

USGS Coalition

Testimony of the
USGS Coalition

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Regarding the
U.S. Geological Survey
FY 2012 Budget Request

To the
U.S. House of Representatives
Committee on Appropriations
Subcommittee on Interior, Environment, and Related Agencies

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Summary

The USGS Coalition appreciates the opportunity to provide testimony about the President's budget request for the United States Geological Survey (USGS) for fiscal year 2012. The USGS Coalition urges Congress to appropriate at least \$1.2 billion for the USGS in FY 2012.

The USGS is uniquely positioned to address many of the nation's greatest challenges. The USGS plays a crucial role in reducing risks from earthquakes, tsunamis, floods, landslides, wildfires, and other natural hazards, assessing water quality and quantity, providing emergency responders with geospatial data to improve homeland security, assessing mineral and energy resources (including rare earth elements and unconventional natural gas resources), 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.

The USGS budget has been reorganized to reflect the agency's new structure. The FY 2012 budget is now organized along the six crosscutting themes from the USGS science strategy, *Facing Tomorrow's Challenges – U.S. Geological Survey Science in the Decade 2007-2017* (USGS, 2007). The budget request also includes a new National Land Imaging account that focuses on operation of Landsat satellites.

The USGS Coalition is an alliance of over 70 organizations united by a commitment to the continued vitality of the United States Geological Survey to provide critical data and services. 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.

Essential Services for the Nation

Established by Congress as a branch of the Department of the Interior in 1879, the U.S. Geological Survey has a truly national mission that extends beyond the boundaries of the Nation's public lands to positively impact the lives of all Americans. The USGS plays a crucial role in protecting the public from natural hazards, assessing water quality and quantity, providing geospatial data, and conducting the science necessary to manage our nation's living, mineral, and energy resources. Through its offices across the country, the USGS works with over 2,000 partners to provide high-quality research and data to policymakers, emergency responders, natural resource managers, civil and environmental engineers, educators, and the public. A few examples are provided below.

A failure to prevent natural hazards from becoming natural disasters will increase future expenditures for disaster response and recovery. Recent natural disasters provide unmistakable evidence that society remains vulnerable to staggering losses. The magnitude 9.0 earthquake and tsunami that devastated Japan on March 11, 2011, the magnitude 7.0 earthquake that killed more than 200,000 people in Haiti on January 12, 2010, and the small volcanic eruptions in Iceland that disrupted global air traffic in April 2010, provide compelling evidence that the United States must have the data to inform further actions to reduce risks from natural hazards.

Providing the information necessary to mitigate the impacts of natural hazards is a core function of the USGS. The USGS operates seismic networks and conducts seismic hazard analyses that are used to formulate earthquake probabilities and to establish building codes across the nation. It monitors volcanoes and provides warnings about impending eruptions. Data from the USGS network of stream gages enable the National Weather Service to issue flood warnings. The USGS and its federal partners monitor seasonal wildfires and 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 mineral and energy resources – including rare earth elements, unconventional natural gas resources, and geothermal resources – are essential for making informed decisions about the nation's future. Widespread deployment of new energy technologies can reduce greenhouse gas emissions, mitigate climate change, and reduce dependence on foreign oil. Many emerging technologies depend on rare earth elements and other scarce elements that currently lack diversified sources of supply. China accounts for 95 percent of world production of rare earth elements although it has only 36 percent of identified world reserves (USGS, 2010). A renewed federal commitment to innovative research, information, and education on mineral and energy resources is needed to address these issues.

The USGS provides scientific information on water availability and quality of the United States to inform the public and decision makers about the status of freshwater resources and how they are changing over time. During the past 130 years, the USGS has collected streamflow data at over 21,000 sites, water-level data at over 1,000,000 wells, and chemical data at over 338,000

surface-water and groundwater sites. This information is needed to effectively manage freshwaters, both above and below the land surface, for domestic, public, agricultural, commercial, industrial, recreational, and ecological uses.

The USGS plays a critical role in bioinformatics and managing natural resources, activities that are essential to our economy, security, and environment. The USGS provides fundamental scientific data that informs management of natural resources, control of invasive species, and monitoring of wildlife diseases that can cause billions of dollars in agricultural losses. The USGS provides critical information for resource managers as they develop adaptive management strategies for restoration and long-term use of the nation's natural resources.

Funding Shortfall

The USGS budget has been nearly stagnant in real dollars since 1996 (Figure 1). The USGS budget for FY 2010 is lower than the USGS budget for FY 2001 in real dollars. The decline in funding for the USGS during this time period would have been greater if Congress had not repeatedly restored proposed budget cuts. Federal funding for non-defense R&D has increased significantly while funding for the USGS stagnated for more than a decade.

President Obama's FY 2012 budget request for the U.S. Geological Survey is \$1.118 billion, a decrease of \$15 million or 1.3 percent below the USGS budget request for FY 2011. Although there is a \$6 million increase in the total USGS budget request for FY 2012 compared to the FY 2010 enacted level, the FY 2012 budget request contains significant cuts in many programs that are offset by increases in other areas, including a \$48 million increase in a new National Land Imaging account that focuses on operation of Landsat satellites.

