

# 1 Defense Environmental Funding

The Department of Defense (DoD) funds its environmental programs at U.S. and overseas installations through an effective planning, programming, budgeting, and execution process that allocates financial resources to where they are needed. This budget and review process ensures that the DoD Components—Army, Navy and Marine Corps, Air Force, and the Defense agencies—identify and request adequate funding to meet mission, legal, and regulatory environmental requirements.

The DoD Components build their environmental cleanup budgets from the site-level up. The remaining environmental budgets are developed from the installation-level up. These site- and installation-level estimates form the basis for the environmental budget included in the overall Defense budget that the President submits to Congress.

## Defense Environmental Funding at a Glance

Fiscal Year 2009 Funding: **\$4.3 billion**

### Highlights:

- Decreased funding by **\$18.3 million** from FY2008 to FY2009
- Requested **\$4.2 billion** for environmental programs in FY2011

## Overview

In FY2009, DoD obligated approximately \$4.3 billion for environmental activities: \$350.0 million for Natural and Cultural Resources; \$1.5 billion for Compliance; \$114.4 million for Pollution Prevention; \$1.5 billion for Environmental Restoration (ER) at active installations and Formerly Used Defense Site (FUDS) properties; \$532.2 million for environmental requirements at installations slated for Base Realignment and Closure (BRAC); and \$252.5 million for Environmental Technology (Figures 1-1 and 1-2). Although all of DoD's environmental programs work toward the same goal—maintaining readiness while protecting human health and the environment—each program has a unique focus and different funding needs. Despite annual funding fluctuations within the different program areas, the Department's level of investment for its entire environmental program remains stable.

Funding shown includes nonrecurring and recurring funding. Nonrecurring activities include one-time projects. Recurring activities include routine tasks that an installation conducts in support of its environmental programs. Examples of recurring activities include:

- Permits and fees
- Sampling, analysis, and monitoring
- Travel and supplies
- Data management and reporting
- Waste disposal
- Updates to environmental management plans

Although the Department reported recurring funds associated with Manpower and Education & Training for Natural and Cultural Resources, Compliance, and Pollution Prevention separately under Compliance in previous years, the Department began distributing these funds across the appropriate environmental program budgets beginning in FY2007. DoD includes Manpower funding for Restoration in the total program funds; it is not reported separately.

## Management Practices

Most funding for DoD's Natural and Cultural Resources, Compliance, and Pollution Prevention Programs comes from the Operations and Maintenance (O&M) appropriations in the DoD Appropriations Act. DoD also uses funds obtained through the Military Construction, Military Quality of Life, and Veteran's Affairs Appropriations Act to build necessary facilities (e.g., wastewater treatment plants). Other notable appropriations include:

- Procurement (PROC)
- Research, Development, Testing, and Evaluation (RDT&E)
- Defense Working Capital Fund (DWCF)

Special programs also provide funds for natural resources management through the sale of forest products; leases of land for agriculture and grazing; and the sale of licenses for hunting, fishing, and trapping.

The Compliance Program (and to a lesser degree, Natural and Cultural Resources and Pollution Prevention Programs) includes funding for environmental activities at overseas installations, such as activities required to comply with existing treaties, laws, and other agreements (i.e., the Final Governing Standards).

