Written Testimony
American Geosciences Institute

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

April 10, 2014

Thank you for this opportunity to provide the American Geosciences Institute's perspective on fiscal year (FY) 2015 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 National Park Service, and the Smithsonian Institution. Specifically, we ask support for the President's request for $1.074 billion for USGS but we request a more balanced distribution for these funds within USGS, $225 million for the National Park Service's Natural Resource Stewardship and Everglades Restoration activities, and $850 million for the Smithsonian Institution.

The Earth provides the energy, mineral, water, and soil resources that are essential for a thriving economy, national security, and a healthy population and environment. We emphasize the importance of understanding the Earth system, and particularly Earth’s 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. The USGS is the nation's only natural resource science agency that can provide the objective data, observations, analyses, assessments, and scientific solutions to intersecting Earth-focused issues.

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 $1.704 billion for USGS. We respectfully suggest that Congress should consider a balanced distribution of funds within USGS to allocate more resources to geoscience functions, for which USGS has unique national expertise and responsibilities.
**Need for balanced investment:** Planet Earth strongly influences human safety, the economy, and people’s quality of life. Earthquake, volcanic, and landslide hazards; the Earth’s groundwater, mineral, geothermal energy, and fossil fuel resource potential; and the Earth’s potential for waste disposal all relate to the subsurface. The USGS Organic Act recognizes the importance of understanding the geological structure of the country and unequivocally vests responsibility and authority for this in USGS.

Table 1 highlights those Mission Areas and Accounts that are being cut relative to the overall USGS budget, and we note that they contain the majority of USGS’s geoscience functions. We respectfully ask Congress to recognize the importance of geoscience 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.

**Table 1. USGS Budget Request, FY 2015**

<table>
<thead>
<tr>
<th>Mission Area or Account</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>% change, FY 13-14</th>
<th>FY 2015 request</th>
<th>% change, FY 14-15</th>
<th>% change FY13 - FY15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecosystems</td>
<td>149,086</td>
<td>152,811</td>
<td>2.5</td>
<td>162,025</td>
<td>6.0</td>
<td>8.7</td>
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<tr>
<td>Climate &amp; Land Use</td>
<td>133,195</td>
<td>131,975</td>
<td>-0.9</td>
<td>149,081</td>
<td>13.0</td>
<td>11.9</td>
</tr>
<tr>
<td>Energy, Minerals</td>
<td>71,901</td>
<td>71,901</td>
<td>0.0</td>
<td>73,247</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>18,614</td>
<td>19,614</td>
<td>5.4</td>
<td>25,826</td>
<td>31.7</td>
<td>38.8</td>
</tr>
<tr>
<td>Natural Hazards</td>
<td>123,536</td>
<td>128,486</td>
<td>4.0</td>
<td>128,339</td>
<td>-0.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Water Resources</td>
<td>197,449</td>
<td>207,281</td>
<td>5.0</td>
<td>210,386</td>
<td>1.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Core Science Systems</td>
<td>107,643</td>
<td>108,807</td>
<td>1.1</td>
<td>109,400</td>
<td>0.6</td>
<td>1.6</td>
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<tr>
<td>Science Support</td>
<td>110,704</td>
<td>110,704</td>
<td>0.0</td>
<td>108,267</td>
<td>-2.2</td>
<td>-2.2</td>
</tr>
<tr>
<td>Facilities</td>
<td>100,040</td>
<td>100,421</td>
<td>0.4</td>
<td>106,697</td>
<td>6.3</td>
<td>6.7</td>
</tr>
<tr>
<td>Total USGS</td>
<td>1,012,168</td>
<td>1,032,000</td>
<td>2.0</td>
<td>1,073,268</td>
<td>4.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

USGS provides impartial scientific information that underpins well-informed decision making by the Department of the Interior, all levels of government, industry, and the public. It provides vital infrastructure through mapping, baseline studies, monitoring, and observations, in addition to cutting-edge research and analysis. Balanced investment in USGS should support both long-term data collection and project-specific research.

