

# CHAPTER 4

Restoring the Future



## Program Status and Funding

*This section presents Environmental Restoration Program statistics. The measures of performance were selected specifically to provide insight into the various dimensions of the Navy's cleanup effort.*



## Funding History

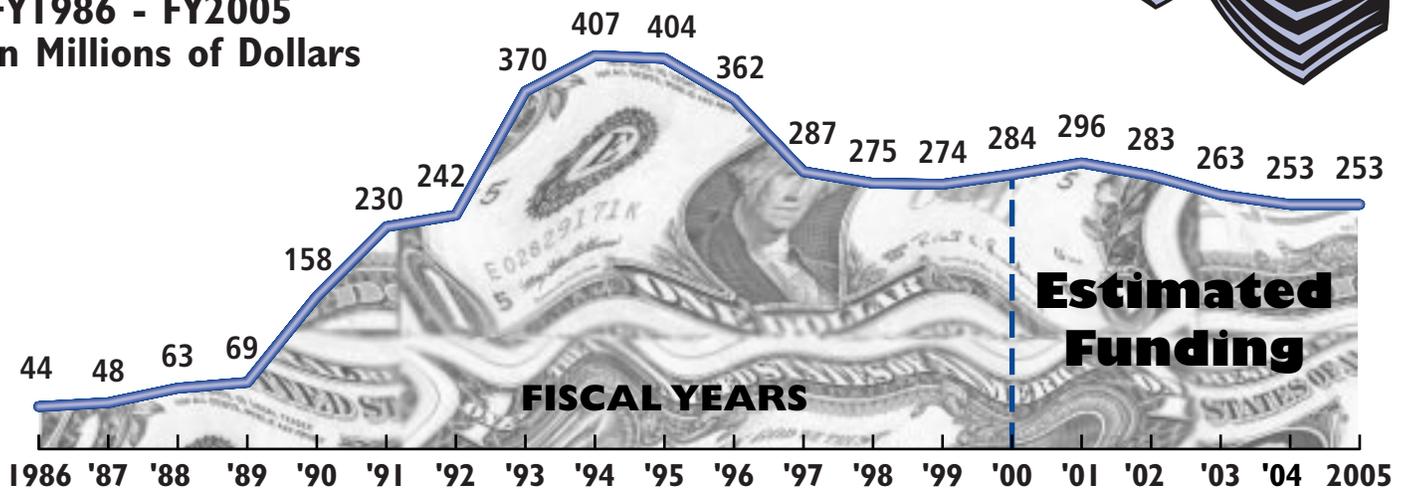
When considering funding, it is important to differentiate between sources. The Department of Navy (DON) works with two funding "pots." The Environmental Restoration, Navy (ER,N) account funds actions at operating installations. As part of the Base Realignment and Closure (BRAC) process to shed unneeded facilities, a separate BRAC account was set up to fund cleanup activities at bases slated for closure.

Like the overall Department of Defense budget, the amount of money spent on DON cleanup at active bases (ER,N) has decreased in recent years. Falling from a high point of \$407 million in FY94, the budget for FY00 is now \$284 million.



# ER,N Funding

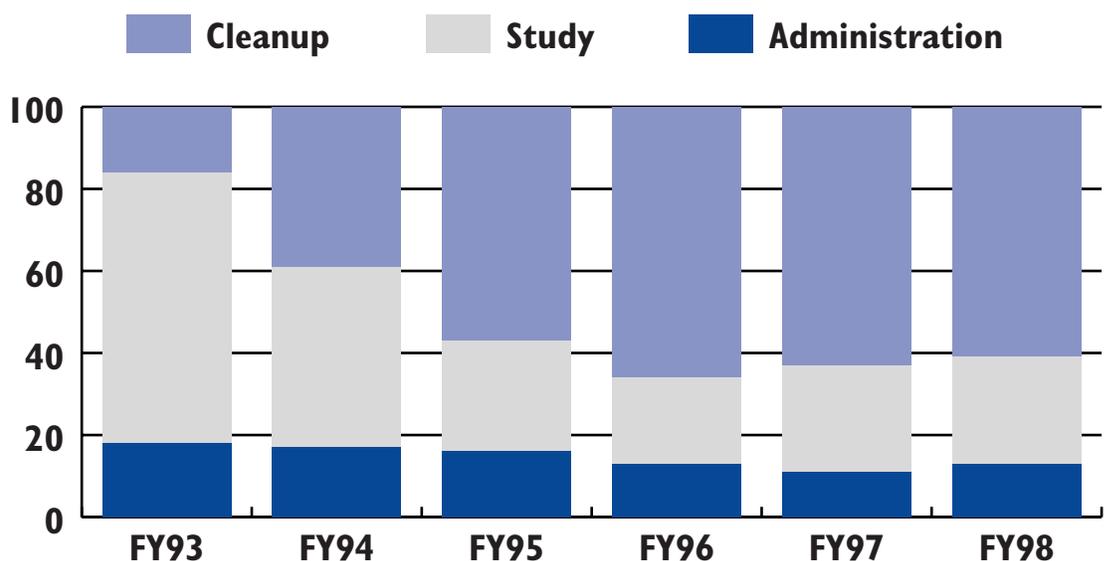
FY1986 - FY2005  
in Millions of Dollars

