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Policy News from NSC Alliance

Through the NSC Alliance partnership with the American Institute of Biological Sciences, we are pleased to provide NSC Alliance members with the following public policy update. If you have any questions or require additional information regarding any of the following items, please contact NSC Alliance director of public policy Dr. Robert Gropp at 202-628-1500 x 250 or at rgcpp@aibs.org.

President Obama Proposes FY 2013 Budget: Science Does Comparatively Well

On 13 February 2012, President Obama released his official budget request for fiscal year (FY) 2013. According to the White House, the spending plan would cut the nation's deficit by \$4 trillion over the next decade and would avoid the \$1.2 trillion in automatic spending cuts mandated by the debt limit deal reached last August. The deficit reductions would be achieved by increased revenues, including higher taxes on families earning more than \$250,000, and spending cuts.

"I am proposing a 5-year freeze on all discretionary spending outside of security," wrote President Obama in his message that accompanied the spending plan. "This is not an across-the-board cut, but rather an overall freeze with investments in areas critical for long-term economic growth and job creation. A commonsense approach where we cut what doesn't work and invest in those things that make America stronger and our people more prosperous. Over a decade, this freeze will save more than \$400 billion, cut non-security funding to the lowest share of the economy since at least 1962, and put the discretionary budget on a sustainable trajectory."

Preliminary analysis suggests that science agencies fair reasonably well as compared to some other program areas. Overall, the President has proposed \$140.8 billion for research and development (R&D) spending. Non-defense R&D would increase by about 5 percent from the 2012 level.

The following provides a quick first look at the top line numbers for some key federal science agencies.

- National Science Foundation: \$7.4 billion (+\$340 million); Directorate for Biological Sciences would receive \$733.9 million (+\$21.5 million)
- Environmental Protection Agency: \$8.3 billion (-\$104.9 million); Science and Technology would receive \$807.3 million (+\$13.5 million)
- United States Geological Survey: \$1.1 billion (+\$34.5 million); the Ecosystems activity would receive \$177.9 million (+\$16.6 million)
- National Institutes of Health: \$30.7 billion, which is essentially unchanged from FY 2012
- National Oceanic and Atmospheric Administration: \$5.2 billion (+\$160 million)
- United States Department of Agriculture: Agriculture and Food Research Initiative would receive \$325 million (+\$60.5 million); the Agricultural Research Service would receive \$1.1 billion (-\$7.9 million)
- Department of Energy Office of Science: \$5.0 billion (+\$118.4 million); Biological and Environmental Research would receive \$625.3 million (+\$15.8 million)
- National Aeronautics and Space Administration: \$17.7 billion (-\$58.6 million)

Download the full analysis of the FY 2013 budget at http://www.aibs.org/public-policy/resources/AIBS_Budget_Report_FY_2013.pdf.

President's Budget Would Boost NSF by 5 Percent, but Cut CSBR Program

- 2013 NSF Budget Request: \$7.4 billion (+\$340.0 million)
- 2013 Research and Related Activities Request: \$6.0 billion (+\$294.3 million)
- 2013 Major Research Equipment and Facilities Construction Request: \$196.2 million (-\$0.9 million)
- 2013 Education and Human Resources Request: \$875.6 million (+\$46.6 million)
- 2013 Biological Sciences Directorate Request: \$733.9 million (+\$21.5 million)

The President's budget request for NSF would provide a 4.8 percent increase over the FY 2012 appropriation.

Research and education initiatives are prioritized over other programmatic areas. The Research and Related Activities account, which includes funding for the various disciplinary directorates, would receive an increase of 5.2 percent. This would fund an additional 500 competitive awards during the fiscal year, although the agency's funding rate is expected to remain at 22 percent. Education and Human Resources, which funds education research and various fellowships, would grow by 5.6 percent. Conversely, Major Research Equipment and Facilities Construction would stay nearly flat (-0.4 percent). The budget for administrative efforts would remain at the FY 2012 funding level.

The budget request includes increases for several Presidential priorities, including clean energy, manufacturing, and education. Toward these goals, the President proposed \$355.4 million (+\$14

million) for research related to clean energy technology, \$148.9 million (+\$39 million) for basic research that could develop new manufacturing technologies, and \$30 million for a new joint program with the Department of Education to improve math education.

Interdisciplinary programs would also grow in FY 2013. The Science, Engineering, and Education for Sustainability initiative would be funded at \$202.5 million, \$45.5 million more than last year. In 2013, the initiative would include five interdisciplinary programs that will take an integrated approach to addressing clean energy and sustainability; included are emphases on coasts and the Arctic. Additionally, a new interdisciplinary research program launched in 2012, Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE), would triple in size to \$63.0 million.

For research infrastructure, the FY 2013 budget requests funding from the Major Research Equipment and Facilities Construction account to continue building the National Ecological Observatory Network (NEON) and the Ocean Observatories Initiative (OOI). NEON would receive \$91.0 million (+\$30.7 million) for continued construction; NEON will break ground on three sites in the summer of 2012. Once completed, NEON will collect data across the United States on the impacts of climate change, land use change, and invasive species on natural resources and biodiversity. The Administration also proposed \$65.0 million (-\$37.8 million) for the fourth year of construction of OOI, which will consist of an integrated network of deep-sea buoys, regional cabled nodes on the seafloor, and coastal observatories that will provide continuous, interactive access to the ocean.

