

American Geosciences Institute Written Testimony

Testimony Submitted by American Geosciences Institute

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To the United States Senate Committee on Appropriations Subcommittee on Interior, Environment, and Related Agencies

Regarding the Unites States Geological Survey, Bureau of Land Management, Bureau of Offshore Energy Management, Bureau of Safety and Environmental Enforcement, Environmental Protection Agency, Smithsonian Institution, and National Park Service

April 27, 2018

Thank you for this opportunity to provide the perspective of the American Geosciences Institute (AGI) on fiscal year (FY) 2019 appropriations for geoscience-related programs within the Subcommittee's jurisdiction.

AGI applauds Congress for successfully negotiating and passing the Bipartisan Budget Act of 2018 and the Consolidated Appropriations Act, 2018. We are grateful to the Members of Congress and congressional staff who crafted this significant legislation. The FY 2018 appropriations bill creates a robust baseline for future budgets, and we encourage the Administration to obligate all appropriated funds.

To strengthen the nation's economy, public safety, and national security, AGI requests sustained funding increases for geoscience agencies. Specifically, we ask the Subcommittee to support \$1.2 billion for the United States Geological Survey (USGS), \$1.2 billion for Management of Lands and Resources at the Bureau of Land Management (BLM), \$190 million for the Bureau of Safety and Environmental Enforcement (BSEE), \$8.1 billion for the Environmental Protection Agency (EPA), \$1.1 billion for the Smithsonian Institution, and \$3.2 billion for the National Park Service (NPS).

The next frontier lies under our feet. We know relatively little about the two miles of the Earth's crust immediately below the surface, even though we rely heavily on it for many of our energy, mineral, and water supplies; we use it as a disposal site for waste products; and it is the source of damaging earthquake and volcanic hazards. Scientific and technological innovations now equip us to characterize the subsurface, identify the wealth that may lie in the shallow subsurface, and better prepare for and mitigate natural hazards. AGI suggests a coordinated national effort to examine and characterize the shallow subsurface of the country to support wise development of the Earth and its resources.

AGI is a nonprofit federation of 52 scientific and professional associations representing approximately 260,000 geoscientists across the nation who work in industry, academia, and government. Founded in 1948 under a directive of the National Academy of Sciences, 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 \$1.2 billion for the USGS to support the agency's scientific mission. We recommend a balanced portfolio of research, monitoring, and assessment, including geologic mapping, geophysics, geochemistry, and minerals information functions to support responsible decisions about the nation's earth, land, and water resources.

Strengthen core geoscience functions at 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 on accurate and publicly available, geoscience information. While there is merit to USGS's broad remit, its unique geological mission should be paramount. The proposed Three Dimensional mapping and Economic Empowerment Program (3DEEP), would improve the topographic, geological, and geophysical mapping of the country. This fundamental step in characterizing the nation's surface and subsurface would create new jobs at state geological surveys and in the private sector. AGI supports the President's request for \$10.6 million in new funds for 3DEEP, in addition to maintaining current investment in key USGS programs.

Invest in long-term data collection and analysis: USGS is renowned for the quality and consistency of its long-term data collection and analysis. The financial, intelligence, emergency response, agricultural, policy, and commercial sectors depend on this impartial, reliable flow of information to identify short-term and long-term trends in key indicators. Landsat, a series of Earth-observing satellites, represents the world's largest archive of continuously collected land remote sensing data. The USGS collects a vital range of information: from stream gages monitoring water flow across the US to the National Minerals Information Center tracking the global supply and flow of mineral materials. The nation cannot afford any disruption in the continuity and quality of these programs and we urge Congress to invest in the infrastructure and staffing needed to maintain long-term data collection and analysis programs at USGS.

Optimize USGS facilities: Aging infrastructure is a significant factor affecting the sustainability of the USGS. We are grateful to the Committees for recognizing these much needed facility improvements and providing increased funding for deferred maintenance in FY 2018. AGI supports additional FY 2019 funding for USGS Facilities to maintain essential monitoring, observation, and analytical instrumentation to best serve the agency's mission. Investing in USGS infrastructure now will increase efficiency and yield considerable savings in the future.

Core Science Systems:

The National Cooperative Geologic Mapping Program (NCGMP) is an important, decades-long partnership between the USGS, state geological surveys, and universities that has a proven track record of delivering cost-effective geological maps. **AGI asks that Congress increase funding for NCGMP to \$30 million in FY 2019 to meet growing demand from many sectors.**

AGI also requests sustained funding at \$67.9 million for the National Geospatial Program. Topographic mapping has been a core activity at USGS since its inception, and we strongly support the 3D Elevation Program (3DEP) interagency partnership to build a modern elevation

map of the nation's territories using LIDAR and IFSAR technologies.

