

APPENDIX E: Restoration Budget Summary

BUDGET

Over the past 10 years, the Department of Defense (DoD) has invested over \$20 billion in environmental restoration through the Defense Environmental Restoration Program (DERP). This funding comes from the Environmental Restoration (ER) account, which funds environmental cleanup at active installations and formerly used defense sites (FUDS); and the Base Realignment and Closure (BRAC) account, which funds environmental restoration at BRAC installations. For Fiscal Year (FY) 2005 alone, DoD invested approximately \$1.3 billion in ER funding for environmental restoration activities at active installations and FUDS properties. DoD invested an additional \$250.3 million for environmental activities at BRAC installations, which includes planning, management, and cleanup activities but excludes land sale revenue used by the Components to supplement BRAC environmental restoration activities.

This appendix provides detailed information on how ER and BRAC environmental funding at the DoD and Component levels meet environmental restoration requirements; how funding relates to progress through the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) cleanup process; and describes future funding needs.

Component Funding Status

ER funding for active installations and FUDS properties is appropriated into five Component-specific ER accounts. The Army, Navy, and Air Force manage individual ER accounts for environmental response activities at their active installations. The U.S. Army Corps of Engineers executes a fourth account that funds the FUDS program. The fifth account, the Defense-wide account, supports the Office of the Secretary of Defense's oversight of the DERP and cleanup initiatives for the Defense Logistics Agency (DLA) and the Defense Threat Reduction Agency. Figure E-1 shows actual, appropriated, and requested FY2004–FY2007 ER funding, by Component, for environmental restoration activities at active installations and FUDS properties. In FY2005, DoD invested \$401.3 million for Army; \$265.9 million for Navy; \$396.5 million

for Air Force; \$265.7 million for FUDS; \$15.4 million for DLA; and \$3.4 million for Defense-wide restoration activities. ER funding remained stable both for the DERP as a whole and for the five individual accounts.

Figure E-2 shows actual and estimated BRAC environmental funding for environmental restoration, compliance, management, and planning at legacy BRAC installations between FY2004 and FY2007. The BRAC funding in Figure E-2 also includes NEPA and environmental studies for BRAC 2005 installations in FY2006 and environmental restoration and program management for BRAC 2005 installations in FY2007. In FY2005, DoD invested \$95.0 million for Army, \$0 for Navy, \$148.8 million for Air Force, and \$6.5 million for DLA for restoration activities as BRAC properties. The Navy's requirement for appropriated BRAC funding continues to fluctuate due to revenue generated from the sale of BRAC property supplementing appropriated restoration costs. Revenue of \$102.5 million generated from the sale of BRAC property reduced the Navy's FY2005 BRAC appropriation. FY2006 and FY2007 show an overall DoD increase in BRAC funding requirements from FY2005. These increased BRAC funding requirements reflect the impact of the BRAC 2005 closures recently approved by Congress.

Progress Through Cleanup Phases

As sites progress through the cleanup process, more sites complete investigations and advance to cleanup activities. As a result, DoD spends increasingly more funding on cleanup activities and less on investigation. Appropriately, ER funding trends mirror this site progress trend, as illustrated in Figure E-3, where the proportion of funding spent on DERP cleanup activity increases as the proportion of funding spent on investigation decreases. During FY2005, DoD spent approximately 58 percent of funding on cleanup and used 25 percent to complete investigation phases. Figure E-3 also demonstrates that the DERP maintains a consistently low level of program management and support costs.

Figure E-1
Environmental Restoration Funding Profile for Active Installations and FUDS Properties*
 (in millions)

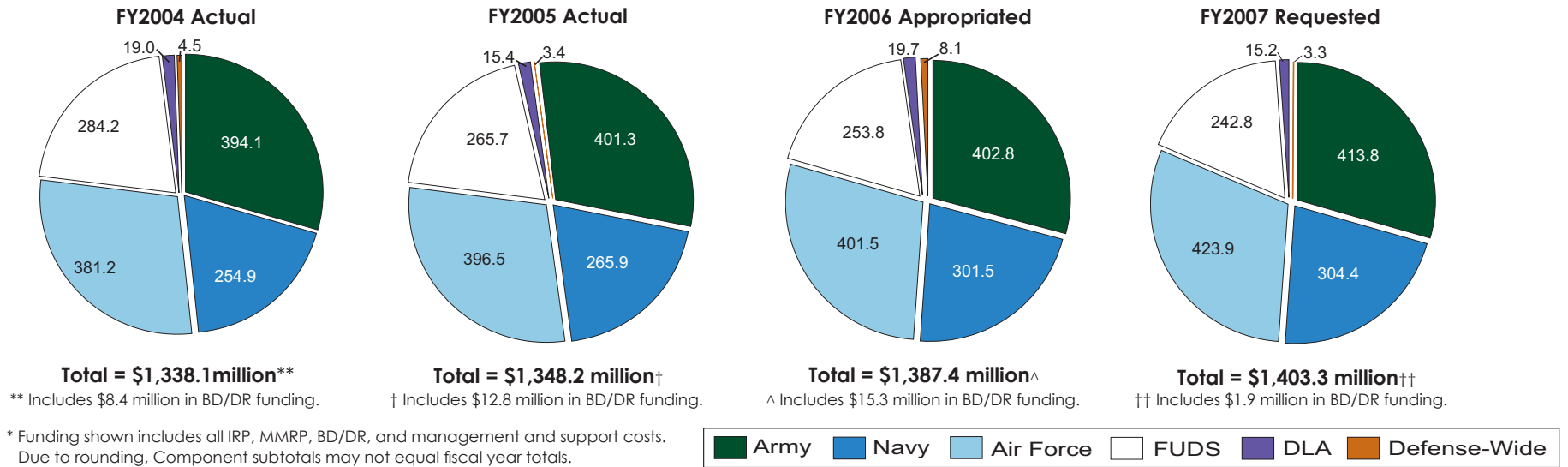
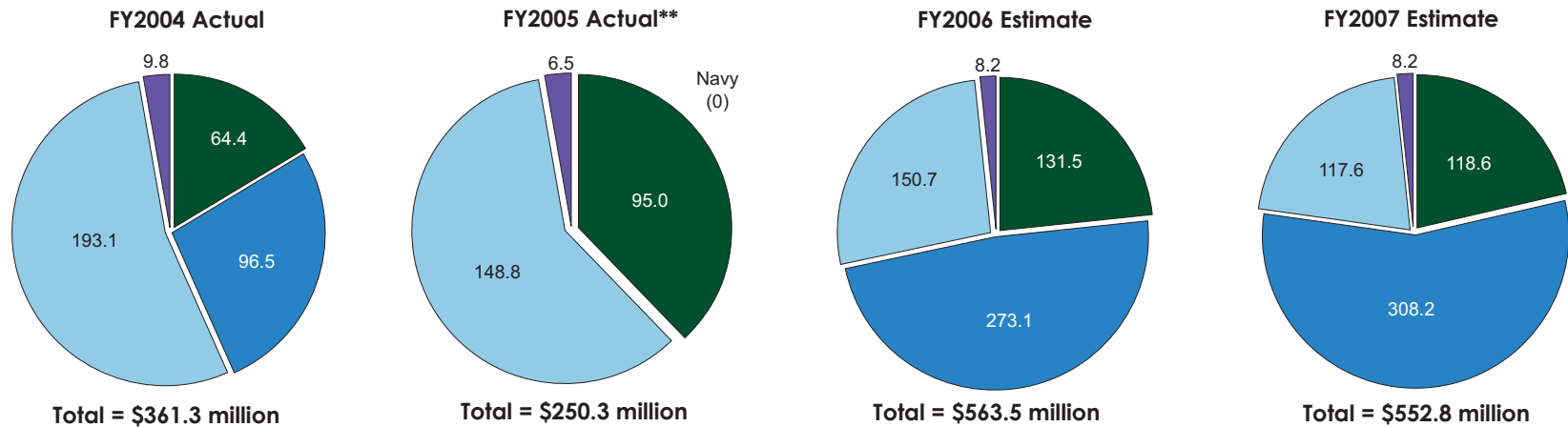


