



Aligning USGS Senior Leadership Structure with the USGS Science Strategy

The U.S. Geological Survey (USGS) is realigning its management and budget structure to further enhance the work of its science programs and their interdisciplinary focus areas related to the USGS Science Strategy as outlined in “Facing Tomorrow’s Challenges—U.S. Geological Survey Science in the Decade 2007–2017” (U.S. Geological Survey, 2007). In 2007, the USGS developed this science strategy outlining major natural-science issues facing the Nation and focusing on areas where natural science can make a substantial contribution to the well being of the Nation and the world. These areas include global climate change, water resources, natural hazards, energy and minerals, ecosystems, and data integration.

The U.S. Geological Survey (USGS) is a science agency with no regulatory or land-management responsibilities. USGS scientists currently work together across programs but face hindrances due to outdated management and budget structures representing a disciplinary division of science that does not serve the interdisciplinary nature of problem solving. The realignment will help to remove these organizational barriers, give more clarity and design to the USGS budget structure, and further codify the principles of the USGS Science Strategy.

The development of a USGS Science Strategy for 2007–2017 came at a time of growing awareness of societal needs posing critical natural-science challenges: the demand for resources posed by a global economy, the crystallization of ecosystem-based management, the need to understand climate change and its impacts, and the risks from natural hazards, all of which require a multidisciplinary approach. As the premier natural resources research bureau of the Federal Government, the USGS plays an important role in helping the economy remain strong, the environment remain healthy, and the quality of life in the United States remain high. To meet this responsibility more efficiently and effectively, the USGS must optimize the integration of its traditional science disciplines. Major national issues of costly natural disasters, air and water quality, energy and materials needs, newly emerging diseases, invasive species, and climate change form a web of linked dependencies among environments, societies, and economies. The USGS must transform its approaches to problem solving not only to address the issues of today but also to prepare for those of tomorrow.

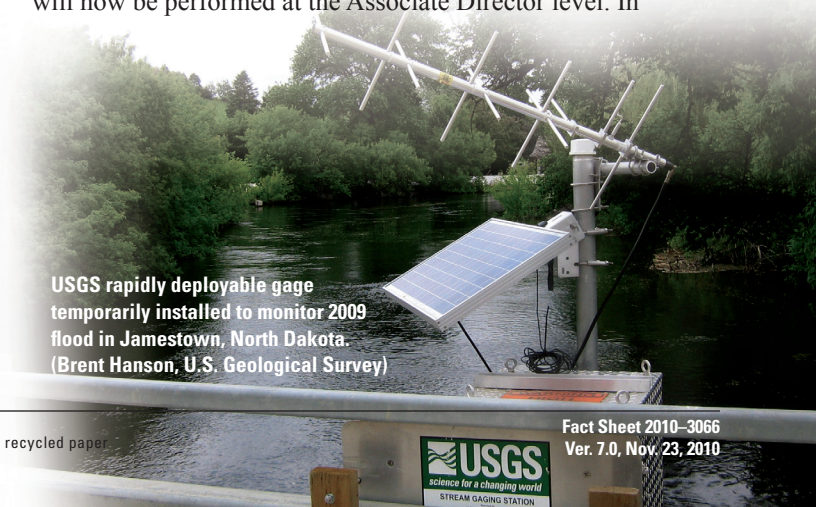
No other organization in the Nation has the breadth of Earth and biological science expertise, the extensive national on-the-ground capability, and the wealth of biological, geographic, geologic, and hydrologic monitoring capabilities and existing data at all scales—from microscopic to global. In the not-too-distant future, a scientist will access a comprehensive array of biological, geographic, geologic, and hydrologic data from past measurements and those being made in real time, use the data or models that describe the present state of the Nation, use scenarios of future climatic states to understand

how the situation will change, and provide this information to decision makers and the broader public in forms most suited to their needs.

To facilitate the realization of this future state, the USGS must erase boundaries and challenges that scientists face in attempting to work together both inside and outside of the organization. The realignment is designed to accomplish this goal.