We urge Congress to reject the President's request to cut funding for the USGS Libraries by almost 50 percent, which would drastically curtail access to this key resource and driver of economic development. Please protect the USGS Libraries from becoming a dark archive and maintain funding at \$6 million for these vital collections.

Natural Hazards:

Natural disasters and hazards can cause substantial damage throughout the nation, but, with the right information, communities can take preventative action to avoid and mitigate potential impacts. The USGS earthquake and volcano hazards programs, plus the agency's work on geomagnetism and coastal and marine geology, provide vital information and tools that strengthen resilience to hazards and ensure the security and prosperity of the nation. AGI echoes the Committee's concern about landslide risk to local communities, and recommends increased investment in the USGS landslide program. AGI supports robust funding of at least \$179 million for the Natural Hazards mission area for its research and efforts that help protect our communities and citizens and reduce the human and financial toll of hazards.

Energy, Minerals, & Environmental Health:

USGS minerals and mapping programs provide the baseline geologic information needed to stimulate and target renewed interest in domestic mineral resources. Funding these programs will support national defense and economic priorities. In addition, we believe the President's proposal to eliminate the Environmental Health mission area, transferring only a small fraction of its work to other programs, is regrettable; therefore, we encourage Congress to continue funding this program which conducts important research on the effects of contaminants and toxic substances on our water and environment. AGI supports the President's request for \$85 million for Mineral and Energy Resources, in addition to the proposed new funding for the 3DEEP initiative, plus continued investment of \$21 million for Environmental Health.

Land Resources:

One of the most fundamental concepts of the geosciences is that the Earth changes through time. The importance of long-term, consistent monitoring of the Earth to provide a sound basis for decision making cannot be overstated. AGI supports increased funding in FY 2019 for Land Resources, which includes Landsat and other Earth observing systems, and we commend Congress for its decision to continue funding climate research and monitoring programs at FY 2017 enacted levels in the FY 2018 appropriations bill.

Water Resources:

Drought and challenges in water supply and water quality highlight 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 \$218 million in FY 2019.

Bureau of Land Management

The FY 2019 budget includes \$137.2 million to strengthen overall program capacity, improve management, and expedite permitting to facilitate increased environmentally responsible energy development. AGI supports efforts by the Energy and Minerals Management program to modernize its data systems and administrative processes. The BLM needs staff with appropriate skills to carry out energy and minerals inspections, data collection and analysis, and administration. AGI supports funding BLM's Management of Lands and Resources at \$1.2 billion, including Energy and Minerals activities at \$175 million, and we urge investment in BLM's workforce to ensure efficient technical and administrative service.

Bureaus of Ocean Energy Management & Safety and Environmental Enforcement

AGI requests \$175 million for BOEM, and \$190 million for BSEE. AGI supports the efforts of these bureaus to ensure responsible, science-informed management and sustainable, safe production of the nation's energy and mineral resources. In order to administer and oversee offshore energy development effectively and efficiently, BOEM and BSEE need sufficient, appropriately-skilled staff. AGI recommends continued investment in workforce development to avoid delays in the functioning of both bureaus.

Environmental Protection Agency

We request that Congress consider the value of the EPA science programs, especially their value to States, tribes, partners, and grant recipients, when making budget decisions. EPA provides many benefits to the nation, and **we support funding of \$8.1 billion for the agency**.

Smithsonian Institution

The Smithsonian Institution not only cultivates world-class artifacts, but also conducts notable research at its facilities, which support thousands of employees and STEM (science, technology, engineering and mathematics) training opportunities. The National Museum of Natural History (NMNH) plays a multifaceted role in communicating the excitement of the geosciences to the public, and enhancing knowledge through research, education, and the sharing of geoscience collections. We thank Congress for their commitment to protecting the nation's scientific, historic, and cultural treasures with increased investment in the Smithsonian Institution in FY 2018, and gratefully ask for continued support in FY 2019. **AGI supports \$1.1 billion for the Smithsonian Institution, with \$49.8 million for the NMNH**.

National Park Service

National parks showcase and protect the unique geologic heritage of our country and offer unparalleled opportunities for scientific research, education, and outdoor recreation activities. **AGI supports \$3.2 billion for the NPS, and we note its significant role in educating students and the general public about all aspects of Earth and human history.** We also applaud the Subcommittee's investment in FY 2018 to address the construction backlog, maintenance, and funding for new park units.

Again, thank you for the opportunity to present testimony to the Subcommittee. If you have questions or would like additional information for the record, please contact Anna Normand at 703-379-2480 ext. 220, anormand@americangeosciences.org, or 4220 King Street, Alexandria, VA 22302-1502.