

25 August 2017

The Honorable Mitch McConnell  
Senate Majority Leader  
317 Russell Senate Office Building  
Washington, D.C. 20510

The Honorable Paul Ryan  
Speaker of the House  
H-232, US Capitol  
Washington, D.C. 20515

The Honorable Charles Schumer  
Senate Minority Leader  
322 Hart Senate Office Building  
Washington, D.C. 20510

The Honorable Nancy Pelosi  
Democratic Leader  
H-204, US Capitol  
Washington, D.C. 20515

Dear Majority Leader McConnell, Speaker Ryan, Minority Leader Schumer, and Democratic Leader Pelosi:

On behalf of the American Geophysical Union (AGU) and its 60,000 Earth and space scientist members, we urge you to maintain robust federal investments in America's scientific enterprise by passing a bipartisan budget agreement that increases the spending caps for non-defense discretionary programs and completing the FY2018 appropriations process this year.

While we recognize the fiscal constraints facing Congress, we urge you to provide strong funding for our nation's federal science agencies, including NASA, NOAA, NSF, USGS, and the Department of Energy.

#### **National Aeronautics and Space Administration**

We urge you to continue the strong pace of growth at the National Aeronautics and Space Administration (NASA) by appropriating \$20.5 billion for the agency for FY18, a 4% increase in funding over FY17 levels. As part of that funding, we request that you appropriate \$5.9 billion for NASA's Science Mission Directorate and provide equitable increases in funding for all of NASA's science missions, including Earth Science, Planetary Science, and Heliophysics. Science has always formed the key backbone of NASA's work, and NASA has always been a multi-mission agency, with each mission complementing the others.

We also urge Congress to continue to invest in NASA's Education office, including the Space Grant program. NASA provides unique STEM education opportunities and training that are vital to develop the next generation of engineers, scientists, and innovators.

#### **National Oceanic and Atmospheric Administration**

AGU requests that Congress appropriate \$6.1 billion for the National Oceanic and Atmospheric Administration (NOAA) for FY18. This 7% increase in funding over FY17 levels will allow NOAA to continue its world-class research, which in turn will help to sustain a strong economy and protect the nation.

From the heartland to the coasts, NOAA provides services that millions of Americans rely on every day. NOAA plays a unique role in supporting coastal economies by monitoring fisheries, restoring habitats, observing coastal conditions, and providing data to decision makers. In addition, NOAA provides data that weather and climate sensitive industries – which account for an overwhelming majority of the U.S. GDP – rely on daily. The value of these daily weather forecasts is estimated at \$11.4 billion annually. NOAA data also helps communities and property owners prepare for, respond to, and mitigate against natural and manmade hazards, such as droughts floods, tornadoes, blizzards, and hurricanes. Moreover, NOAA continuously strives to improve the accuracy, monitoring, and warning time of its projections. Robust funding support to protect and support these programs will help safeguard the health and safety of Americans.

### **National Science Foundation**

We urge Congress to provide at least \$7.8 billion in funding for the National Science Foundation (NSF) for FY18, a 5% increase in funding over FY2017 levels. While we were pleased to see NSF funded at a higher level than the President’s request in both the Senate and House Appropriations bills, we’re concerned that even a 2% cut to NSF will have a detrimental impact on our nation’s scientific enterprise. NSF is the largest funder of basic research and the related educational opportunities at our nation’s college and universities. This funding is vital to ensure that we retain the next generation of scientists and innovators by providing them with the support and opportunities they need to pursue graduate degrees in STEM fields and early career-level jobs. Additionally, NSF Directorates support the research infrastructure and centers that enable transformative science across institutions.

### **United States Geological Survey**

AGU requests \$1.2 billion for the United States Geological Survey (USGS) for FY18, a 9% increase over FY17. Right now, with the U.S. facing increased demands for energy, greater vulnerability to natural hazards, and a growing need for clean water, the USGS is uniquely positioned to provide the information and approaches necessary to respond to these challenges. With the distinct capacity to deploy interdisciplinary teams of experts to gather data, conduct research, and develop decision support tools, the USGS delivers timely assessments of mineral and energy resources, reduces risks from natural and human-induced hazards, and ensures accurate assessments of our water quality and quantity.

An investment of \$1.2 billion for FY18 will allow the USGS to sustain current efforts in scientific discovery and innovation and to make strategic investments that will produce the vital energy, geologic, and environmental knowledge needed by decision-makers across the country.

### **Department of Energy**

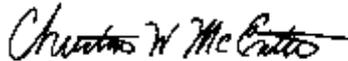
We urge you to support strong funding for the Department of Energy’s (DOE) research endeavors by providing \$5.6 billion for DOE’s Office of Science, a 3% increase over FY2017 enacted levels. We also request \$325 million for DOE’s Advanced Research Project Agency - Energy (ARPA-E) program. Investments at this level will help the DOE fortify America's leadership in energy research and development and support cutting-edge technology to transform our nation's energy landscape.

As the largest supporter of basic research in the physical sciences, DOE's Office of Science provides competitive grants that support 25,000 researchers at all careers levels, and provides these researchers –from academia to Fortune 500 companies – access to resources and user facilities to advance our knowledge and foster energy innovations. Robust investments in ARPA-E promote our nation's security and stimulates jobs and the economy. ARPA-E bridges the gap between research and the commercial market by providing resources for high-risk, high reward projects in the energy space not traditionally funded by the private sector.

As you work to address the budget and finish the FY2018 appropriations process, we urge you to prioritize our nation's scientific enterprise, which repeatedly proves to be a lucrative investment for America. We also urge you to reject any riders that would diminish scientific integrity and capability at our federal science agencies. AGU and its members stand ready to work with you to advance America's scientific enterprise.

Sincerely,

Christine McEntee



CEO/ Executive Director  
American Geophysical Union

Cc: Senate Committee on Appropriations  
House Committee on Appropriations