

# USGS Coalition

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Testimony of the  
USGS Coalition  
Dr. Robert Gropp, Chairman

Regarding the  
U.S. Geological Survey  
FY 2013 Budget Request

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

April 24, 2012

## 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 (FY) 2013. The USGS Coalition urges Congress to appropriate at least \$1.2 billion for the USGS in fiscal year 2013.

The USGS is uniquely positioned to address many of the nation's greatest challenges. The USGS plays a crucial role in assessing water quality and quantity; reducing risks from earthquakes, tsunamis, floods, landslides, wildfires, and other natural hazards; 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 natural and managed environmental systems and public health.

*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 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 of the USGS' valuable work are provided below.

The Survey collects scientific information on water availability and quality 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 purposes.

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. Seismic networks and hazard analyses are used to formulate earthquake probabilities and to establish building codes. USGS 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 bureau and its federal partners monitor seasonal wildfires and provide maps of current fire locations and the potential spread of fires. USGS research on ecosystem structure informs fire risk forecasts.

USGS assessments of mineral and energy resources -- including rare earth elements, coal, oil, unconventional natural gas, and geothermal -- are essential for making decisions about the nation's future. The Survey identifies the location and quantity of domestic mineral and energy resources, and assesses the economic and environmental effects of resource extraction and use. The agency is mapping domestic supplies of rare earth elements necessary for widespread deployment of new energy technologies, which can reduce dependence on foreign oil and mitigate climate change. The USGS is the sole federal source of information on mineral potential, production, and consumption.

USGS science plays a critical role in informing sound management of natural resources on federal and state lands. The USGS conducts research and monitoring of fish, wildlife, and vegetation -- data that informs management decisions by other Interior bureaus regarding protected species and land use. USGS science is also used to

control invasive species and wildlife diseases that can cause billions of dollars in economic losses. The Survey also provides critical information for resource managers as they develop adaptive management strategies for restoration and long-term use of the nation's natural resources in the face of environmental change.

Research conducted by the USGS is vital to predicting the impacts of land use and climate change on water resources, wildfires, and ecosystems. The Landsat satellites have collected the largest archive of remotely sensed land data in the world, allowing for access to current and historical images that are used to assess the impact of natural disasters and monitor global agriculture production. The USGS also assesses the nation's potential for carbon sequestration. Other Interior bureaus use USGS research on how climate variability affects fish, wildlife, and ecological processes to inform natural resource management decisions.

## **Funding Shortfall**

Over the years, Congress has worked in a bipartisan fashion to restore damaging budget cuts proposed by Administrations from both parties. These efforts have paid dividends and helped the USGS continue to provide answers to the challenging questions facing decision-makers across the country.

The President's fiscal year 2013 budget request for the USGS is \$1.1 billion. The budget request contains \$49.5 million in program reductions in valuable, long-standing programs that offset increases in other areas. The proposed budget cuts would have significant negative impacts on core scientific capabilities of the USGS.

Proposed budget cuts in the fiscal year 2013 USGS budget request include:

- \$6.5 million for Water Resources Research Act Program
- \$6.0 million for National Water Quality Assessment Methods Development and Monitoring
- \$5.0 million for Cooperative Water Program Interpretive Studies
- \$5.0 million for Mineral Resources
- \$3.3 million for Hydrologic Networks and Analysis Information Management and Delivery
- \$2.0 million for Toxic Substances Hydrology Methods Development and Assessments

We urge Congress to support the budget request plus work to restore these and other detrimental cuts. An appropriation of \$1.2 billion would provide the USGS with approximately \$50 million that could shore up critical research programs, enhance new research efforts, and fully fund "fixed costs" and "operational efficiencies."

Notably, the proposed budget requests \$10.8 million for fixed costs. Although we applaud the agency for including these expenses in the budget request, we are not certain that this request will fully cover these expenses. Moreover, we are concerned about \$4.4 million in proposed operations and maintenance "efficiencies." According to

USGS budget documents: “The proposed reduction will degrade the condition and performance of the USGS real property portfolio.... In turn, the USGS expects to see an increase in the frequency with which equipment and facility components will need more costly emergency repairs and replacements, as well as a shortening of the overall life cycle of our real property assets.”

The budget request does not propose transferring responsibilities for Landsat satellites from NASA to USGS. We appreciate congressional efforts last year to ensure that the USGS would not assume budget authority for the Landsat satellites. Such a move would have likely compromised core USGS science programs as the costs of the satellites rose significantly in future years.

### **Conclusion**

We recognize the financial challenges facing the nation, but losing irreplaceable data can increase costs to society today and in the future. The USGS Coalition requests that Congress appropriate at least \$1.2 billion for the USGS in fiscal year 2013, a level that will support critical USGS programs that improve the nation’s environment, health, safety, quality of life, and future economic growth.

The USGS Coalition appreciates the subcommittee’s past leadership in strengthening the United States Geological Survey. Thank you for your thoughtful consideration of our request.