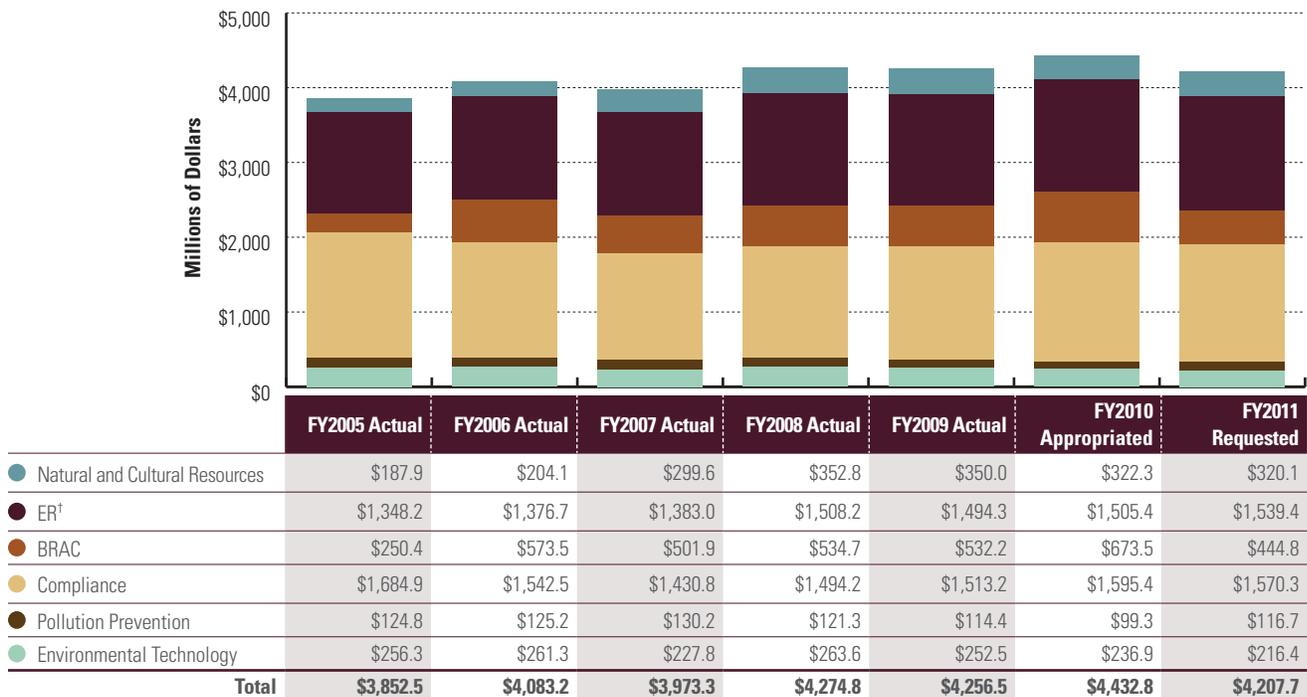
DoD funds activities within the Defense Environmental Restoration Program through the ER and BRAC accounts. The ER accounts fund cleanup activities at active military installations and FUDS properties within the United States and its territories. Separate appropriations fund cleanup activities at BRAC installations, which address closure-related environmental cleanup, planning, and compliance activities. The Department funds restoration activities outside the United States through the Compliance Program.

## Chapter Contents

This chapter summarizes budget information for the following Defense environmental programs:

- Natural and Cultural Resources
- Compliance
- Pollution Prevention
- Restoration
- Environmental Technology
- Overseas Environmental Activities

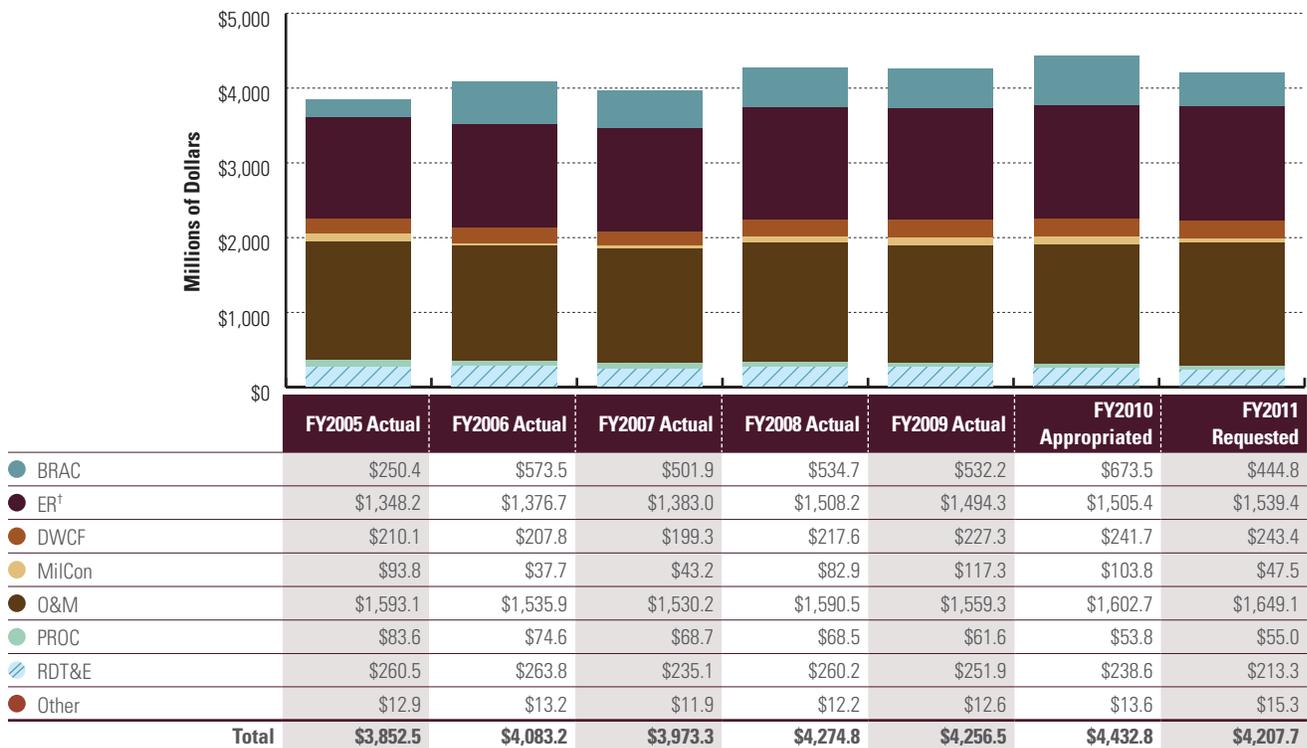
Figure 1-1 DoD Environmental Funding by Program Area\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Includes funding for FUDS properties.

