aquaculture activities, \$2.3 million of which would be added to the budget to support the ongoing NOAA/USDA alternative feeds research initiative.

NOAA Education Program

The budget request includes \$20.76 million for NOAA Education Programs, which is \$32.995 million less than the FY 2010 appropriated amount. This cut is the result of the proposed elimination of a number of education programs and projects within the account that are typically added to the budget via Congressional earmark, including the BWET regional program and the Educational Partnership Program with Minority Serving Institutions (EPPMSI).