**Mineral Resources Program:** Funding for the Mineral Resources Program (MRP) has been cut by more than one-third in constant dollar terms since 2003 (Fig. 1) and the President’s request continues this trend. **AGI urges Congress to increase funding for MRP and to allocate new money to USGS to add forecasting capabilities to its Minerals Information functions.**
Minerals Information: USGS is the sole provider of statistics and analysis on the supply of, demand for, and global flow of about 100 minerals and mineral materials for approximately 180 countries. The Departments of the Interior, Defense, and State, the CIA, the Federal Reserve, as well as manufacturing companies and the financial sector all rely on MRP for reliable, timely, accurate data to guide economic and strategic decision making. Production of critical products is at risk because industry depends on a constant flow of raw materials, many of which are imported and some of which may be subject to disruptions in supply. AGI notes the lack of any capacity to forecast future trends in minerals and mineral commodities, making the country vulnerable to avoidable disruptions in critical material supplies. AGI urges Congress to add new money to enable USGS to develop this strategically important expertise.

Energy Resources Program: AGI supports the increase in funding for geothermal resources studies but we do not support the proposed cut of $1.5 million to energy research and assessment activities. These cuts are being made when the country is increasing its reliance on natural gas and when it is ever more important to understand the nature and distribution of our energy resources.

Hydraulic Fracturing: AGI supports USGS efforts to better understand the scientific aspects of hydraulic fracturing, to reduce potential impacts, and to provide decision-support information. We support the allocation of $8.3 million for scientific research on this economically important technology.

Water Resources Program: The extreme drought situation in California, northern Texas, and surrounding areas highlights the importance of understanding the quality and quantity of our water resources. AGI is pleased to see increased investment in the National Groundwater Monitoring Network, streamgages, and other elements of the USGS Water Resources Program (WRP). We note the redistribution of funds within WRP to focus on selected areas and projects and we urge Congress to ensure that USGS continues to maintain and expand the nationwide, long-term data collection and research programs that support water planning and decision making across all states.

Natural Hazards Program: USGS is world-renowned for its information and research on earthquakes, the natural hazard that poses the greatest threat to life and the economy. USGS work on induced seismicity is contributing crucial information to the decision-making process about regulating hydraulic fracturing and injection wells. AGI views the elimination of $700,000 from geodetic monitoring and active-source seismic profiling in order to fund work on induced seismicity as unwise. Both of these functions are important and one should not be sacrificed to fund the other.

Hurricane Sandy, sinkhole incidents in Florida, and the recent landslide in Washington state remind us of the tragic impacts of natural hazards. But we can use science to guide mitigation strategies and minimize damages. AGI supports robust funding of the Natural Hazards Program and urges Congress to consider funding at more than the President’s request of $128.4 million.
National Cooperative Geologic Mapping Program (NCGMP): AGI is grateful to Congress for passing the reauthorization of the National Cooperative Geologic Mapping Program in the 2009 public lands omnibus (P.L. 111-11, Sec. 11001). This important 20-year-old partnership between the USGS, state geological surveys, and universities provides the nation with fundamental data for addressing natural hazard mitigation, water resource management, environmental remediation, land-use planning, and raw material resource development. AGI thanks the committee for its previous support for the National Cooperative Geologic Mapping Program and supports the President’s request for $24.5 million in FY 2015.

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 (NGGDP) generates more value in terms of economic development, environmental stewardship, hazard mitigation and fulfilling regulatory requirements than it costs to run. Books, maps, and specimens, many of which record observations of sites that no longer exist, are used extensively by geologists even in this digital age. The consolidation of USGS library space must not be at the expense of access to information. AGI supports the President’s request for $2.1 million for the NGGDP but notes with concern the reductions being implemented to USGS libraries.

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 asks the Subcommittee to provide steady funding to cutting-edge earth science research at the Smithsonian Institution. We support the President’s request of $851 million for the Smithsonian Institution in FY 2015.

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. The National Park Services’ Geologic Resources Division was established in 1995 to provide park managers with geologic expertise. Working in conjunction with USGS and other partners, the division helps ensure that geoscientists are becoming part of an integrated approach to science-based resource management in parks. AGI supports the President’s request for $215 million for Natural Resource Stewardship activities and $10 million for Everglades Restoration so the NPS can adequately address the treasured geologic and hydrologic resources in the National Parks.

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.