First, Associate Directors and programs are being realigned to correspond with the themes identified in the USGS Science Strategy. Associate Directors responsible for program direction from headquarters have for many years headed programs grouped under the traditional disciplines spanning the work of USGS: geology, biology, geography, hydrology, and, more recently, geospatial information. This realignment of Associate Directors and programs into mission areas that correspond to the Science Strategy directions makes demonstrable steps toward action on the Science Strategy by encouraging across-the-board strategic thinking and programmatic direction that is interdisciplinary.

Second, the USGS will eliminate a management layer composed of Regional Directors. USGS work across the Nation had been divided into three regions (East, Central, and West), each of which had a Regional Director who supervised Regional Executives in smaller geographic areas. These Regional Directors were largely responsible for translating disciplinary programs from headquarters into interdisciplinary projects on the ground at the regional level. That function will now be performed at the Associate Director level. In



USGS rapidly deployable gage temporarily installed to monitor 2009 flood in Jamestown, North Dakota.
(Brent Hanson, U.S. Geological Survey)



the future the Regional Executives will report directly to the USGS Deputy Director. Regional administrative services such as human capital and finance that the Regional Directors had provided to USGS field offices and science centers will be centralized. This makes for a “flatter” organization that is more typical of research organizations where communication must easily be shared between the field and headquarters. With the centralization of administrative services, there will be increased opportunity for potential management savings and nimbleness to further department-wide priorities such as diversity hiring goals, “green” building initiatives, and common business practices, the lack of which have long been an obstacle to interdisciplinary activities at USGS.

In addition, a new Office of Science Quality and Integrity will be created. The main function of this office will be to ensure the continued high standards of integrity, quality, and health of USGS science. USGS Bureau Approving Officials, those responsible for approval of scientific publications and products, will report to this office. This new office will report to the Deputy Director.

Below is some additional information regarding the realignment. Included are some Frequently Asked Questions and Answers, a chart showing the realignment of senior officials, and a table that shows where each existing Congressionally appropriated line item (program element) will be placed under the revised budget structure.

USGS Realignment: Frequently Asked Questions and Answers

1. *Why realign?*

The realignment will—

- Clarify and emphasize that USGS science is focused on issues of great significance and concern to society. The USGS is a publicly funded agency whose purpose is to serve the pressing needs of the Nation by providing scientific leadership and information leading to real-world solutions to the major problems facing society.
- Enhance opportunities to increase the level of Federal and non-Federal investment in USGS science that addresses, and hopefully resolves, issues of national and global importance.
- Maximize the efficiency of USGS research and data-collection activities by facilitating an interdisciplinary approach when such an approach is beneficial.
- Unite and integrate the capabilities of the USGS and optimize the effectiveness of its strengths and its unique position as a non-regulatory Federal science agency with national scope and responsibility.
- Highlight the unique capabilities, knowledge, and resources the USGS can leverage to address society’s most critical scientific needs.

2. *What are the potential benefits of the realignment?*

Each of the six strategic directions identified in the Science Strategy offers extensive opportunities for multidisciplinary involvement in and contributions to the development of solutions to pressing societal issues. Therefore, it is critical that the USGS amend or remove existing administrative, managerial, and operational barriers that inhibit the pursuit of joint scientific endeavors across artificial boundaries based on discipline and geographic region. By replacing current discipline and regional structures, the USGS can achieve an organization that is focused on realizing the goals and priorities of its Science Strategy, and in which collaboration across discipline and geographic boundaries is encouraged, enhanced, and rewarded.

3. *How will the realignment affect external clients and cooperators?*

Customers and stakeholders have consistently expressed support for USGS prioritization of science efforts related to the broad societal issues outlined in the Science Strategy. External clients and cooperators will benefit from interacting with USGS senior management officials who are directly involved in the conduct of programs and projects that are linked to the USGS’s Science Strategy goals. Points of contact will be both geographically defined and Science Strategy-aimed.

