

USGS Coalition

Testimony of the USGS Coalition
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Regarding the U.S. Geological Survey
FY 2010 Budget Request

To the United States Senate
Committee on Appropriations
Subcommittee on Interior, Environment, and Related Agencies
May 15, 2009

Summary

The USGS Coalition appreciates the opportunity to testify in support of increased appropriations for the United States Geological Survey (USGS) for fiscal year 2010. We continue to believe that the USGS budget is substantially below the amount required to ensure the long-term vitality of the agency. The USGS Coalition urges Congress to increase the budget of the U.S. Geological Survey to at least \$1.3 billion in FY 2010.

The USGS Coalition is an alliance of over 70 organizations united by a commitment to the continued vitality of the unique combination of biological, geographical, geological, and hydrological programs of the United States Geological Survey. The Coalition supports increased federal investment in USGS programs that underpin responsible natural resource stewardship, improve resilience to natural and human-induced hazards, and contribute to the long-term health, security and prosperity of the nation.

The USGS plays a crucial role in protecting the public from natural hazards such as floods and earthquakes, assessing water quality, providing emergency responders with geospatial data to improve homeland security, analyzing the strategic and economic implications of mineral supply and demand, and providing the science needed to manage our natural resources and combat invasive species that can threaten agriculture and public health. The USGS is working in every state and has nearly 400 offices across the country. To aid in its interdisciplinary investigations, the USGS works with over 2,000 federal, state, local, tribal and private organizations.

Funding Shortfall

The USGS budget declined in real dollars for six consecutive years from FY 2003 to FY 2008 (Figure 1). In real terms, funding for the USGS is at its lowest level since FY 1997, the year after the National Biological Service was integrated into the USGS. The decline in funding for the USGS during this time period would have been greater if Congress had not repeatedly restored proposed budget cuts. In contrast, total federal funding for research and development has increased substantially in real terms since FY 1997.

