Statement of

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On the 2003 Budget Request

For the U.S. Geological Survey

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Madam Chairman, and Members of the Subcommittee. I come before you today to present the Administration's proposal for the budget of the U.S. Geological Survey (USGS) for fiscal year 2003. The proposed budget requests $904 million, including $37 million for a government-wide legislative proposal to shift to agencies the full cost of the Civil Service Retirement System (CSRS) and the Federal Employee Health Benefits Program for current employees. Without the legislative proposal, the request is $867 million, a decrease of $47 million from the fiscal year 2002 enacted level. Although less than the 2002 enacted level, this request will enable us to maintain our core science and monitoring programs to continue to provide the Nation with relevant and impartial scientific information.

Before I begin, Madam Chairman, I would like to thank the Subcommittee for its strong support of the USGS over the years. Your support for the scientific programs of the Survey has provided a wealth of valuable information to assist the citizens of this Nation in making sound decisions on environmental, resource, economic, agricultural, and social issues.

The Survey's 123-year history of excellence in the earth and biological sciences is a solid foundation

from which we provide scientific solutions to many national issues. The USGS, through its scientific activities – long-term monitoring and data collection, innovative research and process understanding, and informative assessments and interpretive studies – is well poised to provide the natural science information that society demands to address critical issues, such as

- mitigating the impacts of earthquakes,
- developing strategies to detect and control harmful invasive species,
- developing a better knowledge base for the sustained development of the Nation's water resources, and
- providing information on the availability, quality, and development impacts of energy and mineral resources.

As the science bureau of the Department of the Interior, USGS provides information and technologies that are critical to achieving the missions of the Department's land and resource management bureaus. Scientific support from the USGS to these bureaus ensures that the increasingly complex management decisions for Interior's vast resources are informed by relevant, impartial, credible science.

Let me take just a moment to share a few of our accomplishments over the past year, which show that the taxpayer investment in the science and monitoring programs of the USGS has paid sound dividends for the Nation.

After the September 11 attacks on America, USGS staff provided critical geospatial data and coordination to many State and Federal agencies, helping them respond to the crisis; well over 100,000 maps were distributed. The USGS topographic maps are the only complete, nation-wide coverage of the Nation's land surface and infrastructure. As part of the process of modernizing these topographic data, we are conducting eight National Map pilot projects in Delaware, Florida, the Lake Tahoe area, Missouri, Pennsylvania, Texas, Utah, and Washington-Idaho. These pilots are the foundation upon which future partnerships for data sharing and maintenance will be built.

Our science is respected and valued. In the December issue of *Environmental Science and Technology*, 10 papers were selected for high impact in the field of environmental research over the past 35

years. I am proud that three of those papers were authored by scientists who currently work at the USGS in our hydrology programs.

We are using the Internet to maximize the availability of our information, so that taxpayers have easy access to the scientific results of their investment in our research and monitoring. The new National Water Information System online database provides 14 gigabytes of real-time and historical streamflow, ground-water, and water-quality data collected from 1.5 million sites in all 50 States, Puerto Rico, and the District of Columbia. Since the online database was formally launched last July, the number of pages served has continued to grow, and we have received many compliments praising USGS for the usefulness of this site. Furthermore, the website was selected as one of only 25 finalists in the Federal Chief Information Officers Council Excellence.Gov Awards.

Partnerships remain an essential component of how we do business, to ensure cost-effective operations. In the Tampa Bay region, USGS worked with the National Oceanographic and Atmospheric Administration to develop a seamless merged topographic/bathymetric elevation model of the Tampa Bay region. The new model is proving very useful to local planning, natural resource, and regulatory agencies. We continued to work with the Centers for Disease Control and other public health entities to provide biological and geospatial data about the spread of West Nile Virus. By the end of summer 2001, this disease had been found in birds in most States east of the Mississippi River. In addition, USGS research demonstrated that the disease can be transmitted bird-to-bird, rather than only through mosquito bites. This is a critical advance in understanding how the disease moves between birds, mosquitoes, and humans.

In Nevada, a team of hydrologists has been conducting an intensive re-study of the ground water in the Fallon area, where 16 children have been diagnosed with two forms of leukemia and 2 have died since 1997--a rate 100 times higher than expected for a community of this size. Earlier USGS reports document a broad spectrum of metals, organic compounds, and radioisotopes in the ground water; the samples collected this past summer indicated 10% of the samples have arsenic concentrations greater than 500 μg/L (a maximum concentration of 2,900 μg/L has been observed) and some uranium activities are greater than 200

pCi/L. The USGS Nevada District office has worked closely with State agencies and the CDC to design the study, and results are expected soon.

