

More Cuts in Store for USGS R&D

AAAS R&D Funding Update on R&D in the FY 2005 Interior Budget

(This analysis is a preview of the Dept. of the Interior section in the forthcoming *AAAS Report XXIX: Research and Development FY 2005*, a comprehensive look at the President's budget for R&D in FY 2005. This analysis contains revised AAAS estimates of R&D, different from figures presented in the AAAS Preliminary Analysis of February 5. More tables and continually updated supplemental materials on R&D in the FY 2005 budget can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/rd>.)

Highlights

- **R&D in the Department of the Interior would fall 4.0 percent to \$648 million in FY 2005** (see Table II-15).

- **There would be a cut of 4.0 percent for R&D in Interior's lead science agency, the U.S. Geological Survey (USGS).** The \$525 million FY 2005 R&D portfolio would mean cuts to nearly every USGS program and flat funding for the remainder, in areas such as mapping, earth sciences, water resources research, and biological research.

- R&D funding for Interior would be flat or declining for the fifth year in a row.

USGS R&D in the FY 2005 Budget

The Department of the Interior manages most of the publicly owned lands in the United States, from the national park system to Indian lands to publicly owned mines. The **U.S. Geological Survey (USGS)** is the primary sponsor of R&D in Interior. USGS is one of the leading federal sponsors of earth sciences research, along with the Department of Energy, the National Science Foundation, and the National Aeronautics and Space Administration. Within the earth sciences, USGS is particularly important in geological hazards research, including research on earthquakes and volcanoes. USGS is also a leading sponsor of water resources research and biological research. Nearly 90 percent of this research is conducted within Interior labs to address the science needs of Interior's other agencies, such as the Fish and Wildlife Service, while roughly 5 percent is performed by colleges and universities.

In the FY 2005 budget released in early February, the Bush Administration requested \$921 million for the USGS total budget in FY 2005, \$18 million or 1.9 percent less than the current year (see Table II-16).

R&D accounts for nearly two-thirds of the USGS budget, with the remainder going to non-R&D activities such as environmental data collection, mapping, and natural hazards reduction. **The Bush Administration proposes a cut of 4.0 percent for USGS R&D activities to \$525 million.** The request proposes to cut funding for R&D in three USGS divisions (Geology, Water Resources, and Biological Research) and keep funding flat in the remaining division (Mapping).

Funding for nearly every USGS R&D program would decline in FY 2005, and the remainder would see flat funding. There would be a steep 7.2 percent cut to \$120 million for R&D in the Water Resources Division. Funding for the **Toxic Substances Hydrology Program** would decline by 14 percent down to \$14.6 million, but Congress rejected a similar cut last year. The program is a collaborative effort of USGS scientists, university and private-sector researchers, and state, local, and other federal agency scientists to conduct long-term research on water resource contamination in surface and groundwater environments.

The request again proposes to eliminate the \$6.4 million water resources research institutes program, a proposal Congress rejected last year. The request proposes \$14.6 million for the hydrologic research and development program, down 14 percent from this year's funding level; again, Congress rejected a similar request last year. The request keeps **the National Water Quality Assessment Program (NAWQA)** at \$64 million, up just slightly from \$63 million. NAWQA is charged with monitoring the nation's water quality, and its data are used by the Environmental Protection Agency (EPA) and many state regulatory agencies. Similarly, R&D in the **Cooperative Water Program** would stay even at \$64 million, down slightly from last year's level. This program supports the collection of basic hydrologic data, studies of specific water-resources problems, and hydrologic research through USGS partnerships with organizations in every state, primarily state, tribal, county, and municipal agencies with water-resources responsibilities. The Biological Resource Division (BRD) would receive \$172 million in FY 2005, a reduction of \$3 million.

