



U.S. GEOLOGICAL SURVEY

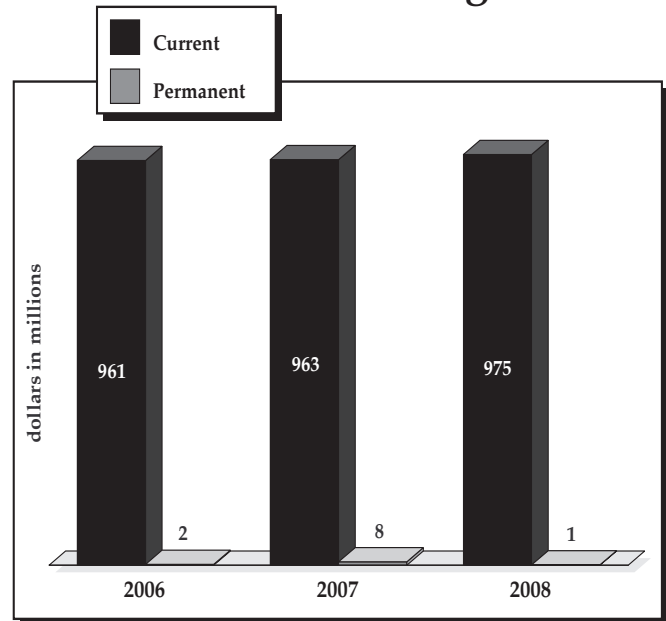
Mission — The mission of the U.S. Geological Survey is to provide reliable scientific information to: describe and understand the Earth; minimize loss of life and property from natural disasters; assist others in managing water, biological, and other natural resources; and enhance and protect the quality of life.

Program Overview — The USGS provides a broad range of expertise in geography, geology, hydrology, and biology. The USGS places a special emphasis on providing science to the land and resource management bureaus of the Interior Department. The USGS hazards programs produce information and enhance understanding of natural hazards, such as earthquakes, volcanoes, and landslides, which are used to reduce the impacts of these events on human life and the economy. The USGS is a primary Federal source of objective resource assessments and unbiased research on oil, gas, and alternative energy potential, production, consumption, and environmental effects. These investigations enable the Nation to make sound decisions regarding domestic energy production with an understanding of potential impacts on the environment.

The USGS analyses of water quality and quantity help water managers develop, regulate, and monitor management practices to ensure the continued availability of water resources for human consumption, agriculture, business, recreation, and fish and wildlife and habitat. Biological studies are used to help maintain healthy ecosystems and natural resources so that these habitats can continue to provide food, energy, medicine, transportation, and recreation. The USGS geography program is expanding its partnerships with Federal agencies and State and local governments to develop and promote use of the geographic data and products that are important tools for States, public and private entities, universities, and citizens for economic and community development, land and natural resource management, and health and safety services.

To deliver the most accurate, timely, and impartial science possible, USGS is seeking ways to integrate its diverse programs, capabilities, and talents to address those issues that require a multi-disciplinary solution. The USGS

USGS Funding



places great value on partnerships and is increasing customer involvement to work collaboratively on issue identification, resource needs, and science solutions. Natural and biological science supports informed decisionmaking by land and resource managers at Federal, State, and local levels; government program managers; industrial and agricultural corporations; scientists and academia; and the public.

Management Excellence — The USGS continues to advance the President's management agenda for improving performance of the Federal government and implementing the Secretary's vision for citizen-centered management excellence. The 2008 budget supports the Department's 2007-2012 strategic plan, specifically in relation to improving understanding of ecosystems, resources, and natural hazards.

The USGS continuously pursues excellence in management and administration of its programs, routinely identifying opportunities to streamline and automate functions and improve internal controls. The bureau encourages managers and employees to review business

practices regularly and develop alternative methods and processes to save time and resources.

The USGS has been engaged in workforce analysis and workforce planning for the past few years, which will be the basis for USGS to renew and restructure its workforce so that it can focus on priority areas and undertake new avenues of scientific research that currently are beyond its technical and organizational capabilities. These efforts will help USGS address future science needs over the years to come. For example, USGS is refocusing its geospatial technical operations business activities to respond to technological and other changes in the way the Nation produces and uses maps and geospatial data.

The close proximity of USGS managers and scientists to Interior land and resource managers in the field allows USGS to be more responsive to regional and local issues and provide the scientific expertise and leadership necessary to assist managers in solving their current problems and addressing their future science needs. The USGS works in close cooperation with more than 2,000 Federal, State, tribal, and local governmental agencies, private sector companies, and non-profit organizations across the country. Partnerships provide highly effective means to leverage resources among many contributors, bringing a greater wealth of knowledge, expertise, and capability for important land and resource management issues.