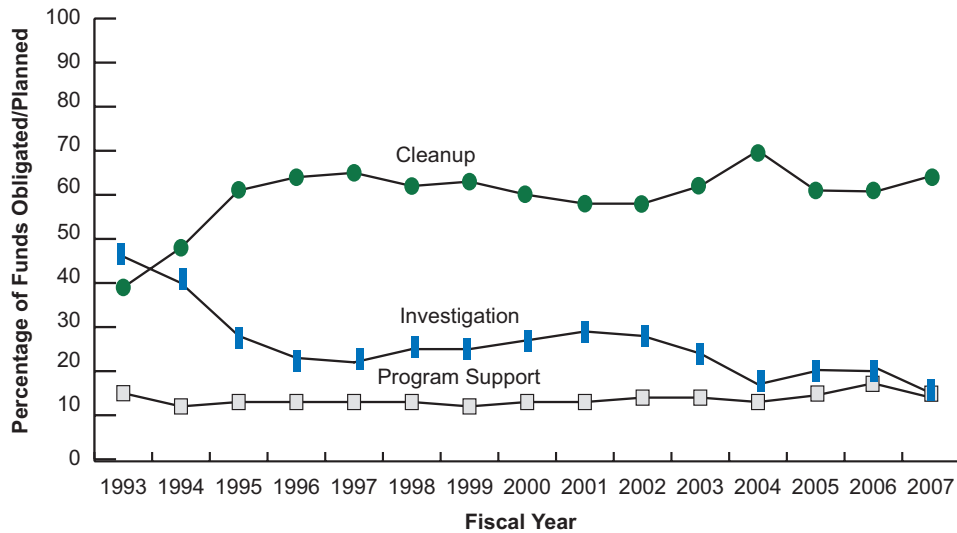
Figure E-2
BRAC Environmental Funding Profile*
 (in millions)



* Includes environmental restoration, compliance and program management funds for legacy BRAC installations, and also includes NEPA, environmental studies and program management for BRAC 2005 installations in FY2006 and environmental restoration and program management for BRAC 2005 installations in FY2007. Due to rounding, Component totals may not equal fiscal year totals.

** Excludes Navy previous year land sale revenue of \$102.5 million.

Figure E-3
Environmental Restoration Obligations and Planning Estimates for Cleanup, Investigation, and Program Management at Active Installations and FUDS



Upon formal creation of the Military Munitions Response Program (MMRP) in FY2001, the Department conducted an inventory to identify MMRP sites. As a result, many new sites that required funding were introduced into the DERP, most of which were in the investigation stages. This temporarily increased the proportion of DERP funding spent on investigation, but the overall trend continues to decline.

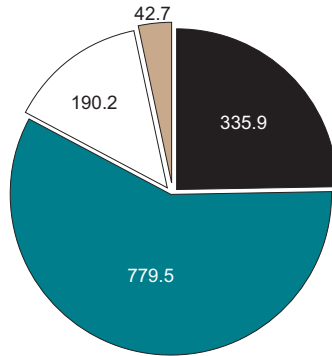
Figure E-4 illustrates the distribution of total DERP ER funds, which include funding for active installations and FUDS in both the Installation Restoration Program (IRP) and the MMRP, across each stage of the environmental restoration process—investigation, cleanup, and long-term management (LTM)—as well as program management. Figures E-5 and E-6 show breakouts of ER funding by environmental restoration program category, IRP and MMRP, respectively. Correspondingly, Figure E-7 illustrates overall BRAC environmental restoration funding, while Figures E-8 and E-9 show BRAC environmental restoration funding broken out by IRP and MMRP, respectively.

Relative Risk Reduction

DoD gauges DERP progress through the program metric to address the “worst first” in site cleanup. Funding limitations require that DoD prioritize sites based on the risk the site poses to human health and the environment

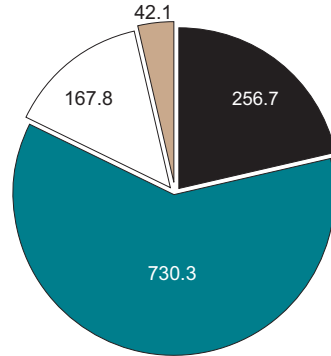
DERP Environmental Restoration Funding by Cleanup Phase*
 (in millions)

Figure E-4
Total FY2005 DERP
Environmental Restoration Funding



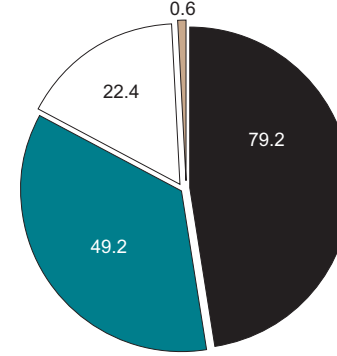
Total = \$1,348.2 million

Figure E-5
FY2005 IRP ER
Environmental Restoration Funding



Total = \$1,196.9 million

Figure E-6
FY2005 MMRP
Environmental Restoration Funding



Total = \$151.4 million

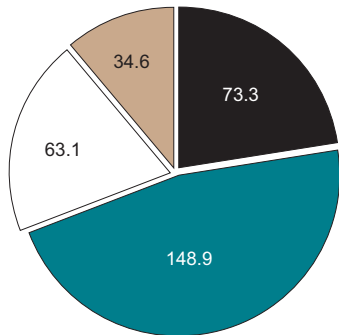


* Due to rounding, Component subtotals may not equal fiscal year totals.

