

**Testimony Submitted by
American Geosciences Institute**

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**To the United States House of Representatives
Committee on Appropriations
Subcommittee on Interior, Environment, and Related Agencies**

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Thank you for this opportunity to provide the American Geosciences Institute's perspective on fiscal year (FY) 2016 appropriations for geoscience programs within the Subcommittee's jurisdiction. We ask the Subcommittee to support and sustain the critical geoscience work of the United States Geological Survey (USGS), the Bureau of Land Management (BLM), the National Park Service, and the Smithsonian Institution. **Specifically, we ask that you support the President's request for \$1.2 billion for USGS, but we respectfully request that Congress place greater emphasis on the geological sciences within the USGS mission; \$120 million for Energy and Minerals Management at the Bureau of Land Management; \$351 million for the National Park Service's Natural Resource Stewardship and Everglades Restoration activities; and \$936 million for the Smithsonian Institution.**

The Earth provides the energy, mineral, water, and soil resources that are essential for a thriving, innovative economy, national security, and a healthy population and environment. We must understand the Earth system, and particularly the geological characteristics of Earth's surface and subsurface, in order to sustain human health and safety, energy and water supplies, and the quality of the environment, while reducing risks from natural hazards.

AGI is a nonprofit federation of about 50 geoscientific and professional associations that represent approximately 250,000 geologists, geophysicists, and other Earth scientists who work in industry, academia, and government. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resilience to natural hazards, and the health of the environment.

U.S. Geological Survey

AGI supports the President's request for \$1.2 billion for USGS. We respectfully suggest that Congress should allocate more resources to USGS's geoscience functions; there is no alternative source for this nationally important expertise.

Importance of Geoscience Functions at USGS: If we do not understand the platform upon which our existence depends – the Earth itself – we put all our achievements at risk. Congress has long recognized the national importance of understanding the geological structure, mineral resources, and products of the national domain, and has vested responsibility and authority for these functions in the USGS.

The need for geological information has not diminished since USGS was established in 1879. On the contrary, as we place increasing demands on Earth’s system, many critical decisions rely upon geoscience information. The USGS has a wide-ranging mission to provide objective data, observations, analyses, assessments, and scientific solutions to support decision making; while there is merit to USGS’s broad remit, its unique geological mission should be paramount.

Table 1 highlights those Mission Areas and Accounts that have been singled out for lower increases than other sections of USGS since FY 2014; we note that these contain the majority of USGS’s geoscience functions. We respectfully ask Congress to recognize the importance of geoscience research, monitoring, information collection and analysis to the nation’s safety, economy, defense, and quality of life, and to support USGS’s mandated role by funding balanced investment in USGS programs.

USGS Mission Area or Account	FY 2014 Enacted	FY 2015 Enacted	% change, FY 14-15	FY 2016 request	% change, FY 15 – FY16 request	% change, FY14 – FY16 request
Ecosystems	152,811	157,041	2.8	176,299	12.3	15.4
Climate & Land Use	131,975	135,975	3	191,828	41	45.4
Energy, Minerals	71,901	70,826	-1.5	75,785	7	5.4
Environmental Health	19,614	21,445	9.3	27,517	28.5	30.1
Natural Hazards	128,486	135,186	5.2	146,363	8.3	13.9
Water Resources	207,281	211,267	1.9	222,878	5.5	7.5
Core Science Systems	108,807	107,228	-1.5	126,667	18.5	16.4
Science Support	110,704	105,611	-4.6	112,828	6.5	1.9
Facilities	100,421	100,421	0	114,327	13.8	13.8
Total USGS	1,032,000	1,045,000	1.3	1,192,492	14.3	15.6

Shaded areas: Mission Areas and Accounts with lowest percentage increases enacted (FY 2014-2015) and proposed (FY 2016)

Table 1: Trends in funding for USGS Mission Areas and Accounts, FY 2014 – FY 2016 request.

National Geospatial Program: Topographic mapping has been a core activity at USGS since its inception. New technologies for mapping the Earth reveal valuable details about the landscape that have multiple applications. AGI strongly supports the 3D Nation interagency partnership to build a modern elevation map of the nation’s territories and urges Congress to support USGS’s contribution, the 3DEP (3D Elevation) program. **AGI strongly supports investment in lidar and ifsar mapping, and the President’s request for \$75.7 million for the National Geospatial Program.**

Mineral Resources Program: AGI is a founding member of the Minerals Science and Information Coalition (MSIC), which supports minerals expertise in the federal government. We are concerned at the dearth of investment in this foundational component of the manufacturing supply chain, which is critical to our national economy and defense. **AGI**

supports the President's request for \$47.7 million for the Mineral Resources Program and asks that Congress add \$5 million in new funding to create minerals forecasting capabilities.