Finally, the Nisqually earthquake did NOT cause widespread death and destruction in the Seattle area. One reason certainly was the depth of the earthquake--30 miles below the surface--but another is the 15 years of work by USGS scientists to assess the seismic hazard in the region and provide the information to local officials in ways that they could use to protect and prepare communities for such events. USGS scientists have worked closely with the University of Washington, the Federal Emergency Management Agency, and others to raise awareness of the earthquake risk among local businesses--including Boeing, Microsoft, and Bank of America--and the general public, so people can take effective action to mitigate their risk. The earthquake also provided the first major test of the 20 Advanced National Seismic System stations that had been recently installed in and around Seattle. All 20 instruments provided valuable information for immediate data analysis and damage assessments, as well as information on the effects of local soil conditions and geologic structures.

The 2003 budget request focuses resources on our core mission programs of geology, mapping, biology, and water. The budget preserves a number of significant program increases received in recent years that provide science support to Interior land- and resource-management bureaus and other high priorities. In the area of hazards, the request preserves the 2002 funding increase for continued implementation of the Advanced National Seismic System, which provides both immediate information on the intensity of ground shaking, for use by emergency responders, and high-quality data on building response, used by engineers to improve building safety. The request also includes funding to address Administration priorities. The USGS will continue to provide the scientific information that is vital to the President's national strategy for a sound energy policy. In addition to ongoing national assessments of coal, oil, and natural gas, and other energy and mineral commodities, the 2003 budget request proposes an increase of $2.7 million for USGS to step up its efforts in support of the National Energy Policy and the overall goal of increasing domestic energy production. Of that $2.7 million, $1.2 million will enable USGS to more fully implement the requirements of section 604 of the Energy Act of 2000, which requires USGS

to conduct estimates of undiscovered oil and natural gas resources on Federal lands in the continental United States. During 2002, with reimbursable funding provided by the Bureau of Land Management, the USGS will estimate volumes of oil and gas resources on Federal lands in five study areas in the Rocky Mountains. The 2003 increase will enable USGS to expand this work beyond the initial five study areas. The budget includes an additional $1.0 million to produce digital base maps in Alaska, with work focused initially on potential lease areas in the National Petroleum Reserve. The mapping effort will provide resource managers with information they need to make timely and environmentally sound resource and management decisions. The USGS budget proposal supports alternative, non-fossil fuel energy development as well, with $500,000 for USGS to begin the process of updating geothermal energy assessments. The USGS will initiate this effort in the Great Basin region.

Besides these energy-related budget increases, USGS is also proposing a $1.0 million initiative to utilize its core mission expertise to study the relationship between environmental change and human health issues in the U.S.–Mexico border region. The border area is a significant contributor to our economic vitality and encompasses important natural resources. In partnership with the National Institute of Environmental Health Sciences, USGS will bring its expertise in geologic, geochemical, and hydrologic processes to bear on these issues. The proposal aims to improve the understanding of naturally occurring and introduced disease-causing agents in the environment — like radiation, pesticides, and pathogens — and their specific exposure pathways in water, air, and soil. For example, USGS will produce geologic maps showing the distribution of rock types likely to produce elevated levels of potentially toxic elements such as mercury, arsenic, and selenium.

The budget maintains recent funding increases that have enabled USGS to undertake a multi-disciplinary coastal initiative, as requested by the Congress. Coastal regions are under enormous pressure due to population growth, and USGS science will lead to a better understanding of the impacts of natural and human-induced change on the coastal environment. In 2003, the current USGS pilot study in Tampa Bay, Florida, will focus on developing a comprehensive understanding of coastal and marine systems. The study will provide Internet-accessible data and decision support systems to inform the responsible use and

management of the Nation's coastal and offshore resources.

The budget proposes a $4.0 million increase for the Critical Ecosystems Science Initiative for the Everglades. This will enable USGS to provide the long-term science, analysis, monitoring, modeling, and decision support systems needed for the adaptive implementation of the Comprehensive Everglades Restoration Plan. The budget retains increases appropriated in 2001 and 2002 for base USGS biological science center operations and high-priority tactical science support for the Fish and Wildlife Service. It also retains funding increases that have accelerated the pace of the biological Gap Analysis Program and expanded the National Biological Information Infrastructure. These programs develop and disseminate data that are beneficial to land and resource managers at all levels of government.

The 2003 budget also retains funding increases provided in FY 2001 that expanded the Ground-Water Resources Program, in response to the Nation's growing reliance on these resources. There is a recognized need for more sophisticated knowledge to support sustainable development of complex aquifers and to protect inter-related surface waters and riparian habitat.

The net funding decrease for FY 2003 reflects the elimination of unrequested funding increases, many of which were for short-duration projects that are completed, and reductions to lower priority programs. The budget includes a 10% reduction to the National Water Quality Assessment Program. The budget proposes to offset this decrease with funding contributions from NAWQA customers and beneficiaries. Finally, the budget reflects a transfer of $10 million in Toxic Substances Hydrology Program funding to the National Science Foundation, where it will be used for a water-quality research grants program. This transfer reflects the Administration's goal of realigning the Federal Government's investment in research and development to give greater support and emphasis to competitive research.

In closing, Madam Chairman, I know that the USGS will do its best to remain strong, dynamic, and ready to meet the science needs of the Nation. I will be pleased to respond to any questions you may have.