It appears that responsibilities for Landsat satellites have been transferred from NASA to USGS without a corresponding transfer of budget authority. In the USGS budget request for FY 2012, budget increases for National Land Imaging are offset by budget decreases for core USGS science programs. This trend cannot continue without compromising the mission of the U.S. Geological Survey. Past experience indicates that the cost of operating Landsat is likely to rise significantly in future years with the launch of Landsat 8, 9, and 10.

The USGS budget request for FY 2012 includes \$89.1 million in program reductions in valuable, long-standing programs. The proposed budget cuts would have significant negative impacts on core scientific capabilities of the USGS. Proposed budget cuts in the FY 2012 USGS budget request include:

- \$9.8 million for Biological Information Management and Delivery,
- \$9.6 million for Mineral Resources,
- \$8.9 million for National Water Quality Assessment,
- \$6.5 million for Water Resources Research Act Program, and
- \$4.7 million for Earthquake Hazards.

The USGS Coalition urges Congress to appropriate at least \$1.2 billion for the USGS in FY 2012, a level that will support critical USGS programs that improve health and safety and provide the basis for future jobs and economic growth.

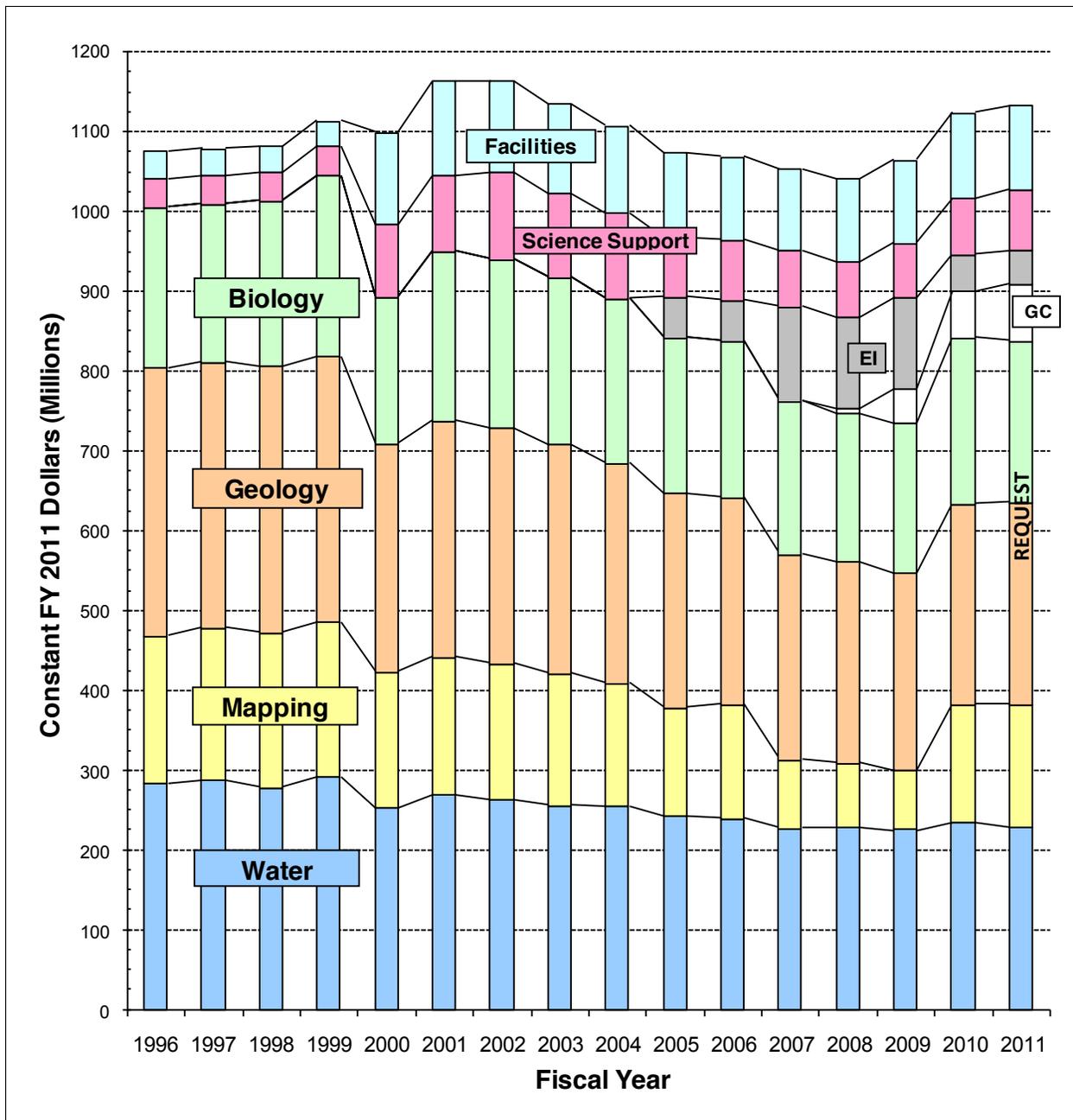


Figure 1. USGS funding in constant 2011 dollars, FY 1996 – FY 2011. EI is Enterprise Information and GC is Global Change. Source: USGS Budget Office.

The USGS Coalition is grateful to the House Interior Appropriations Subcommittee for its past leadership in strengthening the U.S. Geological Survey. 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).