BRAC Environmental Restoration Funding by Cleanup Phase*

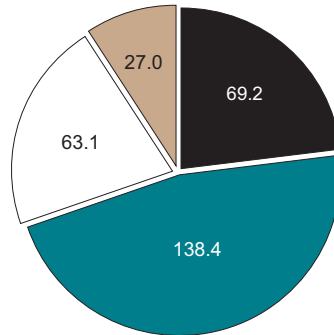
(in millions)

Figure E-7
Total FY2005 BRAC
Environmental Restoration Funding**



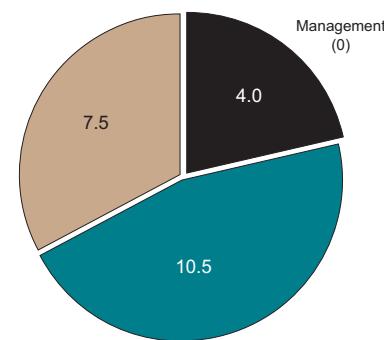
Total = \$319.8 million†

Figure E-8
FY2005 IRP BRAC
Environmental Restoration Funding**



Total = \$297.7million†

Figure E-9
FY2005 MMRP BRAC
Environmental Restoration Funding**



Total = \$22.1 million†

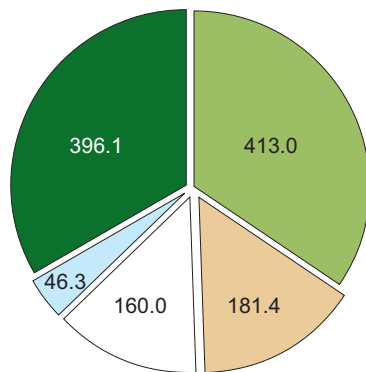


* Due to rounding, subtotals may not equal fiscal year totals.

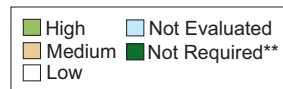
** These figures do not include BRAC environmental compliance and planning funding.

† Includes Navy previous year land sale revenue of \$102.5 million.

Figure E-10
FY2005 Environmental Restoration IRP Funding by Relative Risk Category*
(in millions)



Total = \$1,196.9 million



** Not required includes sites that have already achieved RIP or RC.

* Does not include MMRP funding.

relative to other sites in the program. Sites are classified by relative-risk as high, medium, and low; sites can also be classified as not evaluated or not required. To address the worst sites first, DoD spent the greatest portion of FY2005 ER funding in the IRP on the remaining high relative-risk IRP sites, continuing its commitment to address all of these sites at active installations and FUDS by FY2007. As illustrated in Figure E-10, DoD spent \$413.0 million, or 35 percent of the FY2005 ER IRP budget on high relative-risk sites. In addition to high, medium, and low relative-risk sites, DoD also apportioned funds for sites that have not yet been evaluated for relative risk, most of which are still in investigation stages. DoD also apportioned funding for sites that no longer require relative risk classifications because, while DoD already addressed cleanup at these sites, some "Not Required" sites need funding to continue operations, maintenance, and/or monitoring of remedies already in place.

Cost-to-Complete Estimates

The Department also measures DERP progress using program cost-to-complete (CTC) estimates, which are an estimation of anticipated costs necessary to complete environmental restoration requirements. CTC estimates, derived

from the budgeting process, are based on site-level data and provide the most accurate picture of anticipated cost trends for addressing environmental restoration requirements. As such, the Department values CTC estimates as an important oversight and program management tool used to assess future funding needs and to determine if the Department is using funding effectively. As DoD works to move sites through the CERCLA cleanup process and complete environmental restoration requirements, the total CTC for the DERP declines. Figure E-11 illustrates breakouts of IRP and MMRP CTC estimates for ER and BRAC funding. CTC estimates for funding in the MMRP show anticipated cost trends for addressing munitions response requirements. As the MMRP matures and sites are further characterized, DoD's CTC estimates will continue to improve and provide a more refined picture of munitions response requirements.

Figure E-12 shows total CTC estimates for each Component. The FUDS program has the highest CTC estimates for MMRP activities due to the large number of MMRP sites present at FUDS properties. All Components with MMRP sites, however, will spend increasing amounts of funding on MMRP activities in future years as DoD continues to increase its focus on addressing the risks associated with these sites. DoD's estimated CTC for munitions responses at BRAC installations is composed primarily of funding for addressing MMRP requirements at Army BRAC installations.

The following sections contain charts that provide data on Component funding and cost-to-complete trends in the DERP and illustrate DERP funding breakouts for FY2005.

Figure E-11
Cost-to-Complete Estimates for FY2006-Complete (in millions)

	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012-Complete	Total
Environmental Restoration	\$1,154	\$1,185	\$1,249	\$1,291	\$1,256	\$1,317	\$23,212	\$30,663
IRP*	\$1,002	\$1,019	\$1,048	\$1,036	\$921	\$862	\$5,838	\$11,726
MMRP*	\$153	\$166	\$201	\$254	\$336	\$454	\$17,374	\$18,937
BRAC	\$400	\$383	\$237	\$162	\$208	\$171	\$2,223	\$3,784
IRP*	\$366	\$362	\$215	\$129	\$140	\$142	\$1,270	\$2,624
MMRP*	\$34	\$21	\$23	\$33	\$68	\$28	\$953	\$1,160
Total	\$1,554	\$1,568	\$1,486	\$1,453	\$1,465	\$1,487	\$25,434	\$34,447

†Does not include program management, DTRA, and other miscellaneous costs.
*IRP and MMRP funding are subsets of ER and BRAC funding totals

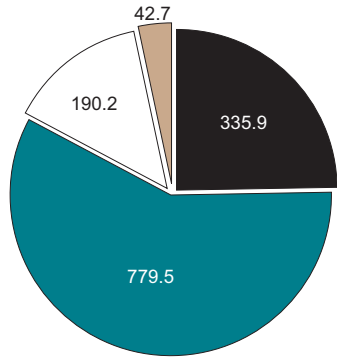
Figure E-12
Cost-to-Complete Estimates by Components for FY2006-Complete† (in millions)

	Army	Navy	Air Force	DLA	FUDS	Total
Environmental Restoration	\$6,650	\$2,532	\$4,824	\$217	\$16,440	\$30,663
IRP*	\$2,353	\$2,066	\$3,550	\$217	\$3,540	\$11,726*
MMRP*	\$4,298	\$466	\$1,275	\$0	\$12,899	\$18,937
BRAC^	\$1,564	\$904	\$1,283	\$32	\$0	\$3,784
IRP	\$502	\$807	\$1,283	\$32	\$0	\$2,624
MMRP	\$1,062	\$98	\$0	\$0	\$0	\$1,160
Total**	\$8,214	\$3,436	\$6,108	\$250	\$16,440	\$34,447

*Includes \$57.4 million of Defense-wide costs.
† BRAC IRP and MMRP totals include cost to complete requirements transferred from active IRP and MMRP sites for BRAC 2005 major installations.
^Does not include compliance costs
**Due to rounding, subtotals may not equal fiscal year totals.