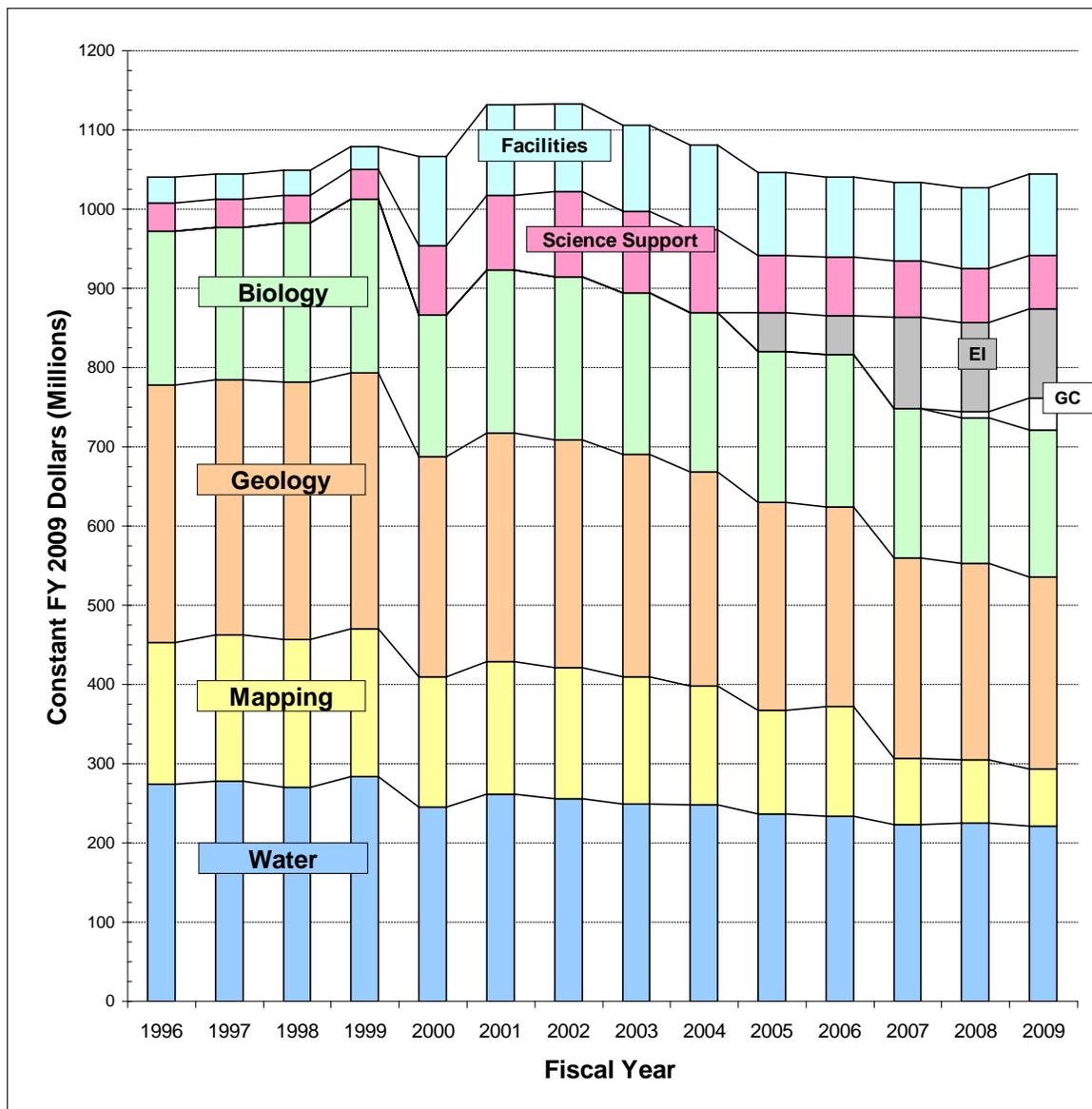


Figure 1. USGS funding in constant 2009 dollars, FY 1996 – FY 2009. EI is Enterprise Information and GC is Global Change. Source: USGS Budget Office.

The USGS is uniquely positioned to address many of the nation’s greatest challenges, including energy independence, climate change, water quality, conservation of biological diversity, and natural hazards. The need for USGS science in these and other areas has increased dramatically as its budget has declined in real dollars.

Ongoing volcanic activity at Alaska’s Mount Redoubt, 106 miles southwest of Anchorage, illustrates the value of robust volcano monitoring systems and the need for increased federal investments in the USGS. Mount Redoubt volcano erupted on March 22, 2009 and explosive events have sent volcanic ash more than 50,000 feet into the air. Approximately 20,000 passengers per day travel through the airspace affected by the volcano. The USGS provided advance warning of this explosive volcanism. Interior Secretary Ken Salazar said the USGS was “able to actually forecast this event...to prevent the endangerment of people and places that

would otherwise have occurred.” When Redoubt volcano erupted in 1989, a Boeing 747 passenger plane flew through a cloud of volcanic ash and lost power to all four engines. After plummeting more than 14,000 feet, the crew restarted the engines and safely landed the plane. The volcanic ash caused over \$80 million in damage to the plane but no lives were lost.

Ongoing floods in North Dakota and surrounding areas led President Obama to sign a Major Disaster Declaration for North Dakota on March 24, 2009 and a fourth amendment was issued on May 13, 2009. Flood waters crested at 34 feet in Fargo and exceeded record levels in some areas. Stream gage networks operated by the USGS are essential for issuing flood warnings.

Natural hazards have negatively affected numerous communities across the country and around the globe over the past several years. Forest fires burned a total of 9,321,326 acres of land in the United States in 2007. These fires are not limited to western states. Virginia experienced a 16 percent rise in wildfires. An earthquake generated a tsunami that caused approximately 230,000 fatalities near the Indian Ocean in 2004. These and other events have inspired a greater awareness and appreciation of the need to improve environmental monitoring, forecasting, and warning systems that can prevent natural hazards from becoming natural disasters.