Figure 1-2 DoD Environmental Funding by Appropriation\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Includes funding for FUDS properties.

## Natural and Cultural Resources

During FY2009, DoD committed the following resources to its environmental programs:

- Obligated **\$350.0 million** for natural and cultural resources
- Decreased funding for natural and cultural resources by **\$2.8 million** since the previous year

Through the Natural and Cultural Resources Programs, the Department invests in conserving, protecting, and restoring natural and cultural resources located on and near its installations in order to enhance and protect the military mission. DoD establishes policy and provides funding to manage and protect the following:

- Natural Resources—flora and fauna with additional emphasis on threatened, endangered, and at-risk species; rivers and other waters; wetlands; soil; and air.
- Cultural Resources—archaeological sites, historic buildings, relics of prior civilizations, recovered artifacts, and other national historic treasures.

In addition to protecting natural and cultural resources, funding also includes DoD’s efforts to work with surrounding communities to reduce the impact of development that would inhibit training and adversely affect mission accomplishment.

Recurring funds finance continuous management activities, such as:

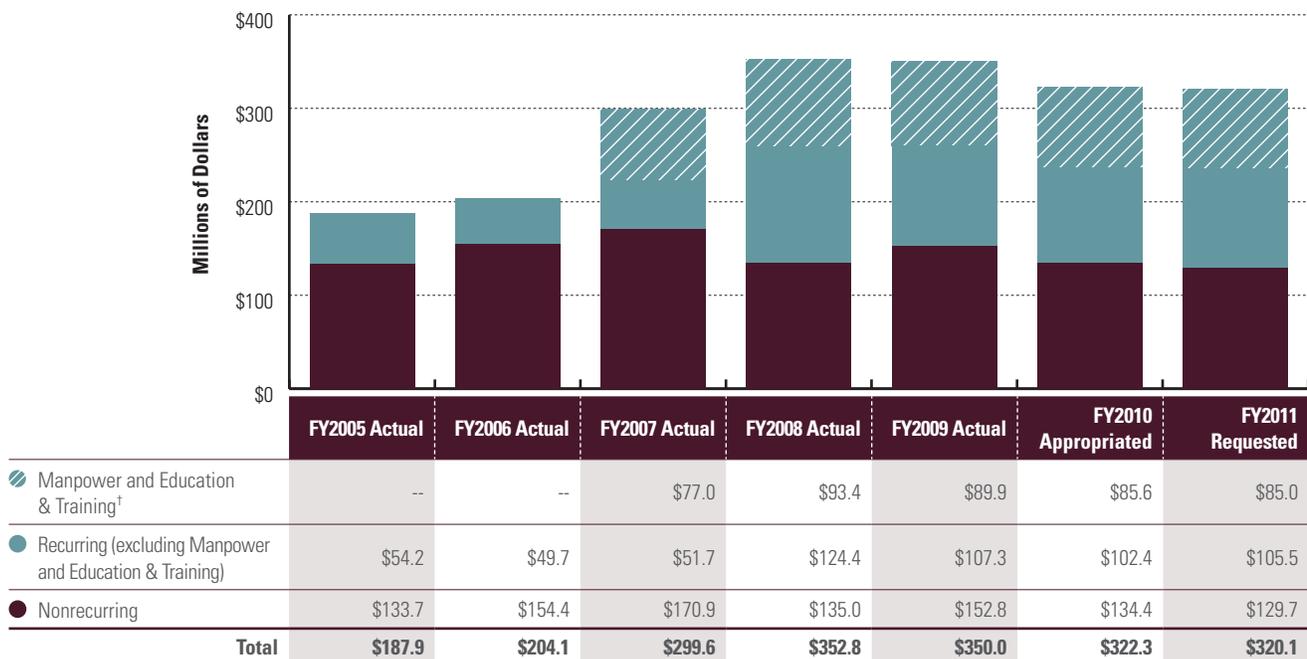
- Preparing and updating natural and cultural resource management plans and inventories
- Coordinating with conservation regulatory agencies
- Monitoring threatened, endangered, and at-risk species
- Continuing protection of archaeological sites
- Invasive species control
- Ongoing erosion control measures.