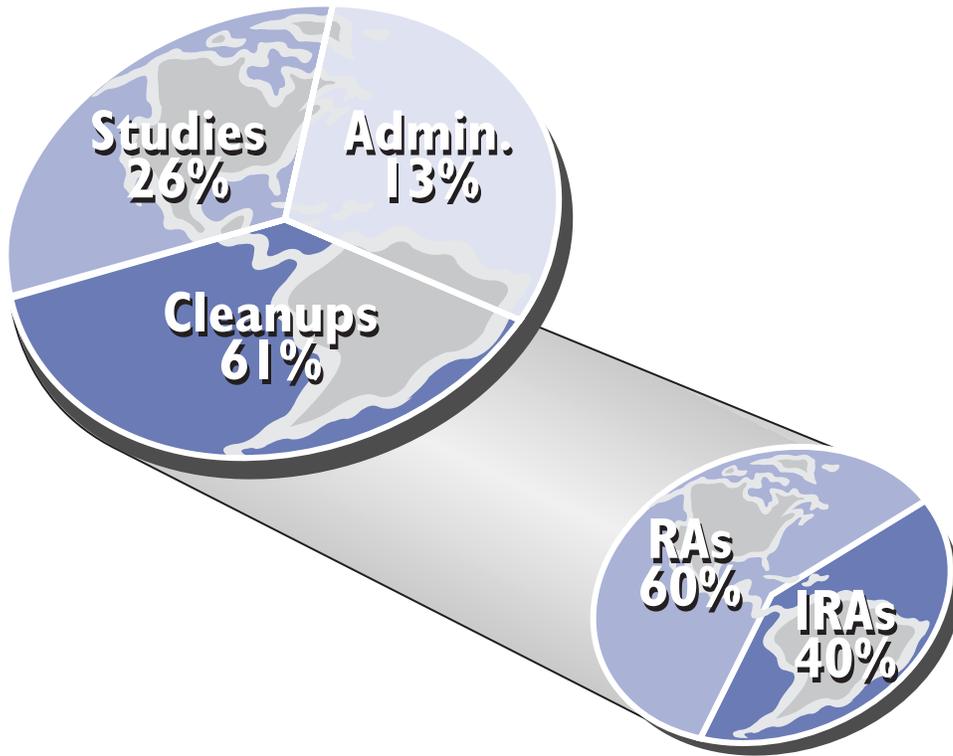


## FUNDING ALLOCATION: How ER,N Funds Were Spent

During the program's early years, DON spent most of its cleanup budget on studies to determine the extent of contamination. This meant locating potential sites, researching their histories, conducting field tests and assessing their threats. While it is DON's responsibility to continue this investigative effort, today the bulk of activity is devolved to cleanup. While cleanup was only 14 percent of the FY92 budget, it jumped to 61 percent in FY98.

Since FY96 the DON goal has been to maintain a minimum of 60 percent of its expenditures on cleanup. Precluding any unforeseen circumstances, the Navy will maintain this minimum allocation of resources for actual cleanup over the remainder of the program.





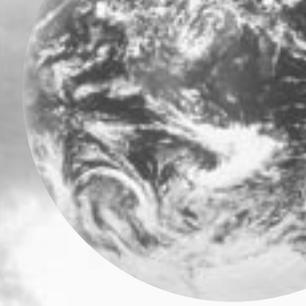
## Spending in Fiscal Year 1998

A closer look at last year's expenditures reveals that the cleanup portion represented 61 percent of the FY98 ER,N budget. This is consistent with recent trends. Cleanup activity may be subdivided into two categories: Remedial Actions (RAs) and Interim Remedial Actions (IRAs). RAs represent final cleanup solutions to site contamination. Once an RA is completed, no further restoration activity occurs at a site.

IRAs are quick response cleanups that can be implemented at any time during the cleanup process to stabilize a site or to remove the source of contamination. Most IRAs occur while a site is still in the study phase. Early cleanup actions under IRAs frequently became final remedial solutions once a further confirmation study is complete.

During the past few years DON has increasingly relied on IRAs and removal actions to protect human health and the environment, accomplish cleanups quickly, and reduce risks and overall costs. IRAs are certainly important elements of SMART Cleanup. In FY98 IRAs represented 40 percent of cleanup expenditures.