DoD Funding Summary

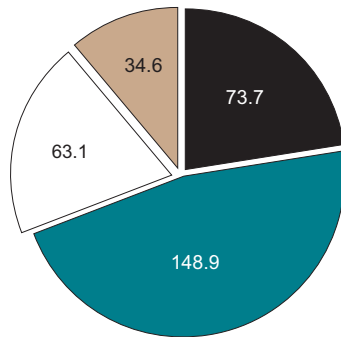
DoD FY2005 ER Funding by Cleanup Phase (in millions)**



Total = \$1,348.2 million**

** Includes \$12.8 million dollars in BD/DR funding.

DoD FY2005 BRAC† ER Funding by Cleanup Phase* (in millions)



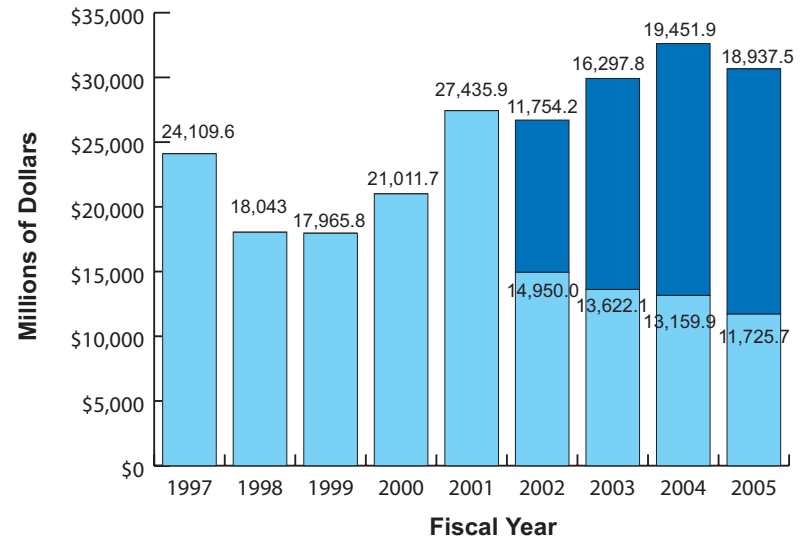
Total = \$319.8 million

* Due to rounding, category subtotals may not equal fiscal year totals.

† Does not include \$23.1 million of compliance and planning funding. Includes Navy land sale revenue of \$102.5 million.



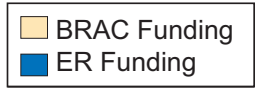
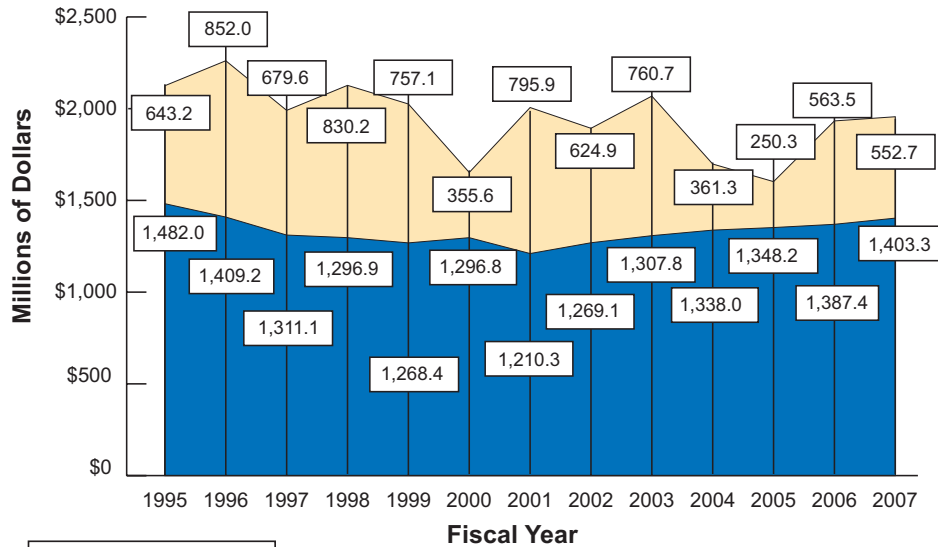
DoD ER Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

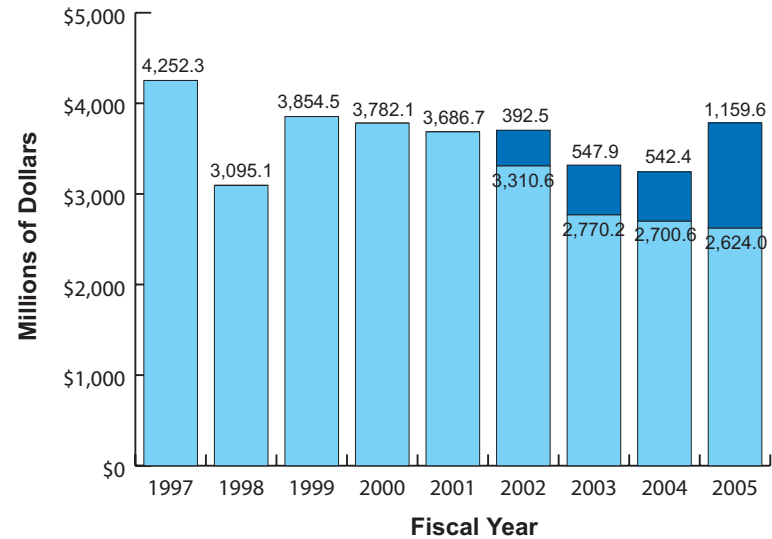


DoD ER and BRAC Funding Trends*†



† Excludes Navy land sale revenue but includes transferred funds earmarked for BRAC 2005.