NSF initiatives in science, technology, engineering, and math (STEM) education would receive new funding. Expeditions in Education is a new program that would establish a partnership between the Directorate for Education and Human Resources and the research directorates to integrate and leverage STEM education research. The program would receive \$49.0 million in FY 2013. NSF's Transforming Undergraduate Education in STEM program would increase by 55.8 percent to \$61.5 million. The Research Experiences for Undergraduates program would be boosted by 3.7 percent.

NSF would expand its support for graduate students and early career scientists. The Faculty Early Career Development program (CAREER) would support approximately 40 additional young faculty members, for a total of 440 new awards in FY 2013. The Graduate Research Fellowship program would maintain the doubling of new awards achieved in FY 2010; the fellowship's stipend would also increase by \$1,500.

Several programs are recommended for cuts and consolidations totaling \$67.0 million. Four programs within the Mathematical and Physical Sciences Directorate are identified for elimination (-\$10.0 million), as well as four computer science and engineering programs (-\$17.0 million). Two public outreach programs that focus on communicating science, Communicating Science Broadly (-\$2.0 million) and Connecting Researchers with Public Audiences (-\$4.0 million), will also be eliminated. Climate change education would be cut by about a third to \$6.3 million.

The budget for BIO would increase by 3.0 percent to \$733.9 million. The number of research grants awarded, average award size, and average award duration are expected to be comparable to FY 2012 levels. The funding rate across the directorate would remain at 15 percent. BIO provides about 62 percent of federal funding for non-medical, basic research, including environmental biology, at academic institutions in the life sciences.

Within the request for BIO, funding would be allocated among five divisions accordingly:

- Molecular and Cellular Biosciences: \$132.7 million (+\$6.9 million, +5.5 percent)
- Integrative Organismal Systems: \$220.5 million (+\$8.2 million, +3.9 percent)
- Environmental Biology: \$143.7 million (+\$1.2 million, +0.8 percent)
- Biological Infrastructure: \$129.7 million (+\$3.5 million, +2.8 percent)
- Emerging Frontiers: \$107.3 million (+\$1.7 million, +1.6 percent)

Several NSF-wide initiatives would receive new funding within BIO. In addition to \$7.5 million in additional funding for the Science, Engineering and Education for Sustainability initiative, BIO would receive \$4.6 in additional funding for the Research at the Interface of the Biological, Mathematical, and Physical Sciences (BioMaPS) program. BIO's support of clean energy technology would be increased by \$6.0 million. As part of INSPIRE, BIO would receive an additional \$2.0 million to co-fund high-risk/high-reward, cross-disciplinary grants.

NSF is also embracing the concept of "grand challenges" in the biological sciences, themes highlighted in a 2010 report from the National Research Council. The 2013 budget request calls for \$20.0 million in new funding across all BIO divisions for research relevant to the following grand challenges: synthesizing life-like systems; understanding the brain; predicting organisms' characteristics from their DNA; interactions of the Earth, its climate, and its biosphere; and understanding biological diversity.

The Long-Term Ecological Research sites would receive \$28.0 million (+2.1 percent).

Digitization of scientific information associated with biological specimens held in U.S. research collections would continue to be supported at \$10.0 million a year. Collections in Support of Biological Research would not be funded in FY 2013 (-\$4.0 million). Instead, the program would change from an annual to biennial competition. The Assembling the Tree of Life program, which aims to resolve evolutionary relationships for the major lineages of organisms, would be moved towards a biennial competition that combines two years of funding into each set of awards.

Other NSF Directorates

The Geosciences (GEO) account would grow to \$906.4 million, an increase of \$21.2 million from the FY 2012 funding level. At \$259.6 million, the Social, Behavioral, and Economic Sciences Directorate (SBE) would grow by \$5.3 million.

NSC Alliance, SPNHC, ASMD, AIBS, AAM Oppose CSBR Program Changes

Today, NSC Alliance and other organizations wrote to the National Science Foundation (NSF) regarding the agency's proposed budget for support of scientific collections.

Although the President's recently released fiscal year 2013 budget request is generally supportive of science, NSF proposes to change the Collections in Support of Biological Research program from an annual to biennial competition. The change would effectively cut the program's funding in half.

The CSBR program provides vitally important support to our nation's biological sciences research collections. The program is considered by some to be besieged by more grant proposals than it can support. A biennial funding system would likely exacerbate the situation.

Several other organizations joined NSC Alliance in signing the letter, including Society for the Preservation of Natural History Collections, American Association of Museums, American Institute of Biological Sciences, and Association of Science Museum Directors.

Read the letter at http://nscalliance.org/wordpress/wp-content/uploads/2012/02/joint-society-ltr-nsf-fy-2013.pdf.