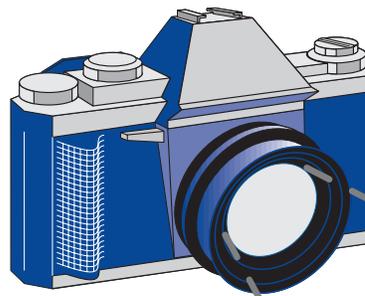
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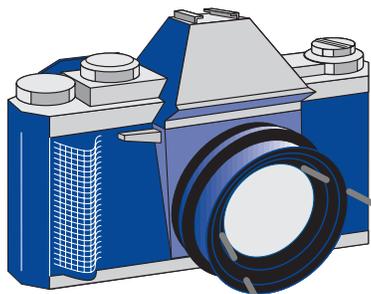
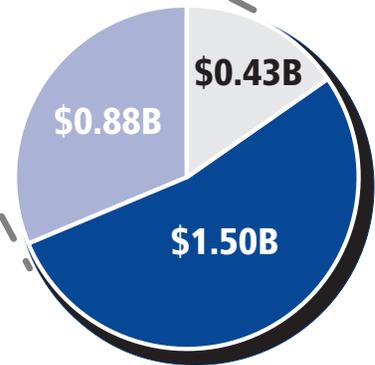
# Cost to Complete

At any time, the costs for completing the entire program consist of two parts: expenditures already made (the “execution” amount) and anticipated future costs (the estimated cost to compete). As a direct result of implementing a SMART cleanup strategy, the projected future costs keep shrinking as better, faster ways to restore sites are identified and implemented.



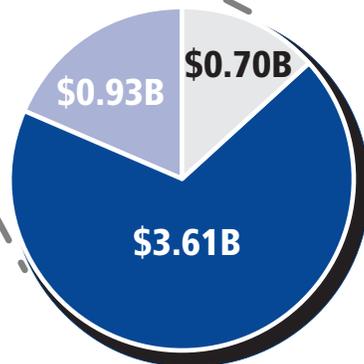
- Avoidance
- Cost to Complete
- Execution (Since 1 Oct 95)

**BRAC  
FY1998**



- Avoidance
- Cost to Complete
- Execution (Since 1 Oct 95)

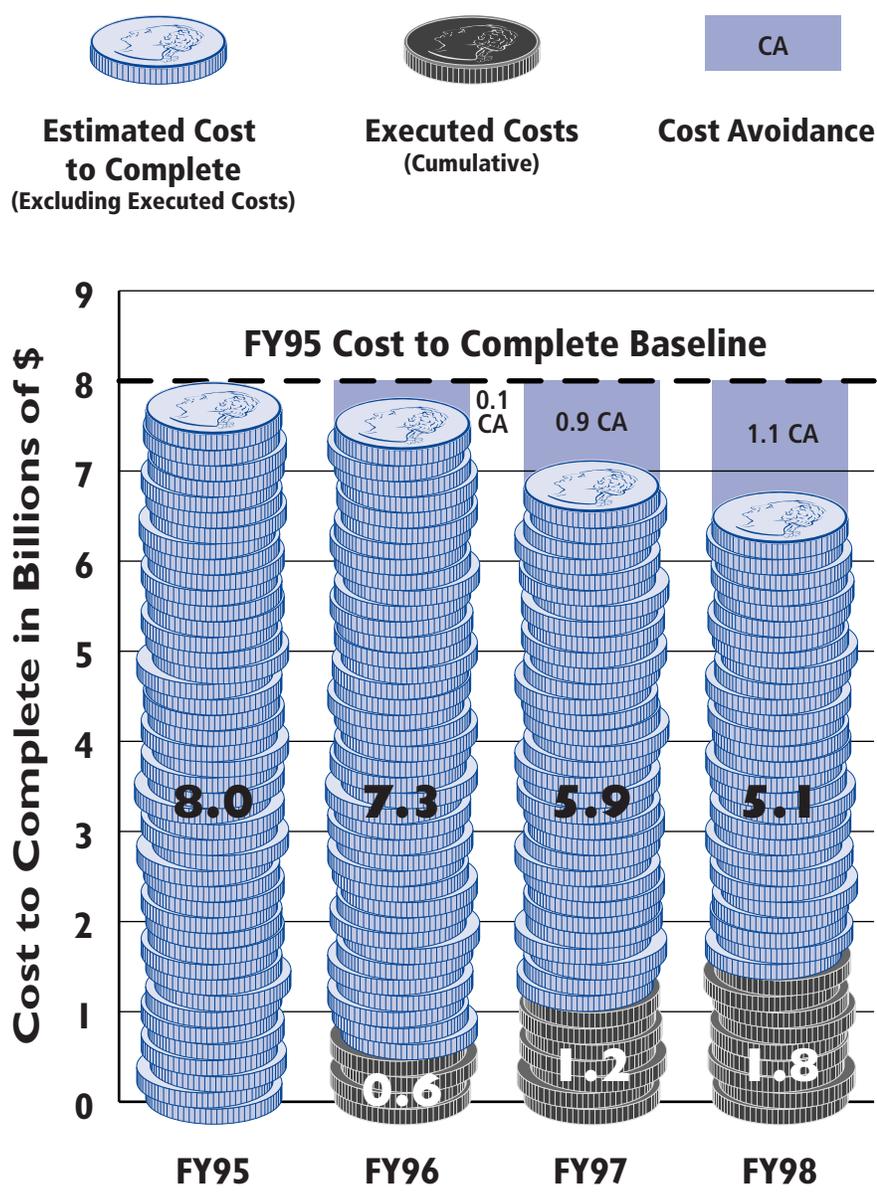
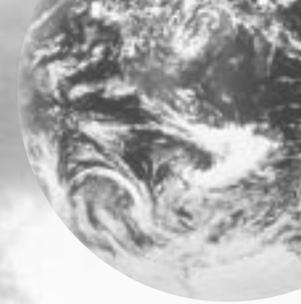
**ER,N  
FY1998**