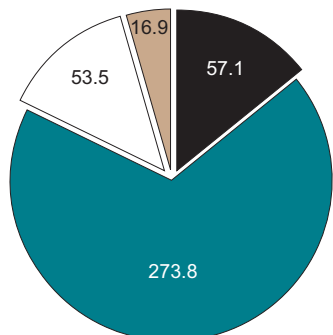
DoD BRAC Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

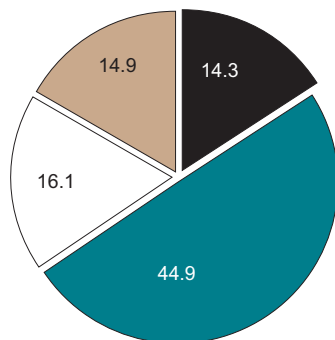
Army Funding Summary

Army FY2005 ER Funding by Cleanup Phase* (in millions)



Total = \$401.3 million

Army FY2005 BRAC ER Funding by Cleanup Phase* (in millions)



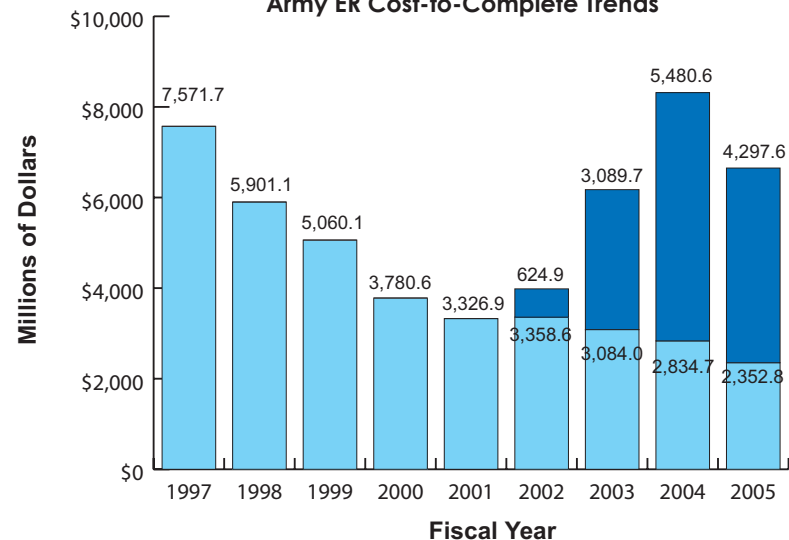
Total = \$90.1 million†



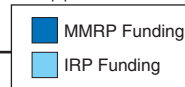
* Due to rounding, category subtotals may not equal fiscal year totals.

† Does not include \$2.0 million of compliance and planning funding or \$3.0 million in Air Force funds for EPA requirements.

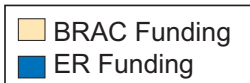
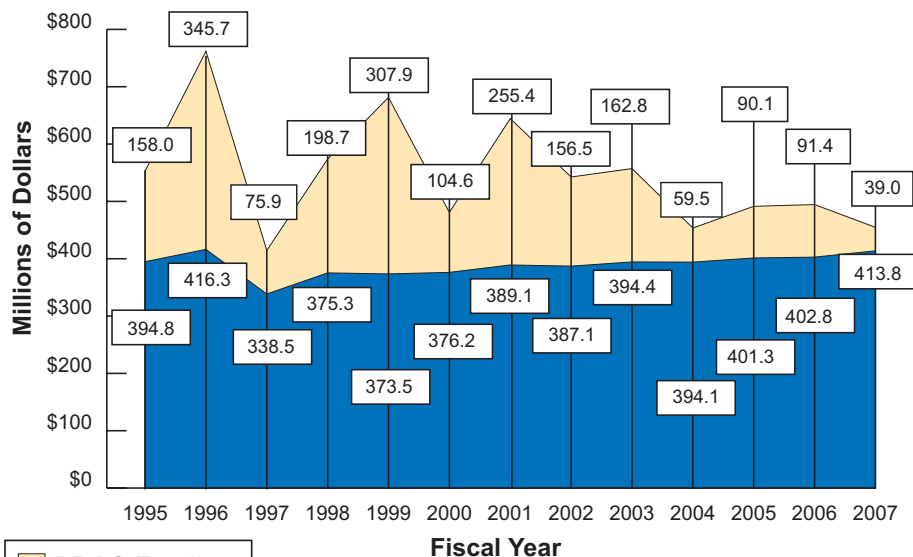
Army ER Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

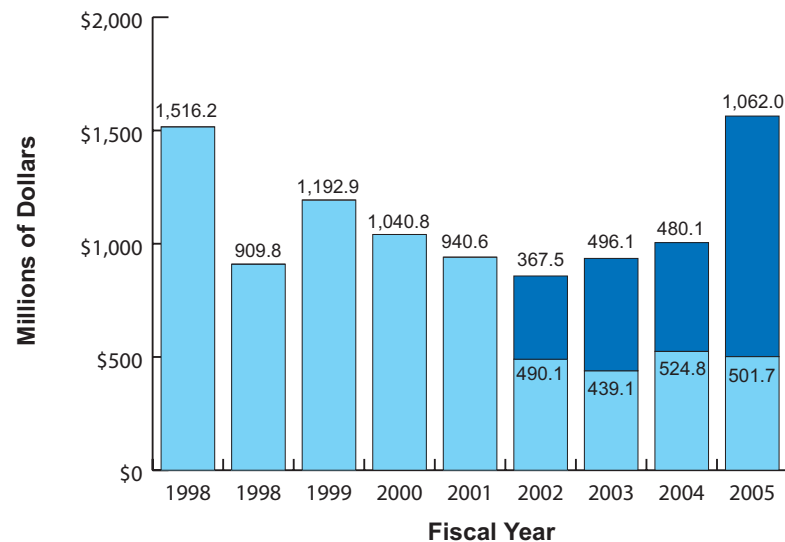


Army ER and BRAC Funding Trends*



* Does not include BRAC environmental compliance and planning funding or transferred funds earmarked for BRAC 2005.