The USGS is addressing its high priority science needs through the Natural Hazards Initiative. Proposed by USGS in 2007, and continued in 2008, the initiative builds stronger communities by significantly reducing the vulnerability of the millions of people most at risk from having their lives and livelihoods endangered by natural hazards. The 2008 budget includes an additional \$1.3 million in support of the hazards initiative.

As part of the 2008 budget process, the Coastal and Marine Geology program was reviewed using the Program Assessment Rating Tool. The program was found to be moderately effective. The review recognized the program's leadership within the USGS in coordinating bureau-wide coastal activities. The budget includes a \$1.5 million increase for this program as discussed below.

The 2008 budget also includes a program increase of \$2.0 million for implementation of the Financial and Business Management System, which is funded through the Department's Working Capital Fund.

Budget Overview — The proposed 2008 USGS budget request is \$975.0 million, \$12.3 million above the continuing resolution and \$30.2 million above the 2007 President's budget. The request includes a \$17.9 million program decrease to restore the priorities of the 2007 President's

budget that are not included at the 2007 continuing resolution level, including fixed costs, eliminating unrequested congressional earmarks, and implementing other program enhancements and reduction proposals included in the 2007 President's budget.

The 2008 budget continues to focus on the highest priorities for research, while ensuring that USGS builds the expertise it needs to continue answering the complex scientific questions that may arise tomorrow. The budget emphasizes increases for science that will ensure the long term viability of wildlife and habitat as energy resources are being developed; implement the Ocean Action Plan; and allow critical infrastructure improvements at the Patuxent Wildlife Research Refuge, a leading international research institute for wildlife and applied environmental research.

Healthy Lands Initiative — The budget includes \$5.0 million for the Healthy Lands Initiative. The USGS works with a focus on the Green River Basin in Wyoming, using the data inventory developed in 2007 that will establish baseline conditions, present the current level of knowledge, and identify gaps in data and information. The inventory will include mapped information on the biologic, hydrologic, and geologic resources integrated with mapped information on roads, utility corridors, land ownership, and other data contributed by Federal and State land management agencies, as well as documents and other forms of information. In 2008, USGS will collaborate with BLM, FWS, the U.S. Forest Service, Wyoming State agencies, industry, and non-governmental organizations to build the geospatial framework for sharing information, assessing the health of habitats and their resources, and monitoring changes in landscape and habitats as energy development proceeds, all to ensure the long-term viability and sustainability of wildlife and terrestrial and aquatic habitat in energy development areas. The percent of targeted science products that are used by partners for land or resource management decisionmaking in support of the resource protection mission area will increase as a result of this initiative.

After determining partner needs for Healthy Lands science information, USGS will establish and implement a monitoring strategy and protocols that provide information needed to: implement alternative management solutions; integrate biologic, geologic, geographic, and hydrologic information and data into tools that evaluate outcomes of alternative resource management strategies; and develop scientific information, knowledge, and tools to ensure future decisions regarding land and resource use, management practices, and energy development are based on understanding the relationships of biological resources to physical changes. These activities will assist partners as they develop habitat restoration strategies that benefit species of concern.

Ocean Action Plan — The U.S. Ocean Action Plan promotes collaboration among Federal, State, tribal, local, private, and international partners. This blueprint is guiding efforts to improve conservation practices through informed scientific and ecosystem-based decisions, while ensuring that the American public can enjoy the benefits of ocean, coastal, and Great Lakes resources. In 2008, the budget includes an increase of \$3.0 million for the Ocean Action Plan, including \$1.0 million that will also support the Survey's hazards initiative.

Geography — The 2008 request of \$75.0 million in Geography supports a strong role for USGS in land remote sensing and geographic research. The request level represents a net decrease of \$1.7 million below the 2007 level. The USGS continues to improve the understanding of the rates, causes, and consequences of natural and human induced processes that shape and change the landscape over time and to provide comprehensive information needed to understand the environmental, resource, and economic consequences of landscape change.

In 2007 and 2008, USGS will continue operations and maintenance for Landsats 5 and 7, and will work with NASA and the Landsat Science Team to continue development of the Landsat Data Continuity Mission. This will improve USGS' ability to monitor and analyze changes on the Earth's surface and will maintain the constant record used by scientists and decisionmakers. The 2007 President's budget included an increase of \$16.0 million for LDCM.

Decreases to the Geography program budget include \$2.0 million in the Priority Ecosystem Science program.