## Snapshot of the Cleanup Program

# Cost Avoidance

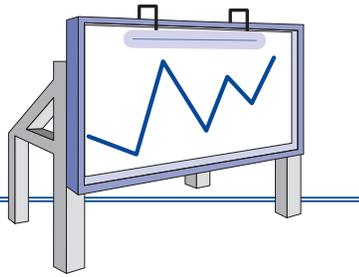
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Using the FY95 cost to complete estimate as a baseline, SMART cleanup reduced overall program (ER,N and BRAC) cost by \$1.1 billion, avoiding 14 percent of the original estimate. A portion of the total estimated cost to complete is spent, or executed, during each fiscal year. The cumulative executed costs are shown as a portion of the total program estimated cost-to-complete in FY96-FY98 for the comparison to the FY95 baseline estimate. For all bases, the remaining cost to complete at the end of FY98 is \$5.1 billion.

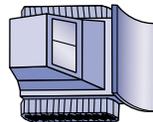


# Site Status

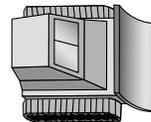


## Number of Sites

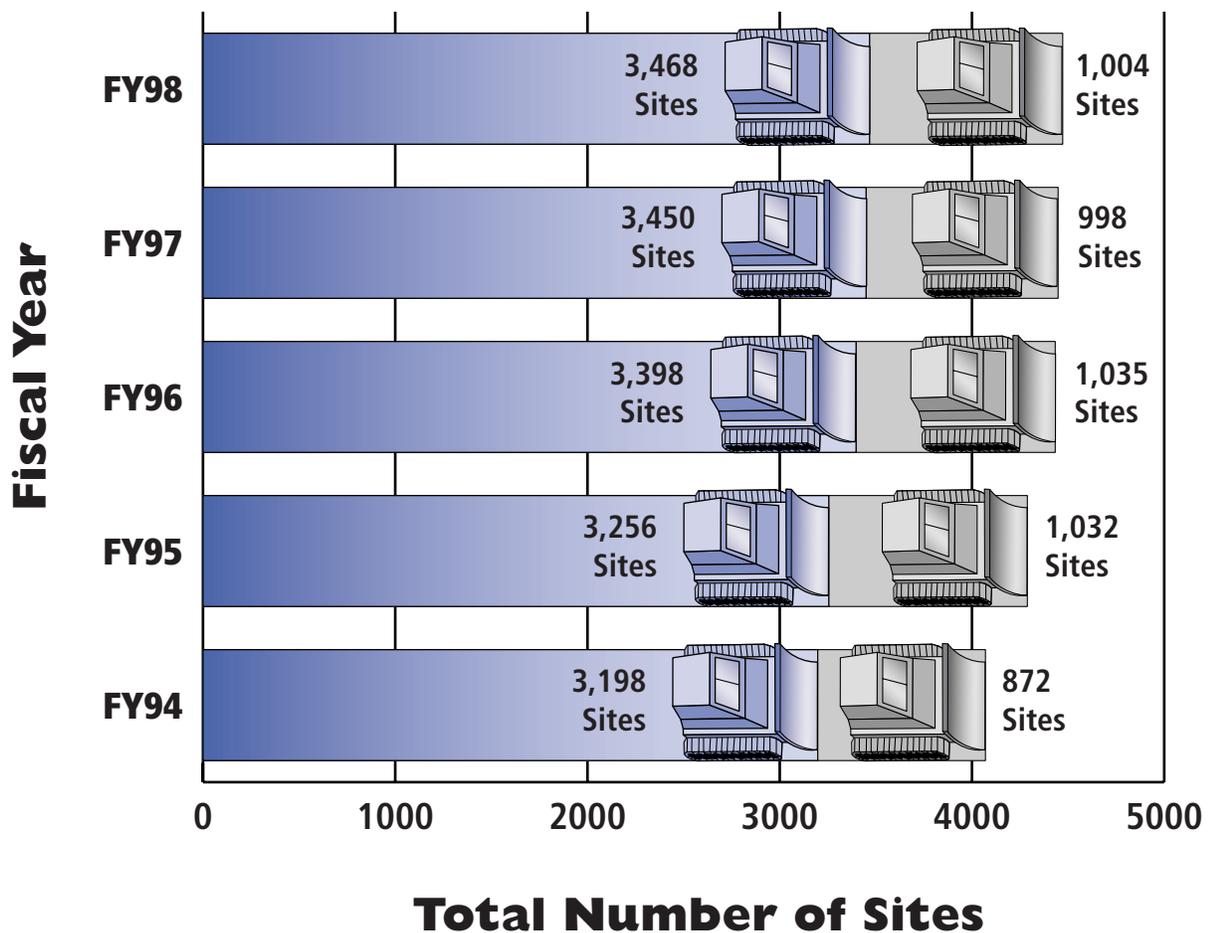
The program grew quickly in the early years as new sites were identified. In recent years the total number of sites stabilized as fewer and fewer new sites are added with each passing year.