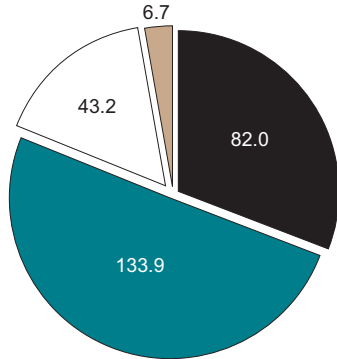
Army BRAC Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

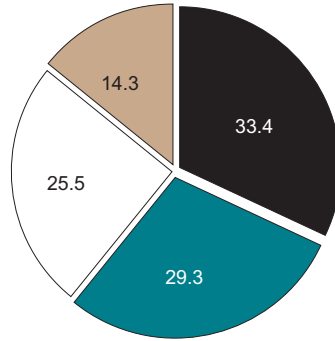
Navy Funding Summary

Navy FY2005 ER Funding by Cleanup Phase* (in millions)



Total = \$265.9 million

Navy FY2005 BRAC† ER Funding by Cleanup Phase* (in millions)

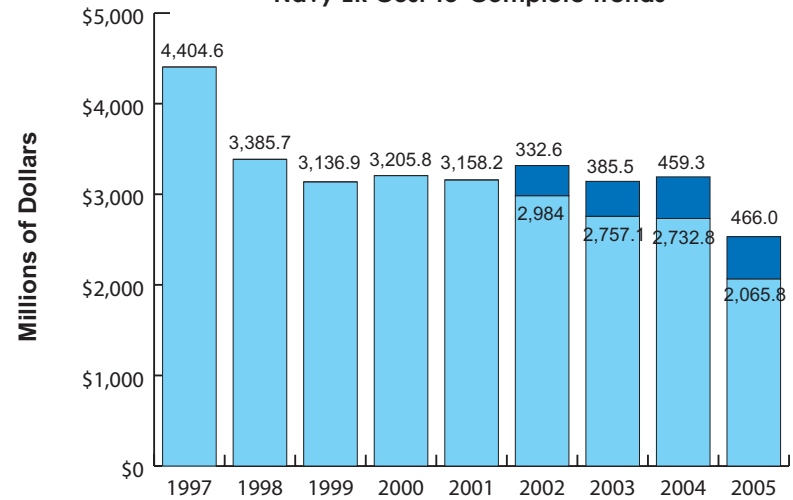


Total = \$102.5 million**



* Due to rounding, category subtotals may not equal fiscal year totals.
 † Does not include compliance and planning funding.
 ** Includes Navy previous year land sale revenue of \$102.5 million.

Navy ER Cost-to-Complete Trends

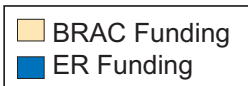
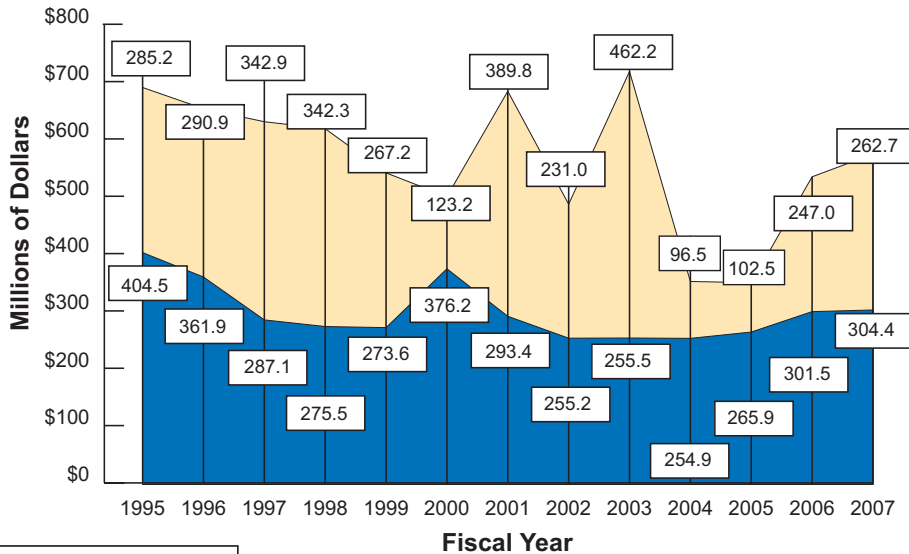


Fiscal Year

Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

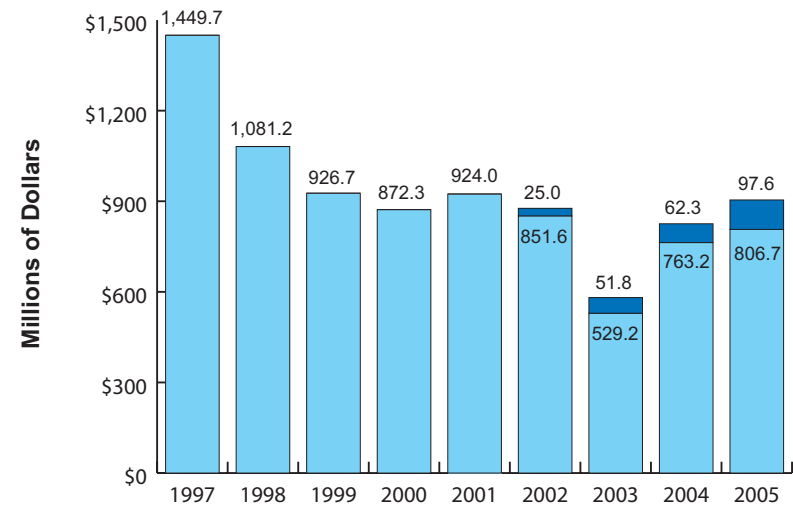


Navy ER and BRAC Funding Trends*



* Does not include BRAC environmental compliance and planning funding or transferred funds earmarked for BRAC 2005.

Navy BRAC Cost-to-Complete Trends

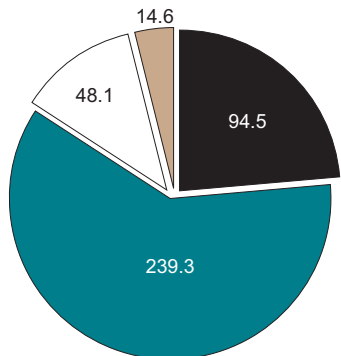


Fiscal Year

Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

Air Force Funding Summary

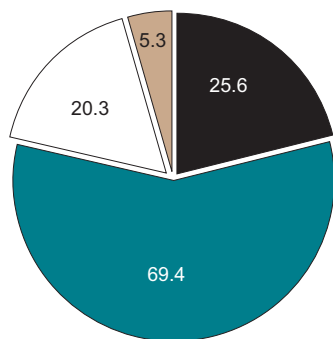
Air Force FY2005 ER Funding by Cleanup Phase* (in millions)



Total = \$396.5 million**

** Includes \$7.8 million dollars in BD/DR funding.

Air Force FY2005 BRAC† ER Funding by Cleanup Phase* (in millions)



