AAAS

Advancing science • Serving society

EPA R&D Declines in Senate Plan

AAAS R&D Funding Update on EPA FY 2007 Senate Appropriations

Highlights

- **The Environmental Protection Agency's (EPA) R&D budget would decline 0.7 percent or $4 million to $596 million in the latest Senate appropriation, an improvement over a 7 percent EPA-requested cut.** Much of the improvement would come from $30 million in congressional earmarks.

- EPA's overall budget would fall 1.3 percent to $7.6 billion.

EPA R&D in FY 2007 Senate Appropriations

On June 29, the Senate Appropriations Committee approved its version of the fiscal year (FY) 2007 Interior and Environment appropriations bill (HR 5386); the full House approved its own version of the bill on May 18. The bill funds most of the Department of the Interior as well as the Smithsonian Institution, the Forest Service, and the Environmental Protection Agency (EPA). **EPA's R&D would total $596 million in the Senate Interior/Environment bill, a slight cut of $4 million or 0.7 percent that would nevertheless improve on** a 7 percent requested cut in the President's February budget proposal. Earlier, the House approved a slight increase for a total of $608 million. (For details of the President's request for EPA R&D, please see Chapter 13 of *AAAS Report XXXI: R&D FY 2007* or the February 28 EPA R&D Funding Update. For details of House appropriations, see the May 17 R&D Funding Update.)

EPA's R&D is managed by its Office of Research and Development (ORD), which funds both R&D at EPA laboratories around the country and external R&D, mostly at universities. Nearly all of EPA's R&D comes from the Science and Technology (S&T) budget account, which would total $793 million in the FY 2007 Senate plan, a dramatic increase of 8.7 percent. But the big increase comes primarily from a transfer of many non-R&D operating costs from the Environmental Programs and Management (EPM) account to S&T. Taking out these costs and other non-R&D items such as critical infrastructure protection, operating overhead costs, and clean air standards and certification activities leaves R&D in the Science and Technology account at $566 million in the Senate, a cut of $2 million. ORD also receives R&D funding from the Superfund program (down $2 million to $28 million) for hazardous wastes research, and small amounts of funding from other EPA accounts.

EPA proposed to eliminate congressional earmarks in the FY 2007 request, but they make comebacks in both the House and Senate appropriations to the tune of $30 million, down slightly from $33 million in 2006. But the two chambers have separate lists of projects that could total well above $33 million if they are combined in the final appropriation. The congressionally designated, performer-specific projects make up $30 million of the $38 million the Senate added to the R&D request, leaving only $8 million to spread around EPA's R&D efforts in other areas. The House had $28 million extra, allowing for slight increases for most R&D programs, but the Senate would leave in place cuts for most of EPA's R&D and increases in just a few areas. EPA, the House, and the Senate would all boost clean water research by 10 percent to $106 million. Clean air research would fall $6 million to $95 million in the Senate plan and the request. Human health and ecosystems research, the largest part of the ORD portfolio, would also decline to $230 million (down $8 million), as would sustainability research (down $5 million to $26 million) and toxics research (down slightly to $30 million). The Senate would add $3 million to a requested cut in EPA's fellowships program, which could have discontinued support for up to 37 fellows receiving EPA support for their environmental studies; instead, the Senate (and also the House) would sustain funding at the current level of $12 million.

Homeland security related R&D would continue to be a growth area in the portfolio, rising from $23 million to $30 million this year and up to $37 million in the Senate plan. Some of this effort is devoted to protecting drinking water supplies against terrorist attack through vulnerability assessments and a laboratory network for surveillance. This portfolio also funds EPA's National Homeland Security Research Center (NHSRC) to conduct R&D on a wide variety of terrorist threats that may have an impact on the natural environment, such as radiation, drinking water contamination, and the environmental impacts of cleanup technologies after a terrorist attack.

EPA's S&T investments are a small part of the overall EPA portfolio (see Table), and are designed to support EPA's regulatory and enforcement missions. R&D fares slightly better than the overall FY 2007 Senate appropriation of $7.5 billion, a loss of $95 million or 1.3 percent. The Environmental Programs and Management (EPM) account which funds most of EPA's regulatory work fall 1.5 percent to $2.3 billion.