**ER,N  
Sites**



**BRAC  
Sites**



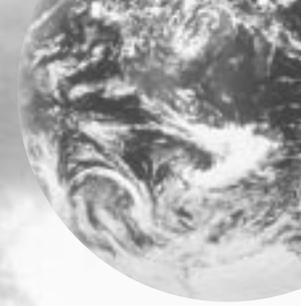


# National Priority List Sites

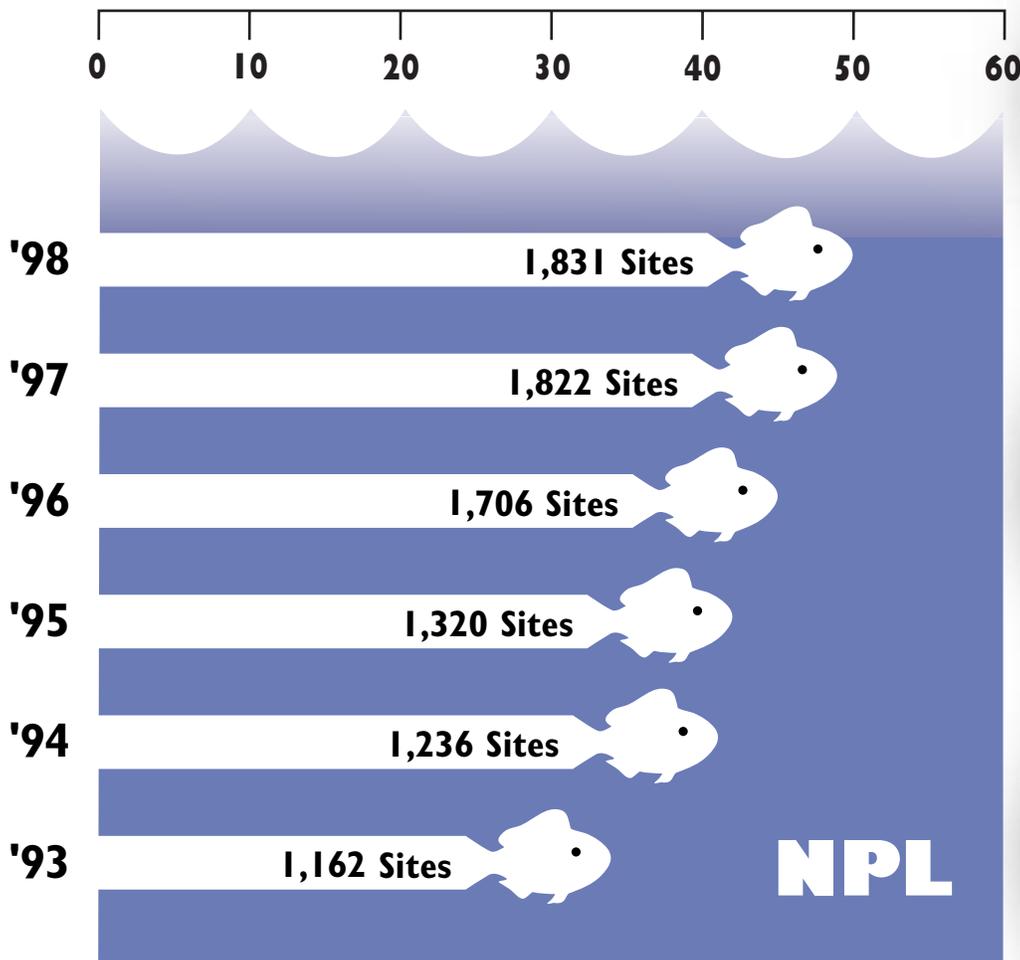
Contaminated sites that are judged particularly hazardous are put on the Environmental Protection Agency's National Priorities List (NPL). At the end of FY98 there were 50 installations, with 1,831 DON sites either proposed or listed.