Providing the information necessary to mitigate the impacts of natural disasters is a core function of the USGS. The USGS monitors volcanoes and provides warnings about impending eruptions. It operates seismic networks and conducts seismic hazard analyses that are used to formulate earthquake probabilities and to establish building codes across the nation. Data from the USGS network of stream gages enables the National Weather Service to issue flood warnings. The USGS and its federal partners monitor seasonal wildfires, provide maps of current fire locations and the potential spread of fires. Research on ecosystem structure and function assists forest and rangeland managers with forecasting fire risk and managing natural systems following fires. The USGS plays a pivotal role in reducing risks from floods, wildfires, earthquakes, tsunamis, volcanic eruptions, landslides and other natural hazards that jeopardize human lives and cost billions of dollars in damages every year.

USGS assessments of energy resources – including emerging energy resources and geothermal resources – are essential for making informed decisions about the nation’s energy future. Research conducted by the USGS is also vital to understanding and predicting the impacts of climate change on our nation’s coastal cities, water resources, ecosystems, and wildlife. The USGS is also developing new methods to assess the nation’s potential for storing carbon dioxide that could lead to techniques for lessening the impacts of climate change.

Equally important, the USGS plays a critical role in bioinformatics and managing natural resources, activities that are essential to our economy, security, and environment. Baseline data about our nation’s biology and how it is changing is needed to understand and address climate change. The USGS provides fundamental scientific data that informs management of natural resources (*e.g.*, data for Fish and Wildlife Service on polar bear populations), control of invasive species (*e.g.*, snakehead fish, zebra mussels, and tamarisk) and monitoring of wildlife diseases (*e.g.*, Highly Pathogenic Avian Flu, Chronic Wasting Disease) that can cause billions of dollars in agricultural losses.

USGS research that spans the biological, geological, geographical, and hydrological sciences is essential for understanding potential impacts that could result from global climate change or from land management practices. These studies provide critical information for resource managers as they develop adaptive management strategies for restoration and long-term use of the nation's natural resources.

Greater investment in the USGS is required. This investment could be used to strengthen USGS partnerships, improve monitoring networks, produce high-quality digital geospatial data and deliver the best possible science to address societal problems and inform decision-makers.

USGS Budget Request

President Obama's FY 2010 budget request for the U.S. Geological Survey is \$1.098 billion, an increase of \$54 million, or 5.2 percent, above the level in the FY 2009 Omnibus Appropriations Act. The USGS budget request would provide increased funding for Secretarial initiatives in climate change (\$22 million), energy (\$3 million) and youth conservation corps (\$2 million). Budget increases are also proposed for the national stream gage network (\$5 million), arctic ecosystem studies (\$4 million), staffing for biology cooperative research units (\$2 million), extended continental shelf studies (\$1 million), and sustainable energy development (\$0.7 million). The budget request would provide full funding for increases in "fixed costs" totaling \$21 million. The proposed increases in the USGS budget deserve the support of Congress.

The coalition urges Congress to increase the USGS budget to at least \$1.3 billion in FY 2010, which is necessary for the agency to continue providing critical information to the public and to decision-makers at all levels of government. The budget increase recommended by the Coalition would enable the USGS to address the growing backlog of science needs that has resulted from stagnant real budgets for more than a decade, accelerate the timetable for deployment of critical projects, and launch science initiatives that address new challenges.

The FY 2010 budget recommended by the USGS Coalition would enable the USGS to meet the tremendous need for science in support of public policy decision-making. More investment is needed to strengthen USGS partnerships, improve monitoring networks, implement important bioinformatics programs, produce high-quality digital geospatial data, and deliver the best possible science to address societally important problems. The USGS has a national mission that directly affects all citizens through natural hazards monitoring, water resource studies, biological and geological resource assessments, and other activities.

The USGS Coalition is grateful to the Senate Interior Appropriations Subcommittee for its leadership in restoring past budget cuts and strengthening the U.S. Geological Survey. We are also grateful to the subcommittee for its leadership in providing \$140 million in stimulus funds for the USGS under the American Recovery and Reinvestment Act of 2009. Thank you for your thoughtful consideration of our request. For additional information or to learn more about the USGS Coalition, please visit www.USGScoalition.org or contact co-chairs Robert Gropp of the American Institute of Biological Sciences (rgropp@aibs.org) or Craig Schiffries of the Geological Society of America (cschiffries@geosociety.org).