Smithsonian Institution Could See Increase for Collections Digitization, Preservation

• 2013 Budget Request: \$856.8 million (+\$46.6 million)

Federal support for the Smithsonian Institution would increase by 5.8 percent. The federal government provides roughly 65 percent of the Institution's total funding.

The budget includes an increase of \$1.5 million to digitize collections and make them accessible online. Preservation of collections would see an increase of \$1.4 million, which would be used for a collections space survey, to improve storage conditions, and to address recommendations made by the Smithsonian Inspector General.

No new funding is proposed to address SI's "four grand challenges": 1) unlocking the mysteries of the universe, 2) understanding and sustaining a biodiverse planet, 3) valuing world cultures, and 4) understanding the American experience. "Although no specific Grand Challenge increases are requested for FY 2013, the Institution will continue advancing the Strategic Plan with the increases appropriated in FYs 2011 and 2012," states the Institution in their budget request.

Several Smithsonian facilities used for research and curation of scientific collections would be renovated under the proposed FY 2013 budget. The National Museum of Natural History would receive \$8.8 million for repairs. The Smithsonian Environmental Research Center laboratory would receive \$15.1 million to complete renovation of a laboratory building and access road.

Four million dollars would be used to construct a collections storage facility. The Smithsonian Tropical Research Institute would receive \$7.0 million to convert an uninhabitable building into a research and laboratory facility.

IMLS Budget Request is Flat

The fiscal year (FY) 2013 budget request for the Institute of Museum and Library Services (IMLS) would fund IMLS at \$232.0 million, the same as the FY 2012 enacted level.

Museum services would receive \$29.4 million, which is unchanged from the current fiscal year. Funding for Research, Analysis, Evaluation and Data Collection, a budget line that was recreated after the reauthorization of the Museum and Library Services Act of 2010, would remain at \$1.9 million.

The budget request includes support for the first ever census of museums in the United States. According to IMLS budget documents: "IMLS is undertaking a comprehensive census of museums in the U.S. At this time no accurate inventory exists and we believe that our current assumptions vastly underestimate the number of U.S. museums. This data will help public officials and practitioners make informed policy decisions about the future of museum service in the U.S."

The budget also will support "innovative development of digital collections and develop new tools to help people find and use digital resources" through the National Leadership Grant program.

The complete budget request for IMLS can be downloaded at www.imls.gov/assets/1/AssetManager/FY13_CJ.pdf.

Encyclopedia of Life Launches Education Innovative Challenge

The Encyclopedia of Life (EOL) is offering a \$50,000 prize for the winner of the EOL Education Innovation Challenge. This international competition aims to foster development of educational software tools, services, or games using EOL content.

The competition will award funding to the most scalable and innovative applications. Target audiences can include the general public, citizen scientists, and learners of all ages in both formal and informal settings.

The Challenge is a two-stage process. In Stage 1, applicants submit a product idea that includes an overview of the concept. Applicants who are selected to continue to Stage 2 will be asked to submit a development plan and budget required to complete a working product. One or more prizes will be awarded to successful Stage 2 proposals.

The deadline for Stage 1 applications is 23 March 2012. For more information, visit http://eol.org/info/290.

Upcoming Meeting of the Native American Graves Protection and Repatriation Review Committee

The Native American Graves Protection and Repatriation Review Committee will meet on 28-29 November 2012 in Washington, DC. The agenda for the meeting will include finalization of the Review Committee Report to Congress for 2012, the appointment of the subcommittee to draft the Review Committee's Report to the Congress for 2013, and discussion of the scope of the Reports, and National NAGPRA Program reports.

The Committee may also consider requests for a recommendation to the Secretary of the Interior to effect the agreed-upon disposition of Native American human remains determined to be culturally unidentifiable.

The agenda and materials for this meeting will be posted by late October at http://www.nps.gov/nagpra.

The Review Committee is also soliciting presentations by museums, Indian tribes, Native Hawaiian organizations, and Federal agencies on the following two topics: (1) the progress made, and any barriers encountered, in implementing NAGPRA, and (2) the outcomes of disputes that have come before the Review Committee. More information is available at http://www.gpo.gov/fdsys/pkg/FR-2012-02-10/html/2012-3145.htm.

Save the Date: 2012 SPNHC Annual Meeting

The Society for the Preservation of Natural History Collections will hold its annual meeting at the Peabody Museum of Natural History at Yale University in New Haven, Connecticut from 11-16 June 2012.

The meeting theme is: Emerging Technology and Innovation in Natural History Collections Management. Abstracts for oral presentations and posters are due by 13 April.

Additional information is available at: http://peabody.yale.edu/collections/spnhc2012/home.

The Natural Science Collections Alliance is a Washington, D.C.-based nonprofit association that serves as an advocate for natural science collections, the institutions that preserve them, and the research and education that extend from them for the benefit of science, society, and stewardship of the environment. NSC Alliance members are part of an international community of museums, botanical gardens, herbariums, universities, and other institutions that house natural science

collections and utilize them in research, exhibitions, academic and informal science education, and outreach activities. Website: www.NSCAlliance.org.

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