Geology — The 2008 budget proposes \$222.1 million for geology activities, which is \$4.7 million above 2007. This funding level includes a proposed increase of \$1.5 million in the Coastal and Marine Geology program to begin implementation of the Oceans Research Priorities Plan and Implementation Strategy, integral to the U.S. Ocean Action Plan, by conducting observations, research, sea floor mapping, and forecast models. Work on ORPPIS will lead to the development of decision support tools to help policy makers anticipate and prepare for coastal ecosystem and community responses to extreme weather events, natural disasters, and human influences. These activities, which will be developed collaboratively with other Federal agencies, also support the USGS hazards goals.

The 2008 budget continues to refocus the Mineral Resources program on activities that are inherently governmental. In 2008, the budget includes \$29.9 million for the MRP, a decrease of \$2.6 million below 2007. In 2008, USGS will continue selected minerals surveys and studies relevant to ongoing Departmental land management.

Water Resources — The Water Resources program is funded at \$212.5 million in the 2008 budget request, which is \$8.4 million above 2007. One of the chief recommendations of the U.S. Ocean Action Plan is the creation of an interagency National Water Quality Monitoring Network that will address and integrate watershed, coastal waters, and ocean monitoring based on common criteria. The budget includes an increase of \$1.5 million in the Hydrologic Networks and Analysis program, building upon pilot study results that will help begin the implementation of the network.

The budget request includes an increase of \$1.7 million for the National Streamflow Information Program, including \$250,000 that would enable installation of three new streamgages in southern California and deployment of storm surge monitors in support of the bureau's ongoing hazards program.

The increase of \$1.4 million in NSIP will be used to fully fund ongoing operating costs for the national streamgaging network, reactivate recently discontinued streamgages; supplement operations and maintenance funding for threatened streamgages; stabilize the network; and help reduce the loss of streamgages in the future.

The 2008 budget also includes a decrease of \$2.2 million in the Cooperative Water program for studies that are coming to an end.

Biological Research — The 2008 budget requests \$181.1 million in biological research, which is \$8.5 million above 2007, and includes an additional \$5.0 million for the Healthy Lands Initiative, discussed above.

Science Support, Enterprise Information, and Facilities — The 2008 budget requests a total of \$284.3 million for Science Support, Enterprise Information, and Facilities activities, which is \$10.3 million above 2007. This funding level includes an increase of \$4.7 million in Facilities for repairs and rehabilitation of facilities at the Patuxent Research Refuge. Funding budgeted by USGS and FWS for Patuxent will be used to replace utilities at the refuge that are outdated, unreliable, and costly to operate. The funding will allow the facility to connect to public utilities. The budget request also includes a decrease in Enterprise Information of \$1.5 million achieved through economies of IT centralization, consolidation of software and hardware purchases, and workforce planning.

Fixed Costs — The 2008 budget request includes an increase of \$24.0 million to fully fund fixed cost increases.

SUMMARY OF BUREAU APPROPRIATIONS

(all dollar amounts in thousands)

Comparison of 2008 Request with 2007 Continuing Resolution:

	2007 CR		2008 Request		Change from 2007	
	FTE	Amount	FTE	Amount	FTE	Amount
Appropriations						
Surveys, Investigations, and Research.....	5,301	962,676	5,222	974,952	-79	+12,276
Permanents and Other						
Operations and Maintenance of Quarters.....	0	61	0	51	0	-10
Contributed Funds.....	0	1,408	0	1,045	0	-363
Spectrum Relocation Activities.....	0	6,159	0	0	0	-6,159
Working Capital Fund.....	158	0	345	0	+187	0
Subtotal, Permanents and Others.....	158	7,628	345	1,096	+187	-6,532
Transfers and Reimbursables.....	2,758	0	2,550	0	-208	0
TOTAL, U. S. GEOLOGICAL SURVEY.....	8,217	970,304	8,117	976,048	-100	+5,744