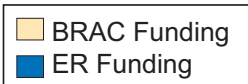
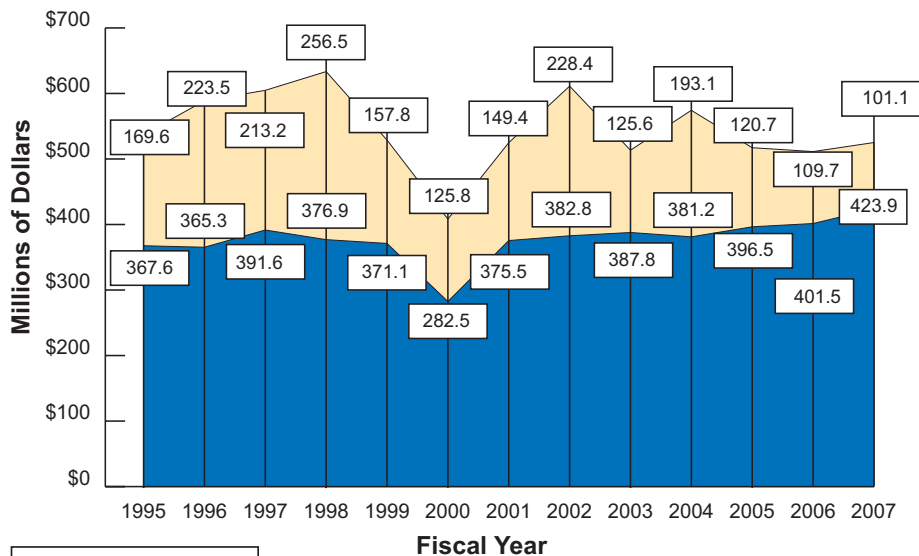
Total = \$120.7 million

* Due to rounding, category subtotals may not equal fiscal year totals.

† Does not include \$21.4 million compliance and planning funding and \$6.7 million in prior year BRAC funds carried forward.

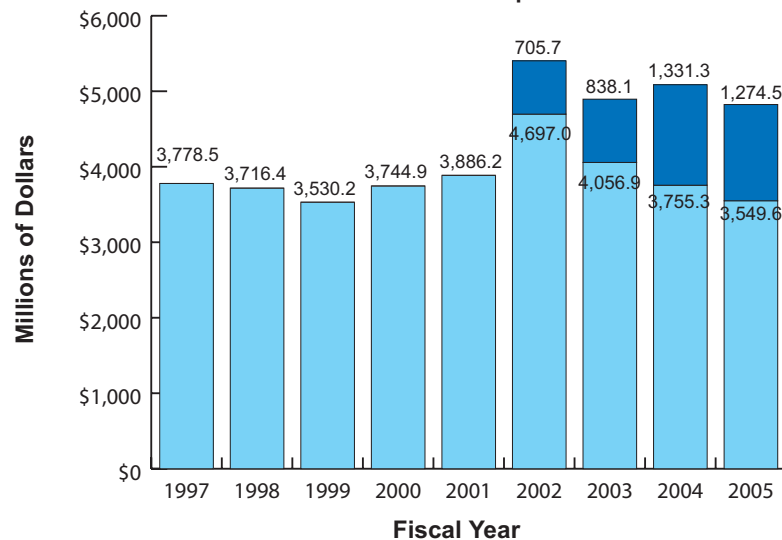


Air Force ER and BRAC Funding Trends*

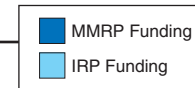


* Does not include BRAC environmental compliance and planning funding or transferred funds earmarked for BRAC 2005.

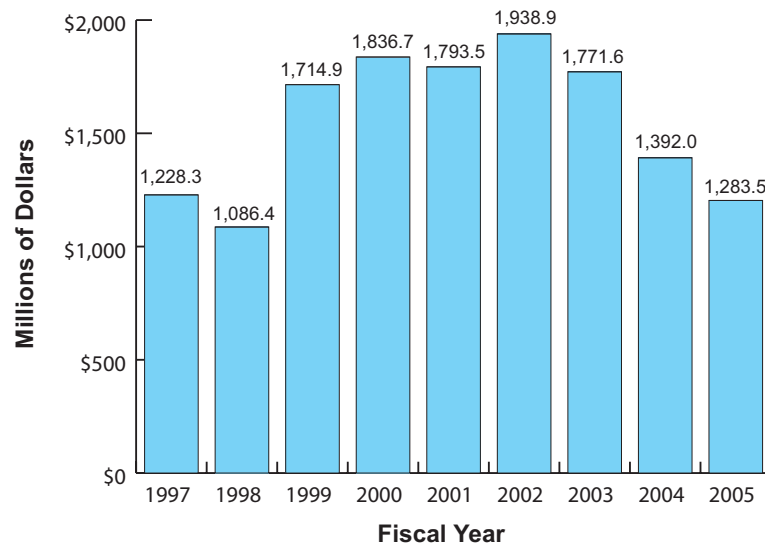
Air Force ER Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.



Air Force BRAC Cost-to-Complete Trends*

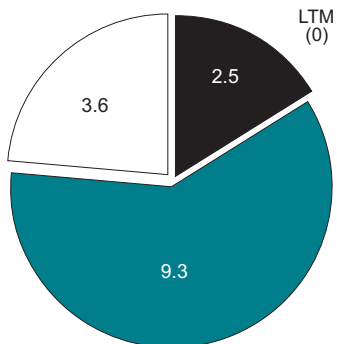


Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

* Excludes transferred funds earmarked for BRAC 2005.

DLA Funding Summary

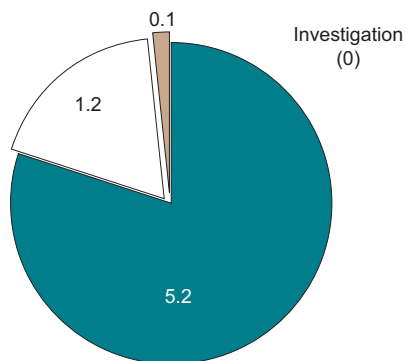
DLA FY2005 ER Funding by Cleanup Phase* (in millions)



Total = \$15.4 million



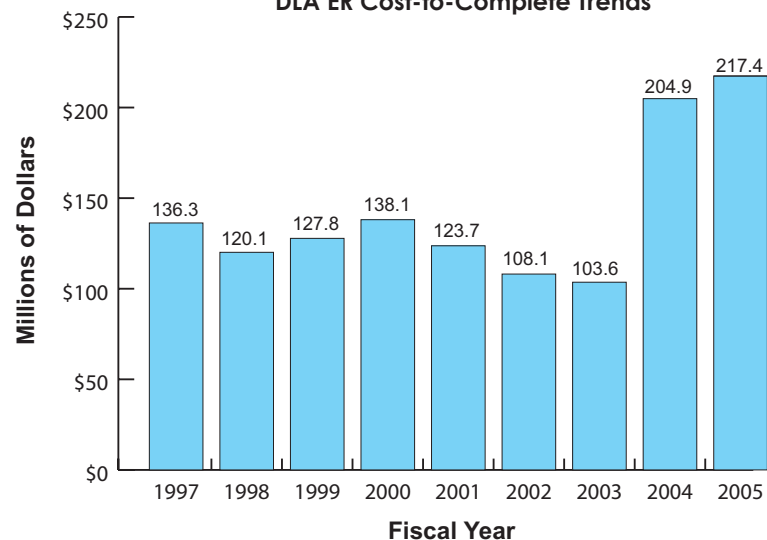
DLA FY2005 BRAC† ER Funding by Cleanup Phase* (in millions)



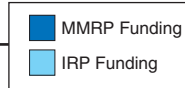
Total = \$6.5 million

* Due to rounding, category subtotals may not equal fiscal year totals.
† Does not include compliance and planning funding.