USGS researchers study population dynamics of grizzly bears, as well as hazards they face. This information is used by resource managers and decision makers. (Kim Keating, U.S. Geological Survey)

4. *How will the realignment affect USGS employees?*

The change that will affect USGS employees most significantly is the elimination of a layer of management. Eliminating the Regional Director positions will leave most employees with only a single layer of executive management between them and the Director's Office of the USGS. This "flattening" of the organization will reduce administrative complexities and allow the USGS to focus on the pursuit of science in support of its strategic directions. Science support activities will be focused more directly on supporting the conduct of science rather than on responding to a divided and regionalized administrative hierarchy.

5. *Will any new positions be created in the realignment? Will any currently existing positions be eliminated? Will any currently existing positions be changed, moved, or modified?*

The realignment creates six new Associate Director positions, one for each of the strategic directions contained in the USGS Science Strategy: Ecosystems; Climate and Land-Use Change; Energy and Minerals, and Environmental Health; Natural Hazards; Water; and Core Science Systems (fig. 1). It eliminates the five Associate Directors for the disciplines (Biology, Geography, Geology, Geospatial Information, and Water) and the three Regional Directors (Eastern, Central, and Western). The realignment elevates the Regional Executives by having them report directly to the Deputy Director of the USGS. The realignment also creates a new Office of Science Quality and Integrity, which will report to the Deputy Director. Finally, the formerly regionalized Administrative Policy and Services and Human Capital functions will be consolidated at the Bureau level.

6. *How will the realignment affect the USGS's long-standing Congressionally funded budget line item programs?*

Each existing Congressionally funded budget line item program of the USGS will remain intact and be located within one of the six new USGS mission areas that correspond to the Science Strategy directions. It will be the responsibility of the Associate Directors to champion the program(s) under their purview.

7. *The USGS Science Strategy on which the realignment is based is a 10-year plan. What will happen in 10 years?*

The Science Strategy was developed as a 10-year view of the future, and its six themes are understood to represent issues that are likely to endure for several decades; however, the USGS recognizes that the relevance of the Science Strategy must be reviewed periodically and acknowledges the need to be sufficiently flexible to adapt to new and emerging issues of national concern.

All necessary reviews and approvals have been completed. USGS plans to begin implementation of the realignment at the beginning of fiscal year 2011.