Like the number of sites overall, the number of NPL sites has stabilized as the scope of DON contamination problems becomes better understood. During FY98 only one new Navy installation was proposed for the NPL.

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## # of Installations

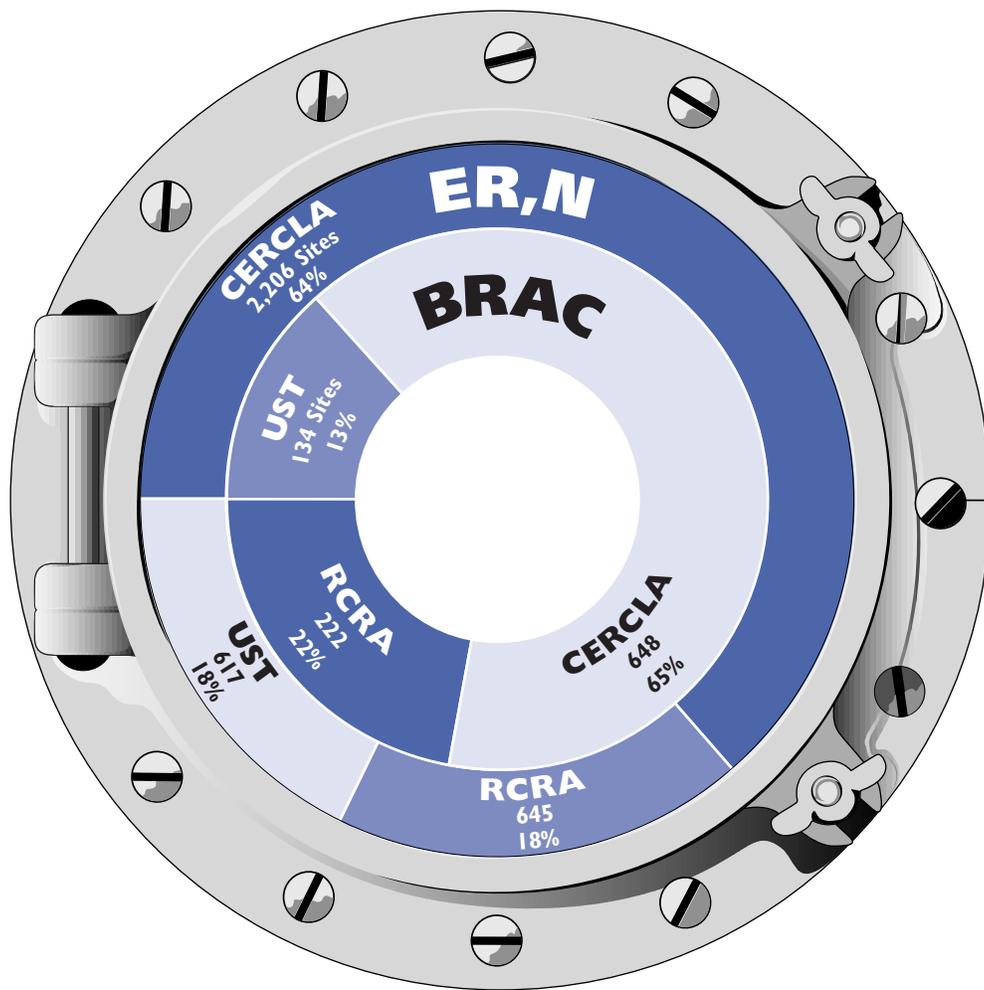


**TOTAL:**  
**4,472**  
**sites**

# Sites by Regulatory Regime

At the end of FY98 there were 4,472 sites in DON's cleanup program: 3,468 ER,N and 1,004 BRAC. The three regulatory regimes that govern cleanups are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), and the underground storage tank (UST) component of RCRA.

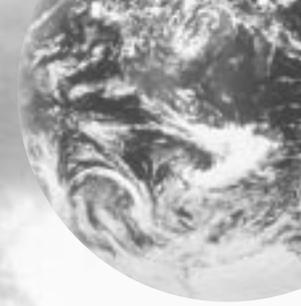
Approximately two-thirds of the sites are under CERCLA and the distributions are nearly the same for the ER,N and BRAC classifications.