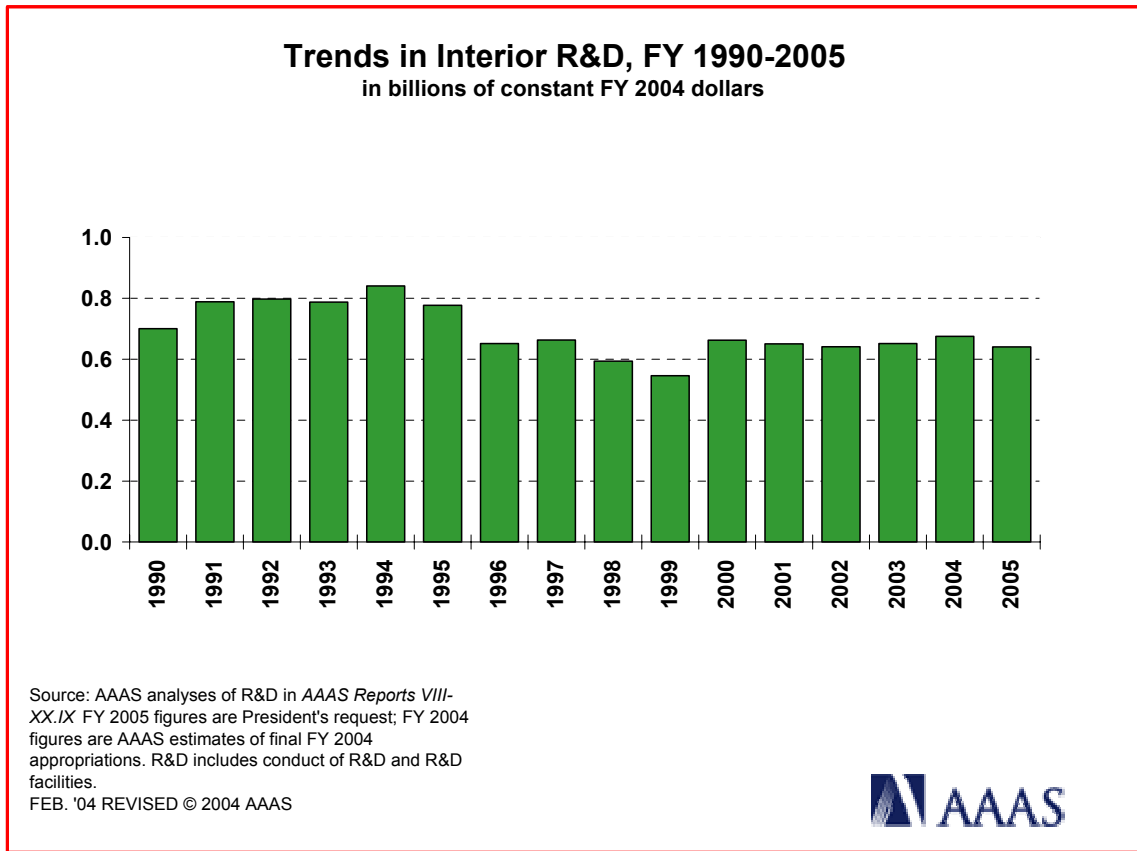


Figure 1. (click on the image to view or download a color, full-page PDF version of this chart)

R&D in the Geologic Hazards, Resources, and Processes Division would fall \$10 million down to \$201 million, mostly because of a proposed \$6.8 million reduction to \$48.7 million for mineral resources R&D. Congress disagreed strongly with a similar proposal last year, and restored funding to the proposed cut. Funding for R&D on earthquakes, volcanoes, landslides, geologic mapping, geology, and earth surface dynamics would stay flat or decline slightly. Mapping and Geography R&D would remain at \$33 million.

Other Interior Agencies

Although USGS is the primary science agency in Interior, four other Interior bureaus also fund R&D (see Table II-16). These include funds for minerals and mining research in the Minerals and Management Service (MMS), wildfire prevention research in the Bureau of Land Management (BLM), water resources research in the Bureau of Reclamation, and R&D for the Florida Everglades restoration project in the

National Park Service. Recent expansions in BLM's wildfire-related R&D activities would continue in FY 2005, bringing BLM R&D to \$52 million (up 6.1 percent).

Impacts of the FY 2005 Interior Budget

The FY 2005 cut to Interior R&D would be the fifth year in a row that Interior R&D funding has stagnated and lost ground to inflation (see Figure 1), and leaves the department 20 percent below the funding levels of a decade ago. Interior R&D has declined sharply since FY 1994, primarily because of the elimination of the Bureau of Mines in FY 1996 and the merging of the former National Biological Service into USGS in the mid-1990s. Since then, Interior R&D has been mostly flat, after climbing back in FY 2000 from hitting bottom in FY 1999.