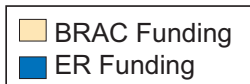
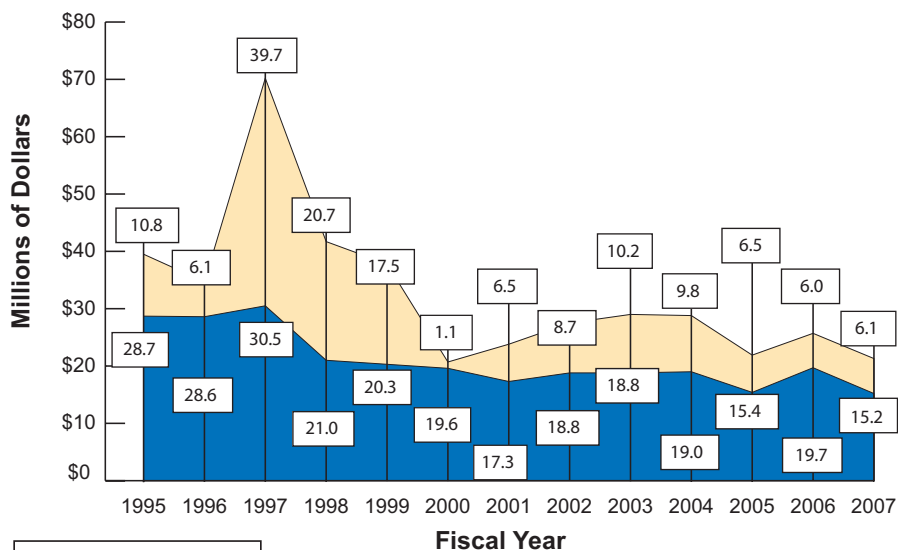
DLA ER Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

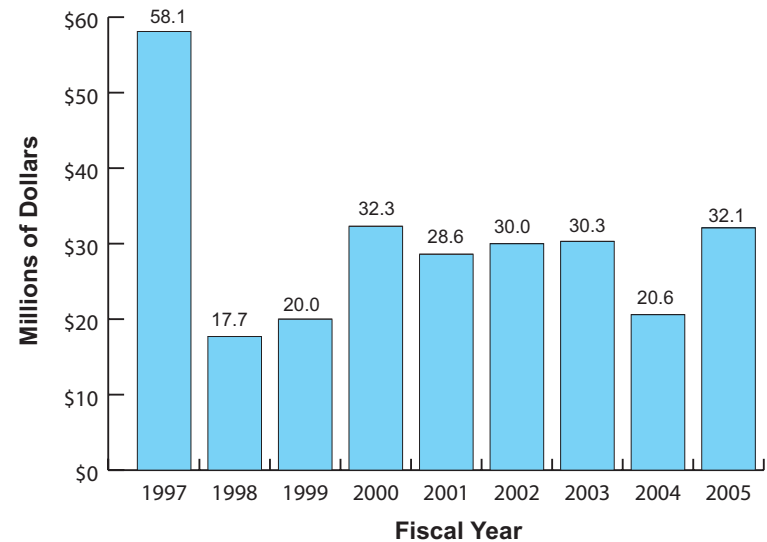


DLA ER and BRAC Funding Trends*



* Does not include BRAC environmental compliance and planning funding or transferred funds earmarked for BRAC 2005.

DLA BRAC Cost-to-Complete Trends*

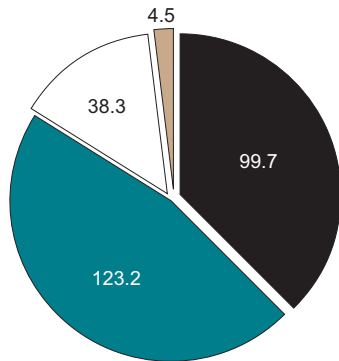


Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.

* Excludes transferred funds earmarked for BRAC 2005.

FUDS Funding Summary

FUDS FY2005 ER Funding by Cleanup Phase* (in millions)

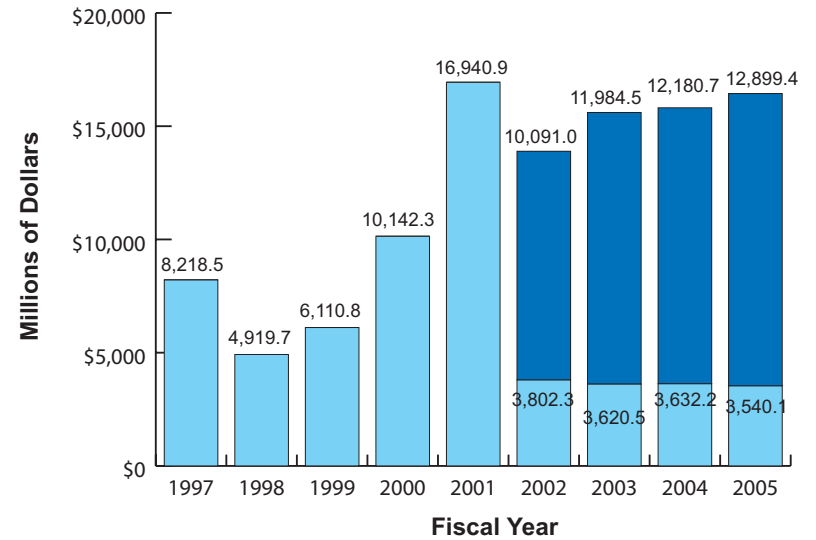


Total = \$265.7 million†

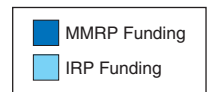


† Includes \$5.0 million dollars in BD/DR funding
* Due to rounding, category subtotals may not equal fiscal year totals.

FUDS ER Cost-to-Complete Trends



Note: Funding represents site level data and does not include management and support or other miscellaneous costs not directly attributable to specific sites.



FUDS ER Funding Trends