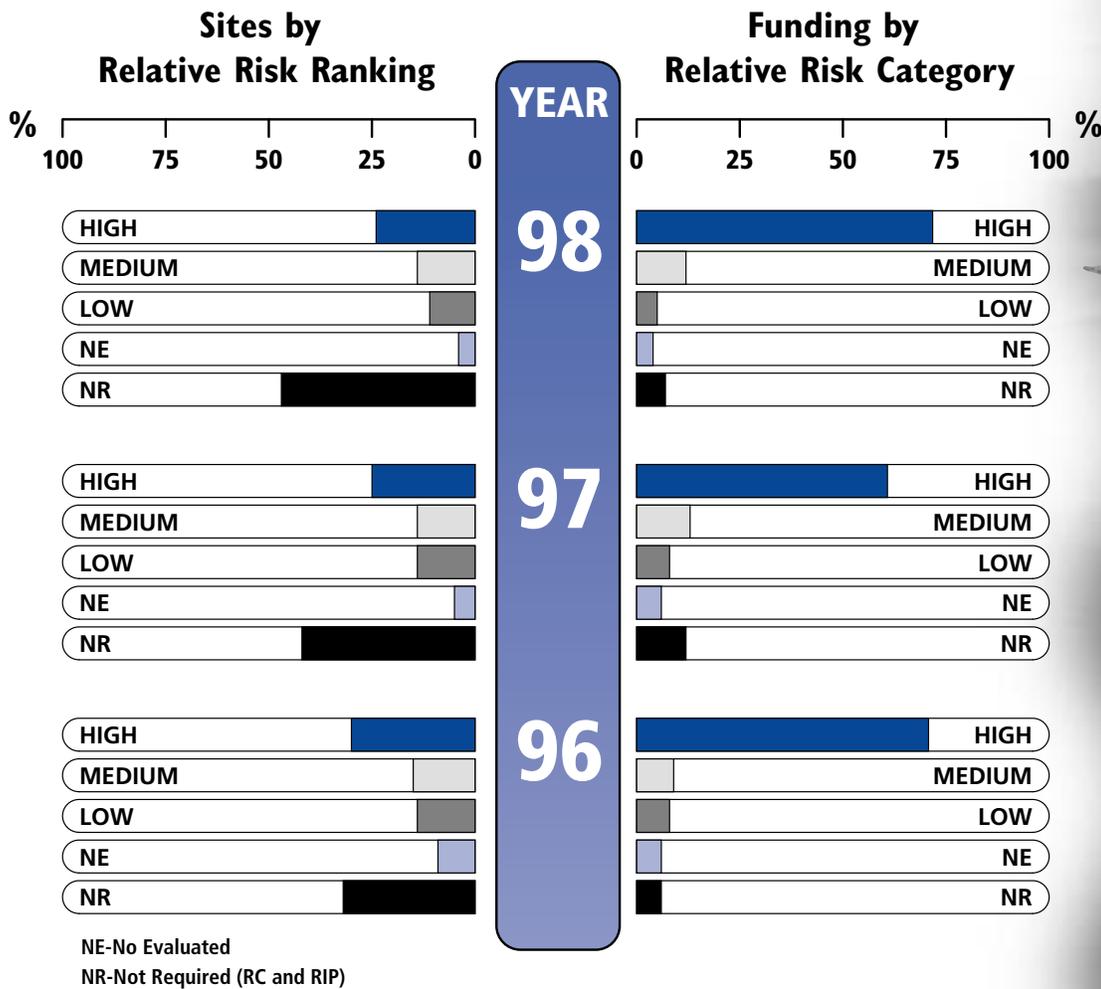


# Addressing Relative Risk

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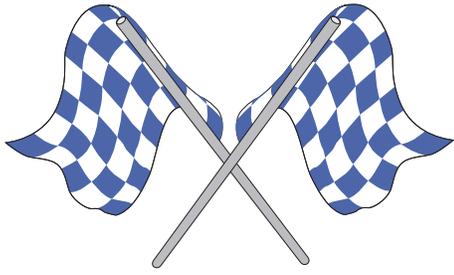


DON continues to rank ER,N and BRAC sites with the Department of Defense's Relative Risk Site Evaluation Model. (Sites with insufficient data to run the model are classified as "not evaluated.") Sites that are response complete or that have a final remedial solution in place and operating are classified as not requiring a relative risk ranking. The remainder are classified as high, medium, or low relative risk by the model. SMART cleanup dictates that high sites receive priority for funding. In FY98 24 percent of the sites were judged high and they received 72 percent of the funding.