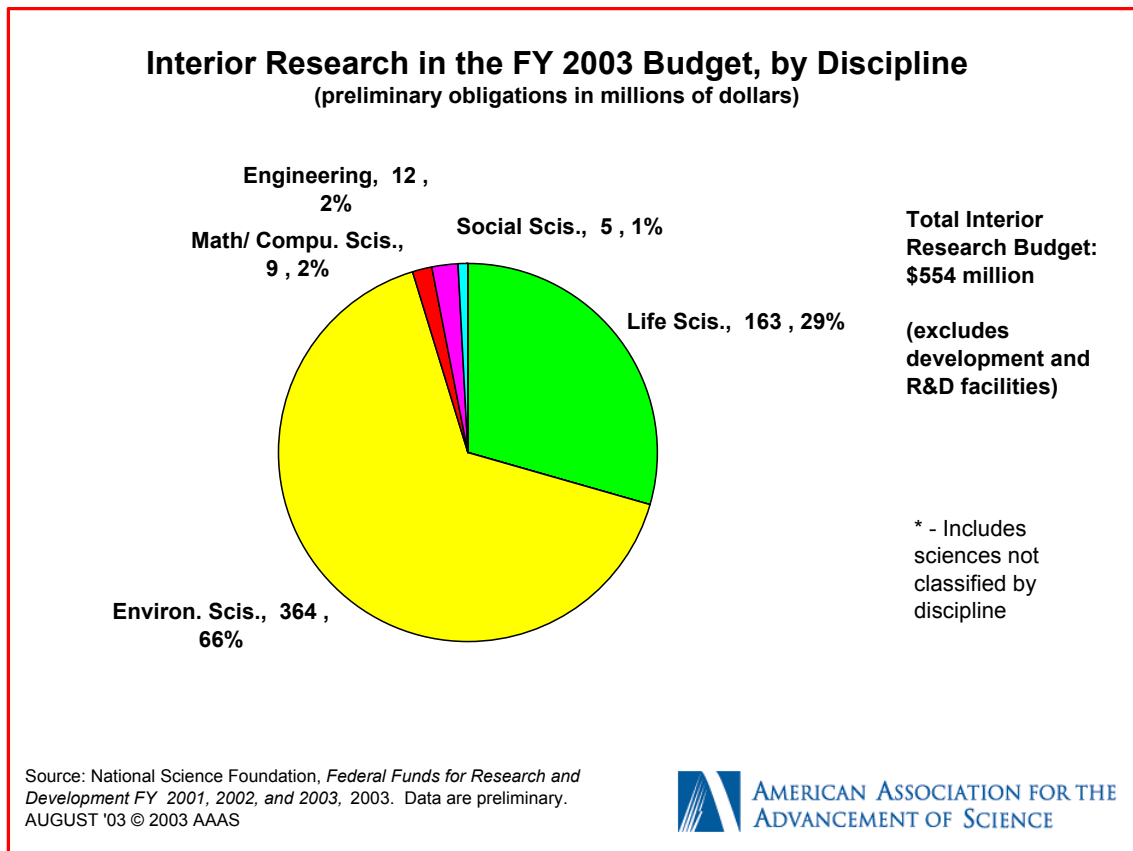


Figure 2. (click on the image to view or download a color, full-page PDF version of this chart)

Figure 2 shows the distribution of Interior's research portfolio (excluding development and R&D facilities) by discipline, most of it funded by USGS. USGS work in earth sciences and water resources falls under the environmental sciences category, which accounts for two-thirds of Interior's research. Biological research in USGS is classified under life sciences, which accounts for most of the remaining Interior portfolio. USGS and the other Interior bureaus fund small amounts of other research.

Even the flat funding of recent years may look good compared with what lies in store. With Congress and the President apparently committed to reducing the budget deficit in half within the next five years primarily through holding down domestic spending, the consequences for USGS are becoming clearer. The FY 2005 budget contains preliminary projections for the USGS budget out to FY 2009. **In FY 2006, the total USGS budget would fall even further to \$897 million** and end up well below this year's funding level at \$903 million by FY 2009. **After adjusting for expected inflation, the five-year Bush budget would leave USGS R&D funding 13 percent below this year's funding level in 2009.**

- February 26, 2004

(More materials on R&D in the FY 2005 budget, historical data and charts, and more information on *AAAS Report XXIX: Research and Development FY 2005*, can be found on the AAAS R&D Web site at <http://www.aaas.org/spp/rd>.)

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Table II-16. Department of the Interior R&D

Table II-16. R&D in the Department of the Interior
(budget authority in millions of dollars)

	FY 2003	FY 2004	FY 2005	Change FY 04-05	
	Actual	Estimate	Budget	Amount	Percent
U.S. Geological Survey	550	547	525	-22	-4.0%
<i>National Mapping, Geography</i>	46	33	33	0	0.0%
<i>Geologic & Mineral Resources</i>	209	210	201	-10	-4.6%
<i>Water Resources</i>	126	129	120	-9	-7.2%
<i>Biological Research</i>	170	175	172	-3	-1.6%
Minerals Management Service	29	30	28	-2	-6.7%
National Park Service	33	33	33	0	0.0%
Bureau of Reclamation	11	16	10	-6	-37.5%
Bureau of Land Management	20	49	52	3	6.1%
Total Interior R&D	643	675	648	-27	-4.0%

Source: OMB data for R&D for FY 2005 and agency supporting documents.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

Please see Chapter 13 for a discussion of the Interior budget.**AAAS REVISED February 26, 2004****Dept. of the Interior Budget** (includes R&D components above)
(budget authority in millions of dollars)

	FY 2003	FY 2004	FY 2005	Change FY 04-05	
	Actual	Estimate	Budget	Amount	Percent
Bureau of Land Management	2,434	2,384	3,124	740	31.0%
Minerals Management Service	1,125	1,274	1,308	34	2.7%
Office of Surface Mining...	385	311	387	76	24.4%
Bureau of Reclamation	1,009	1,025	1,016	-9	-0.9%
U.S. Geological Survey	920	939	921	-18	-1.9%
U.S. Fish and Wildlife Service	1,925	1,992	2,031	39	2.0%
National Park Service	2,582	2,626	2,668	42	1.6%
Bureau of Indian Affairs	2,345	2,432	2,344	-88	-3.6%
Other	1,297	1,461	1,623	162	11.1%
Misc. Offsetting Receipts	-3,590	-4,029	-4,831	-802	19.9%
Total Interior Budget	10,432	10,415	10,591	176	1.7%

Source: *Budget of the United States Government FY 2005*.

Includes budget authority from appropriations, trust funds, and permanent approps.

All figures are rounded to the nearest million. Changes calculated from unrounded figures.

Please see Chapter 13 for a discussion of Interior R&D.