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BEFORE THE

COMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

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Good morning, Mister Chairman and Members of the Subcommittee. Thank you for the opportunity to present the Administration's proposal for the budget of the U.S. Geological Survey (USGS) for fiscal year 2009. This budget preserves the Survey's scientific excellence in our core areas of biologic, geographic, geologic, and water resources research. It also provides new funding to address several important Secretarial priorities that seek to expand our work in water assessment, oceans, bird surveys, and lead selected Federal efforts in remote sensing. These initiatives comport with scientific work and accomplishments of USGS and are outlined in our Science Strategy. This strategy, developed by a cadre of USGS scientists and professional staff, responds to national priorities and global trends with USGS scientific excellence and strong collaboration with partners at the local, State, and Federal levels. The 2009 budget request for USGS is \$968.5 million in current appropriations, a reduction of \$38.4 million from the 2008 enacted level of \$1.0 billion.

The Administration's 2009 budget proposal continues to focus USGS research on issues of societal relevance, while reflecting the President's commitment to reduce the deficit and balance the Federal budget by 2012. It ensures that USGS maintains the expertise to help address the scientific and societal challenges that will arise in the months and years ahead. The budget strengthens USGS efforts in support of key Administration priorities such as Water for America, Birds Forever, Healthy Lands, and Ocean and Coastal Frontiers. It maintains strong efforts to ensure continued availability of crucial data and research results to governmental, academic, commercial, and international users, and to provide the fundamental research and monitoring needed to address increasing concerns about climate change. The budget reflects \$34.9 million in program increases and \$15.0 million in increases for fixed costs, which are offset by \$87.8 million in program reductions.

Water is vital to the U.S. economy in general, and to agricultural production, energy independence, the viability of communities, and environmental quality in particular. If the Nation is to manage this resource well, good information and predictive tools are needed to guide decisions made by the private sector, localities, Tribes, States, and the Federal Government. The Committee on Environment and Natural Resources of the National Science and Technology Council is preparing an interagency plan for a water census, with USGS playing a key role in this multi-agency effort. USGS has played an essential role in monitoring the Nation's rivers for well over a century, and USGS databases contain information on surface-water and ground-water resources at 1.5 million sites and more than 64 million chemical analyses, all of which help local

managers assess water availability and plan for floods and droughts. In cooperation with the Bureau of Reclamation, the USGS is participating in the Department's \$21.3 million Water for America initiative to avert water crises and ensure 21st century water supplies. Within the USGS, a net increase in the 2009 budget of \$8.2 million, along with an internal redirection, will provide \$9.5 million to fund the first nationwide assessment of water availability, water quality, and human and environmental water use since the 1970s; regional-scale watershed studies; and critical upgrades of telemetry equipment at streamgages. For purposes of improved geologic characterization of aquifer systems, the initiative employs the efforts of both USGS and State geological surveys through the USGS National Cooperative Geologic Mapping Program.

Within the Department's \$9.0 million Birds Forever initiative, the USGS is requesting \$1.0 million in 2009. This funding will address threats that have led to rapid declines in the populations of many migratory bird species. USGS will complement the efforts proposed by the U.S. Fish and Wildlife Service by providing new or increased research and monitoring capacity to better understand large-scale drivers of migratory bird populations and habitat change such as climate change, deforestation, and urban development. This initiative supports monitoring efforts in the Breeding Bird Survey, Strategic Habitat Conservation, and other migratory bird monitoring activities critical to the achievement of migratory bird resource goals and objectives by the Fish and Wildlife Service and other partners. Additional funding in 2009 will be used to expand the number of Breeding Bird Survey routes surveyed annually, expand the geographic scope of the Breeding Bird Survey into Mexico, evaluate and refine methodologies, and enhance both database management and online data reporting.

The Healthy Lands initiative was a central component of the President's 2008 budget proposal, with the USGS portion focusing on the Green River Basin of Wyoming. In 2009, USGS requests an increase of \$3.5 million. Through this initiative, in partnership with the Bureau of Land Management and the Fish and Wildlife Service, USGS will provide the essential long-term science for land managers to help protect and restore the living resources of the basin while facilitating responsible development of the energy resources. Working with partners, USGS will assess the health of habitats and resources, build the geospatial framework for sharing information, and monitor changes in landscapes. USGS research and monitoring will inform habitat restoration strategies that benefit species of concern. The scientific tools, models, and protocols that are developed as part of the 2008 work in southwest Wyoming will be transferred and applied as initial steps in assisting land management agencies to determine best management practices to meet the needs of multiple stakeholders in other basins throughout the West.

The Department is also requesting \$7.9 million in targeted increases in 2009 for the Ocean and Coastal Frontiers initiative. The proposed budget includes increases in both geology and water programs, building on work begun in response to the U.S. Ocean Action Plan issued in December 2004 and the Ocean Research Priorities Plan issued in January 2007. Through Executive Order 13366 and the Ocean Action Plan, the President directed Federal agencies to enhance existing partnerships by expanding coordination and consultation on ocean-related matters and encouraged State collaboration with Federal agencies to address ocean and coastal issues. The USGS' 2009 budget requests \$7.0 million for these efforts as part of the 2009 Ocean and Coastal Frontiers initiative, which are conducted in collaboration with Federal, regional, State, and local partners. The three components of this initiative are to provide the geologic base

for delineating the limits of the U.S. Extended Continental Shelf; to develop, in collaboration with State and local entities and other Federal agencies, the tools, information, and management frameworks required to address pressing national issues where they are deemed critical to regional ocean and coastal priorities; and to enhance interagency work begun in 2008 in order to implement a water quality and ecological monitoring network.