## Allocation of Funding

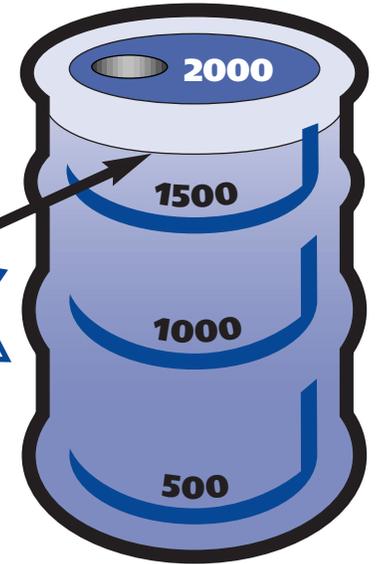




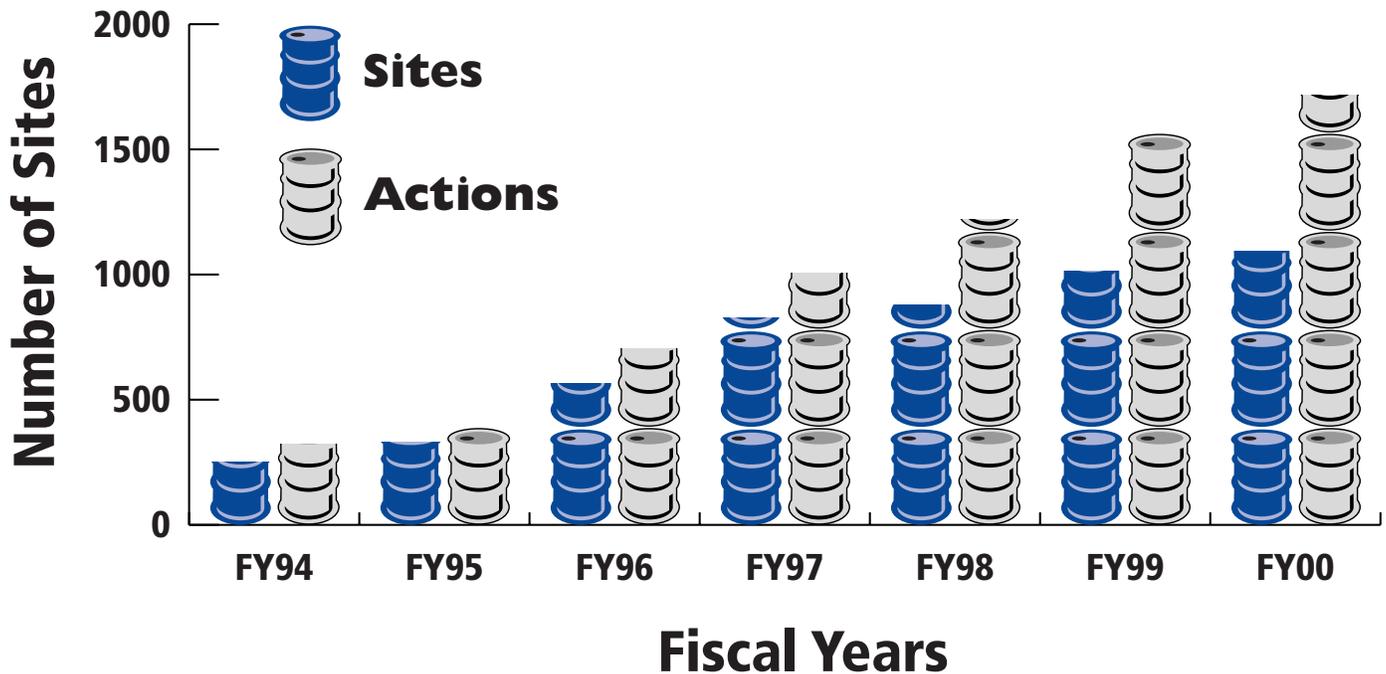
# Completed Actions = Reponse Complete

The term “completed actions” means that restoration activities have been accomplished. At the end of FY98 responses were complete at 1,972 ER,N and BRAC sites. With a current total of 4,472 sites, DON is well on its way to reaching the 50 percent point of total restoration. Although much difficult work remains, the program’s goal of 100 percent completion by 2014 is in sight.

As part of the SMART cleanup philosophy, DON emphasizes completing cleanups at entire installations. This approach minimizes administrative and overhead costs associated with maintaining a program at installations with only a few sites requiring response actions. To date, all cleanup actions have been completed at 49 installations, 41 under the ER,N program, and 8 under the BRAC program.



## Sites with Completed Removal Actions



# Installations With All Response Actions Completed

## BRAC

Charleston FMWTC	Oakland NMC
Charleston NRC	Philadelphia NH
Chase Field NAS	Puget Sound NS
New York NS Ft Wadsworth	Salton Sea Test Range

## ER,N (Active)

Arlington HQ	New Orleans NSA
Atlanta NMCRC	North Island NADEP
Baltimore NRC	Pearl Harbor ISMD
Billings NMCRC	Point Sur NAVFAC
Binghamton NRC	Portland NMCRC
Broken Arrow NMCRC	Puget Sound NH Bremerton
Butte NRF	Quincy NRC
Cheltenham NCTC	San Diego NMC
Chesapeake Bay Det NRL	San Juan SUPSHIP
Corona NOC NWAD	Sentinel NCCOSC
Dam Neck FCTC	St. Inigoes NCCOSC NISE
Fishers Island NUSC	St. Paul NIROP
Floyd Bennett Field NMCRC	Sunnyvale NIROP
Guam RDC	Syracuse MCRTC
Jacksonville FISC	Tacoma NMCRC
Knoxville NMCRC	Waldorf NRL
Lincoln NRC	Washington NRL
Lubbock NMCRC	Watertown NRC
Magna NIROP	Wilmington NRC
Monterey NPGS	Wyoming MCRC
New Orleans NAS	

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