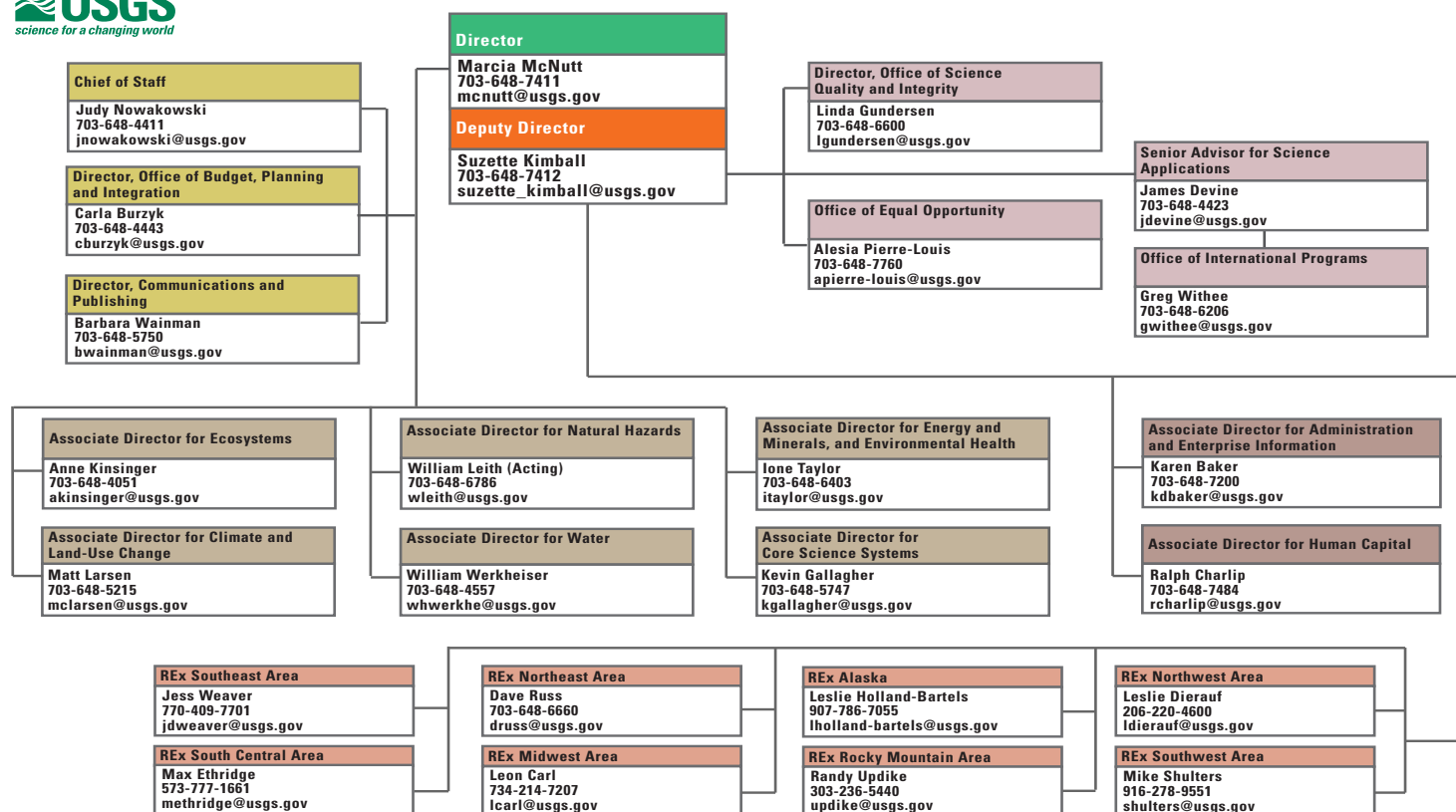


Figure 1. U.S. Geological Survey organizational structure.

Table 1. U.S. Geological Survey post-realignment organization structure with program/activity.

Ecosystems

- Biological Status & Trends
- Invasive Species
- Fisheries
- Wildlife
- Ecosystems
- Cooperative Research Units

Climate and Land-Use Change

- Climate Effects Network
- Climate Change Science Applications
- DOI Climate Science Centers and National Climate Change and Wildlife Science Center (NCCWSC)
- Carbon Sequestration
- Climate Change Research and Development
- Climate Change Science Support for DOI Bureaus
- Land Remote Sensing
- Geographic Analysis and Monitoring

Energy and Minerals, and Environmental Health

- Mineral Resources
- Energy Resources
- Contaminants
- Toxic Substances Hydrology

Natural Hazards

- Earthquake Hazards
- Volcano Hazards
- Landslide Hazards
- Global Seismographic Network
- Geomagnetism
- Coastal and Marine Geology

Water

- Groundwater Resources Program
- National Water Quality Assessment
- National Streamflow Information Program
- Hydrologic Research and Development
- Hydrologic Networks and Analysis
- Cooperative Water Program
- Water Resources Research Act Program

Core Science Systems

- Biology Information Management and Delivery
- National Geological and Geophysical Data Preservation Program
- National Geospatial Program
- National Cooperative Geologic Mapping

Administration and Enterprise Information

- Science Support
- Security and Technology
- Information Resources
- Rental Payments and Operations and Maintenance
- Deferred Maintenance and Capital Improvement
- Construction

Communications and Publishing

- Congressional Affairs
- Public Affairs
- Internal and Web
- Enterprise Publishing Network
- Science Information Services (formerly SILS)

Reference Cited

U.S. Geological Survey, 2007, Facing Tomorrow's Challenges—U.S. Geological Survey Science in the Decade 2007–2017: U.S. Geological Survey Circular 1309, 69 p., available at <http://pubs.usgs.gov/circ/2007/1309/>.