We note the success of the Critical Materials Hub in the Department of Energy (DOE) and suggest that an equivalent hub, the Critical Minerals Hub, is needed in USGS. There is no point developing new materials if we cannot supply the raw materials to manufacture them. **AGI suggests the creation of a Critical Minerals Hub, with funding of \$25 million per year for 5 years,** to match the Critical Materials Hub in DOE.

Energy Resources Program: AGI supports increased funding for the Energy Resources Program. We note the importance of research on gas hydrates, which may play a significant role in future energy and climate scenarios. We are pleased to see interagency collaboration on several projects and urge USGS to develop opportunities to collaborate effectively with other agencies, including the possibility of integrating more geological information with DOE's Subsurface Technology and Engineering (SubTER) crosscut, to ensure prudent use of federal funds. **AGI supports funding of \$28.1 million for the Energy Resources Program.**

Earth Observing Systems: One of the most fundamental concepts in the geosciences is that the Earth changes through time. It is impossible to overstate the importance of long-term, consistent monitoring of the Earth to provide a sound basis for decision making. **AGI supports the Landsat satellite program and supports the President's request for \$77.6 million to ensure the seamless continuation of this important dataset.**

Water Resources Program: The extreme drought situation in large tracts of the country highlights the importance of understanding the quality, quantity, and distribution of our groundwater and surface water resources. **AGI urges Congress to ensure the continuity and expansion of nationwide, long-term data collection and research programs that support water planning and decision making across all states, and to fund Water Resources at \$222.9 million.**

Natural Hazards Program: Detailed topographic data from the National Geospatial Program is the foundation for a step-change in assessing landslide, sinkhole, and other natural hazards; the sooner lidar data are analyzed by USGS, state, and other entities, the more potential tragedies may be avoided. **AGI supports increased funding at \$8.0 million for the Landslides Hazards Program** in order to reap benefits from geospatial investments as quickly as possible.

USGS earthquake expertise is needed now more than ever. Earthquakes are being recorded more frequently in states like Oklahoma, and early warning systems are needed to avoid potential devastation from large earthquakes. **AGI is disappointed in the proposed cut to the Earthquake Hazards program and asks Congress to fund the program at \$60 million.**

The Science Application for Risk Reduction (SAFFR) project and other elements of the Natural Hazards mission area are linking USGS scientific information with public awareness and action, adding great societal value for relatively small outlay.

AGI supports robust funding of the Natural Hazards Program and urges Congress to appropriate \$150 million to this mission area.

National Cooperative Geologic Mapping Program (NCGMP): This important, decades-long, partnership between the USGS, state geological surveys, and universities provides the nation with fundamental geological data for addressing natural hazard mitigation, water resource management, environmental remediation, land-use planning, and raw material resource development. **AGI asks that Congress increase funding for the National Cooperative Geologic Mapping Program to \$30 million in FY 2016.**

Libraries and Data Preservation: Geological and geophysical data include rock and ice cores, fossil, oil, and rock specimens, paper records, and computer files that are worth far more than the cost of preserving them. The National Geological and Geophysical Data Preservation Program (NGGDPP) produces more value in terms of economic, environmental, hazard mitigation, and regulatory efficiency than it costs to run. **AGI urges Congress to reauthorize NGGDPP and to fund it at the previously authorized level of \$3 million.**

Bureau of Land Management

The Bureau of Land Management's Energy and Minerals Management program provides support for the safe and responsible extraction of natural resources on our nation's public lands. **We are disappointed in the proposed cut for the Energy and Minerals Management program, and we ask that Congress fund it at \$130 million.**

Smithsonian Institution

The Smithsonian's National Museum of Natural History plays a dual role in communicating the excitement of the geosciences and enhancing knowledge through research and preservation of geoscience collections. **AGI supports the President's request of \$936 million for the Smithsonian Institution in FY 2016.**

National Park Service

National parks are very important to the geoscience community and the public as unique national treasures that showcase the geologic splendor of our country and offer unparalleled opportunities for research, education, and outdoor activities. **AGI supports the President's request for \$231 million for Natural Resource Stewardship activities and \$10 million for Everglades Restoration.**

Thank you for the opportunity to present this testimony to the Subcommittee. If you would like any additional information for the record, please contact Maeve Boland at 703-379-2480, ext. 228 voice, 703-379-7563 fax, mboland@agiweb.org, or 4220 King Street, Alexandria VA 22302-1502.