Impacts of the EPA R&D Portfolio

EPA's R&D support has been declining slowly for the past few years after steady growth in the late 1990s (see Figure 1). EPA R&D fell in FY 2000, and has eroded slowly in inflation-adjusted dollars since then except for a one-time boost in FY 2004 for homeland security-related R&D. EPA R&D has hovered near $600 million in today's dollars in recent years.

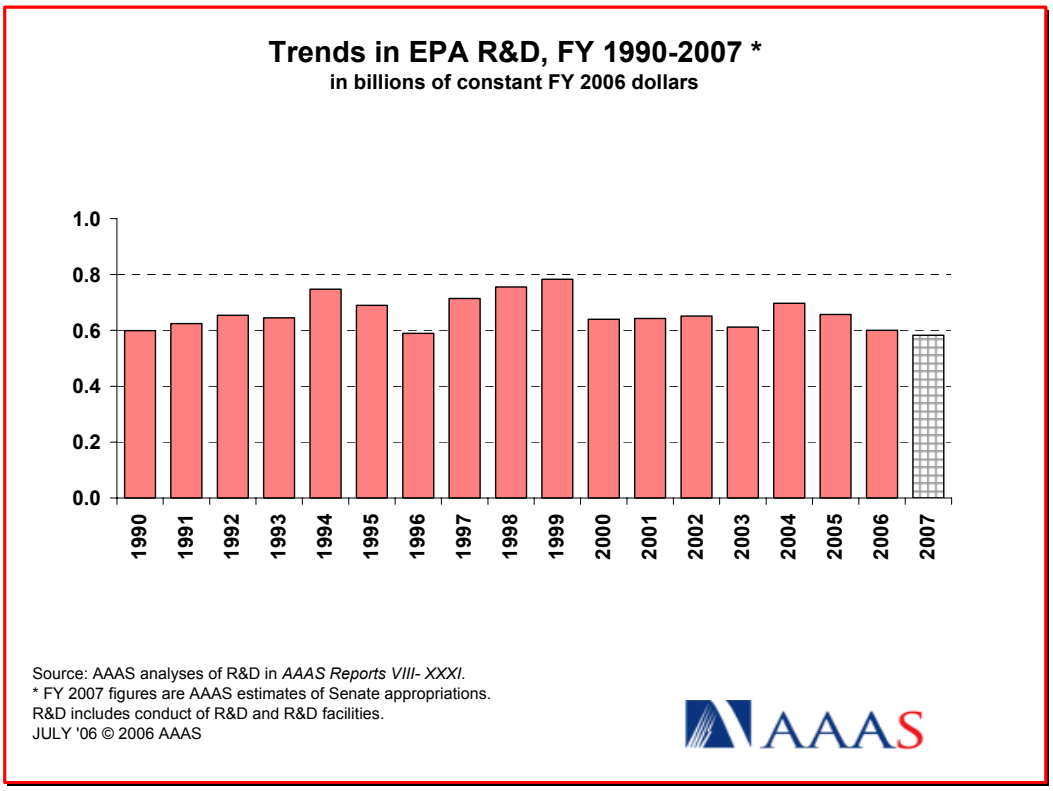

Figure 1. (click on the image for PDF)

EPA's basic and applied research support (excluding development and R&D facilities) comprises the large majority (80 percent) of EPA's R&D. The largest part of EPA's research is in the life sciences (primarily biology and environmental biology), with significant support for the environmental sciences and engineering as well. Although EPA is the major environmental regulatory agency in the federal government, many other agencies have environmental responsibilities related to research, resource stewardship, and economic management of the environment, so EPA is a relatively small funding source for environmental R&D.

Roughly 47 percent of EPA's R&D is performed in the agency's own laboratories, while about 10 percent is performed by industrial firms. Nearly a third of EPA's R&D is performed by colleges and universities, a share that has been growing in recent years as EPA has attempted to expand its links with academia. The remainder is performed by nonprofit institutions and state and local governments.