The request for 2009 includes \$2.0 million to enable USGS to begin working with the Department and the land remote sensing community to begin to implement the Administration's August 14, 2007 plan for a National Land Imaging Program. The increase in 2009 will allow USGS, through a collaborative process, to assess and integrate current and future needs for land imaging.

The potential impacts of climate change are of great concern to Interior land managers, and there is a critical need for information to assist in adapting to changes on the landscape. With USGS' ability to conduct national, regional, and local research across the Nation and our ability to provide science information across multiple scientific disciplines, times, and scales, USGS plays a unique role in the climate science community. In 2009 USGS is sustaining \$5.0 million of \$7.4 million provided by Congress in 2008 for climate change. We will continue developing the framework for a comprehensive, national climate effects research and monitoring network; continue adapting scientific findings of the network to real-life applications; and support the recently established National Global Warming and Wildlife Science Center.

The 2009 budget proposes to consolidate 2008 base funding of \$21.6 million in current climate change work through a budget restructure that will align USGS climate change work under a single Global Change budget activity. USGS will use this funding to monitor, model, and understand ecological and physical responses to changing climate. These observations and related USGS research are essential components for climate models, especially those that deal with the physical components of climate change and impacts to the terrestrial, freshwater, and marine ecosystems from changing climate.

Priority Ecosystems Science provides integrated science to better understand the interactive nature of resources and the environment in targeted ecosystems. In 2009, a total of \$10.4 million will be dedicated to work in six study areas—Greater Everglades, Chesapeake Bay, San Francisco Bay, Mojave Desert, Platte River, and Yellowstone.

The 2009 budget includes \$73.1 million for the geography program that continues support for the USGS role in land remote sensing and geographic research. The request reflects a decrease of \$4.6 million from 2008, a net program decrease of \$2.1 million. The budget maintains funding to ensure continued availability of Earth observation data to government, academic, commercial, and international users. In addition, the 2009 budget requests an increase of \$2.0 million for the National Land Imaging Program, described earlier. The budget also requests an increase of \$416,000 for fixed costs.

The budget proposes \$208.0 million for USGS geology activities, which is \$35.5 million below 2008, a net program decrease of \$28.2 million. The geology activity includes \$6.5 million for the Oceans and Coastal Frontiers initiative, described earlier. The budget continues funding high

priority assessments of geologic hazards, landscapes, and energy resources. The budget also includes an increase of \$3.0 million for fixed costs.

Included in the geology budget is a decrease of \$25.4 million for the Mineral Resources Program. This program provides scientific information and resource assessments; data on mineral production, consumption, and environmental effects; and comprehensive baseline data for the United States in the fields of geochemistry, geophysics, and mineral deposits. The Administration is focusing its efforts in mineral resource assessments and research on projects that support the needs of Federal land management programs. The proposed budget will permit the program to continue work on a global mineral resource assessment, conduct research to provide mineral deposit models of targeted nonfuel mineral commodities for decision-makers, collect data on domestic and international production and utilization of 70-80 essential mineral commodities, and manage four national-scale long term databases.

The budget for the USGS water resources discipline proposes \$203.0 million to continue work on issues related to water availability, water quality, and flood and drought hazards. The request reflects a net decrease of \$17.5 million from 2008, a net program decrease of \$18.0 million. The budget request includes \$8.0 million for its component of the Water for America initiative, and \$500,000 for the Ocean and Coastal Frontiers initiative, as described earlier. The budget also includes an increase of \$3.6 million for fixed costs.

The 2009 budget requests \$180.3 million for biological research, which is \$458,000 above 2008, a net program increase of \$3.0 million. The proposal reflects increases of \$1.0 million for Birds Forever and \$3.5 million for Healthy Lands in the Green River Basin of Wyoming, as described earlier. The budget also includes an increase of \$2.5 million for fixed costs.

The budget requests \$277.4 million for science support, enterprise information, and facilities, which is \$63,000 below 2008. The proposed 2009 budget includes a decrease of \$4.6 million for one-time funding provided in 2008 for critical health and safety repairs and rehabilitation of facilities at the Patuxent Wildlife Research Center, a facility that is shared with the Fish and Wildlife Service. The budget also includes an increase of \$5.1 million for fixed costs in these three activities.

The budget includes a bureau-wide reduction in travel expenditures of \$3.3 million as part of an effort to reduce travel and relocation expenses. USGS will create a strategy to manage and control travel and relocation costs that promotes improved efficiency in allocating available travel funds to highest priority uses, locations, and functions.

With a worldwide reputation for excellent, objective, unbiased science, USGS is uniquely suited to address the broad scope of natural-resource and natural-science issues facing the Nation, employing scientific tools at scales ranging from microscopic to global. The 2009 budget request will enable USGS to build on its breadth of expertise and its long tradition of service to provide the data, long-term scientific understanding, and scientific tools needed to help the economy remain strong, the environment remain healthy, and the quality of life in the United States remain high, now, and into the future.

This concludes my statement. I will be happy to answer any questions you may have. I appreciate this opportunity to testify before this Subcommittee.