HIGHLIGHTS OF BUDGET CHANGES

By Appropriation Activity/Subactivity

APPROPRIATION: Surveys, Investigations and Research

	2006 Actual	2007 CR	2008 Request	Change from 2007
Geographic Research, Investigations, and Remote Sensing				
Cooperative Topographic Mapping ...	68,855	0	0	0
Land Remote Sensing	45,713	61,754	61,431	-323
Geographic Analysis/Monitoring	14,705	14,860	13,524	-1,336
Subtotal, Geographic Research	129,273	76,614	74,955	-1,659
Impact of the CR (<i>non-add</i>)		[-11,766]		
Geologic Hazards, Resource, and Processes				
Geologic Hazards Assessments	81,000	82,396	84,008	+1,612
Geologic Landscape/ Coastal Assess....	77,752	78,106	81,391	+3,285
Geologic Resource Assessments	76,534	56,916	56,686	-230
Subtotal, Geologic Hazards	235,286	217,418	222,085	+4,667
Impact of the CR (<i>non-add</i>)		[+18,067]		
Water Resources Investigations				
Hydrologic Monitoring, Assess, & Rsch	142,527	141,876	150,073	+8,197
Cooperative Water Program	62,833	62,171	62,381	+210
Water Resources Rsch Act Program	6,404	0	0	0
Subtotal, Water Resources	211,764	204,047	212,454	+8,407
Impact of the CR (<i>non-add</i>)		[+7,839]		
Biological Research				
Biological Research/Monitoring	140,086	135,692	143,406	+7,714
Biological Info Mgmt/Delivery	23,794	21,967	22,278	+311
Cooperative Research Units	14,664	14,938	15,430	+492
Subtotal, Biological Research	178,544	172,597	181,114	+8,517
Impact of the CR (<i>non-add</i>)		[+4,984]		
Enterprise Information				
Enterprise Info Security and Tech	24,866	25,972	24,902	-1,070
Enterprise Information Resources	16,900	16,636	17,041	+405
National Geospatial Program	4,628	68,622	70,177	+1,555
Subtotal, Enterprise Information	46,394	111,230	112,120	+890
Impact of the CR (<i>non-add</i>)		[-535]		
Science Support	69,302	67,382	70,671	+3,289
Impact of the CR (<i>non-add</i>)		[+1,920]		
Facilities	94,782	95,472	101,553	+6,081
Impact of the CR (<i>non-add</i>)		[-2,593]		
Net Transfers	-4,000	0	0	0
TOTAL APPROPRIATION (<i>w/o CR or supps</i>)	961,345	944,760	974,952	30,192
Impact of the Continuing Resolution...		+17,916		-17,916
TOTAL APPROPRIATION (<i>with CR</i>)	961,345	962,676	974,952	+30,192
Hurricane Supplemental	+15,500	0	0	0
TOTAL APPROPRIATION (<i>w/ CR and supps</i>)	976,845	962,676	974,952	+12,276

Highlights of Budget Changes

	<u>Amount</u>
Fixed Costs	[+24,034]
Impact of the Continuing Resolution	-17,916
Geographic Research, Investigations, and Remote Sensing	
Land Remote Sensing	-323
The budget proposes a decrease (-\$850) in USGS support provided to other Federal agencies in the acquisition of remote sensing data. Fixed costs are fully funded at \$527.	
Geographic Analysis and Monitoring	-1,336
The budget proposes a reduction (-\$2,000) in the USGS Priority Ecosystem Science program with deferral of lower priority research. Fixed costs are fully funded at \$664.	
Geologic Hazards, Resources, and Processes	
Geologic Landscape and Coastal Processes	+3,285
The proposed increase (+\$1,500) in the Coastal and Marine Geology program would support USGS development of the Oceans Research Priorities Plan and Implementation Strategy integral to the U.S. Ocean Action Plan. Fixed costs are fully funded at \$1,785.	
Geologic Resource Assessments	-230
A decrease is proposed (-\$2,614) in the Mineral Resources program. Fixed costs are fully funded at \$2,384. Funding is retained for selected surveys and studies relevant to ongoing Interior land management.	
Water Resources Investigations	
Hydrologic Monitoring, Assessments, and Research	+8,197
Increases in the National Streamflow Information program would enable installation of three new streamgages in southern California and deployment of storm surge monitors (+\$250), and fund continued operations for the streamgaging network (+\$1,400). The proposed increase (+\$1,500) in Hydrologic Networks and Analysis would fund establishment of a pilot effort for an interagency National Water Quality Monitoring Network, which supports the goals of the Ocean Action Plan. Fixed costs are fully funded at \$5,047.	
Cooperative Water Program	+210
The proposed decrease (-\$2,200) is for studies that are coming to an end. Fixed costs are fully funded at \$2,410.	
Biological Research	
Biological Research and Monitoring	+7,714
The proposed increase (+\$5,000) supports the Healthy Lands Initiative. Decreases are proposed for lower priority studies for mammalian population ecology and habitat (-\$300) and the contaminants program (-\$650). Fixed costs are fully funded at \$3,664.	
Enterprise Information	
Enterprise Information Security and Technology	-1,070
The proposed decrease (-\$1,500) would be achieved through economies of IT centralization, consolidated software and hardware purchases, and workforce planning. Fixed costs are fully funded at \$430.	
Science Support	+3,289
The proposed increase (+\$1,972) is for implementation of a Department-wide Financial and Business Management System. Fixed costs are fully funded at \$1,317.	
Facilities	+6,081
The budget proposes an increase (\$4,650) in the Deferred Maintenance and Capital Improvement subactivity for a collaborative effort between USGS and FWS to fund critical utility infrastructure replacement for their collocated facilities on the Patuxent Wildlife Research Refuge. Fixed costs are fully funded at \$1,431.	