Outlook and Next Steps

The full Senate may debate its Interior/Environmental bill later this month, and will most likely approve it by a large margin after modifying it with numerous amendments. The House has already approved its version of the bill, but a House-Senate committee to craft a final compromise bill may not be able to reach an agreement until the fall.

> (This analysis is one of a series of AAAS R&D Funding Updates on FY 2007 congressional appropriations. The complete series of AAAS R&D Funding Updates, including continually updated analyses of R&D in FY 2007 appropriations, is available on the AAAS R&D Web Site (http://www.aaas.org/spp/rd) in the "FY 2007 R&D" or the "What's New" sections.)

- July 6, 2006
AAAS R&D Budget and Policy Program
1200 New York Avenue, NW
Washington, DC 20005
AAAS R&D Web site: http://www.aaas.org/spp/rd

Table. Environmental Protection Agency
Senate Appropriations Committee Action on R&D in the FY 2007 Budget
(budget authority in millions of dollars)

				Action by Senate				
	FY 2006	FY 2007	FY 2007	**FY 2007**	Chg. from Request		Chg. from FY 2006	
	Estimate	Request	House	**Senate**	Amount	Percent	Amount	Percent
EPA R&D:								
Science and Technology [1]	568	528	576	**566**	38	7.3%	-2	-0.3%
Congressional Projects	*33*	*0*	*30*	***30***	*30*	*- -*	*-3*	*-8.9%*
Clean Air	*102*	*95*	*102*	***95***	*0*	*0.0%*	*-6*	*-6.3%*
Clean Water	*96*	*106*	*106*	***106***	*0*	*0.0%*	*10*	*10.2%*
Human Health & Ecosystems	*238*	*228*	*238*	***230***	*2*	*0.9%*	*-8*	*-3.2%*
Land Protection	*12*	*11*	*11*	***11***	*0*	*0.0%*	*-1*	*-9.1%*
Sustainability	*31*	*24*	*26*	***26***	*2*	*10.5%*	*-5*	*-15.3%*
Pesticides and Toxics	*30*	*26*	*30*	***30***	*4*	*15.7%*	*0*	*0.0%*
Homeland Security	*30*	*38*	*33*	***37***	*0*	*-0.7%*	*8*	*25.4%*
BA adjustment	*-3*	*0*	*0*	***0***	*0*	*-100.0%*	*3*	*-100.0%*
Superfund	30	28	30	**28**	0	0.0%	-2	-8.2%
Leaking Underground Storage Tanks	1	1	1	**1**	0	0.0%	0	0.0%
Oil Spill Response	1	1	1	**1**	0	0.0%	0	0.0%
Other R&D	0	0	0	**0**	0	- -	0	- -
Total EPA R&D	600	557	608	**596**	38	6.9%	-4	-0.7%
EPA Budget (includes non-R&D components):								
Science and Technology [1]	730	788	808	**793**	5	0.6%	64	8.7%
Environ. Progs. and Management	2,345	2,307	2,336	**2,311**	4	0.2%	-34	-1.5%
Superfund	1,231	1,259	1,257	**1,261**	2	0.2%	30	2.5%
State and Tribal Assistance Grants	3,148	2,797	3,007	**3,000**	203	7.3%	-147	-4.7%
Buildings and Facilities	40	40	40	**40**	0	0.0%	0	0.5%
Leaking Underground Storage Tanks	80	73	73	**73**	0	0.0%	-7	-9.0%
Oil Spill Response	16	17	17	**17**	0	0.0%	1	5.6%
Inspector General	37	35	35	**35**	0	0.0%	-2	-4.9%
Total EPA Budget	7,625	7,315	7,573	**7,530**	214	2.9%	-95	-1.3%

AAAS estimates based on FY 2007 appropriations bills. Includes conduct of R&D and R&D facilities.
FY 2006 and FY 2007 request figures based on OMB R&D data and supplemental agency budget data.
Figures are rounded to the nearest million. Changes calculated from unrounded figures.

[1] Does not include transfers from Superfund (see Superfund line).

July 5, 2006 - AAAS estimates of Senate Appropriations Committee action.
These figures may be modified or rejected by the full Senate.