Nonrecurring activities are one-time efforts to address unique or specific requirements, such as consultation activities under the Endangered Species Act, mitigation for specific actions, reforestation, or creation of new habitat. The nonrecurring category is divided into two subcategories to identify funds for natural resources, and historical and cultural resources. Natural resources funds include threatened and endangered species, wetlands protection, and other natural resources. Examples of nonrecurring activities under other natural resources include:

- Habitat restoration
- Volunteer and partnering programs
- Public awareness programs.

Cultural resources nonrecurring funds include baseline inventories of historic buildings, initial archaeological materials curation, and consultations with Native American groups.

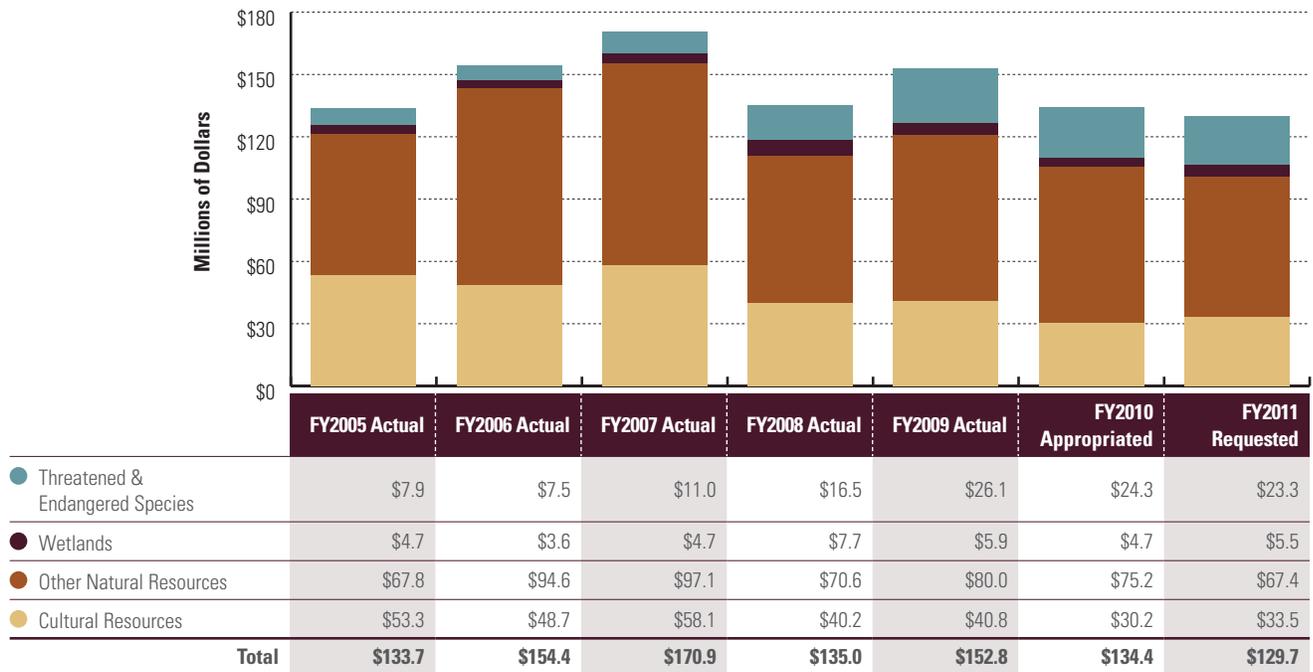
Figure 1-3 DoD Natural and Cultural Resources Recurring and Nonrecurring Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Prior to FY2007, DoD reported all Manpower and Education & Training funds under the Compliance Program.

Figure 1-4 DoD Natural and Cultural Resources Nonrecurring Funding



The DoD Components obligated \$350.0 million in FY2009 for natural and cultural resources (Figure 1-3), which is consistent with the previous year. The Department allocated over 40 percent of the funds for nonrecurring projects to perform one-time activities. The increase in funding from FY2007 to FY2008 was the result of a greater emphasis on threatened and endangered species and an increase in the Army's recurring activities. The FY2011 funding request of \$320.1 million is 9 percent less than the FY2009 obligation due to fewer one-time projects.

In addition to the \$26.1 million in funding for threatened and endangered species, shown in Figure 1-4, a major portion of recurring and nonrecurring other natural resources funding also contributes to threatened and endangered species management. As a result, DoD spends in excess of \$40 million annually to protect threatened and endangered species. This reflects the significant value that military and civilian personnel place on maintaining compliance with the Endangered Species Act.

Chapters 3 and 4 describe the Department's performance within the Natural and Cultural Resources Programs, respectively. Appendix B, Figure B-1.1 contains Natural and Cultural Resources funding data by DoD Component.

### Compliance

During FY2009, DoD committed the following resources to its environmental programs:

- Invested **\$1.5 billion** for compliance activities
- Increased funding for the Compliance Program by **\$19.0 million** since the previous year

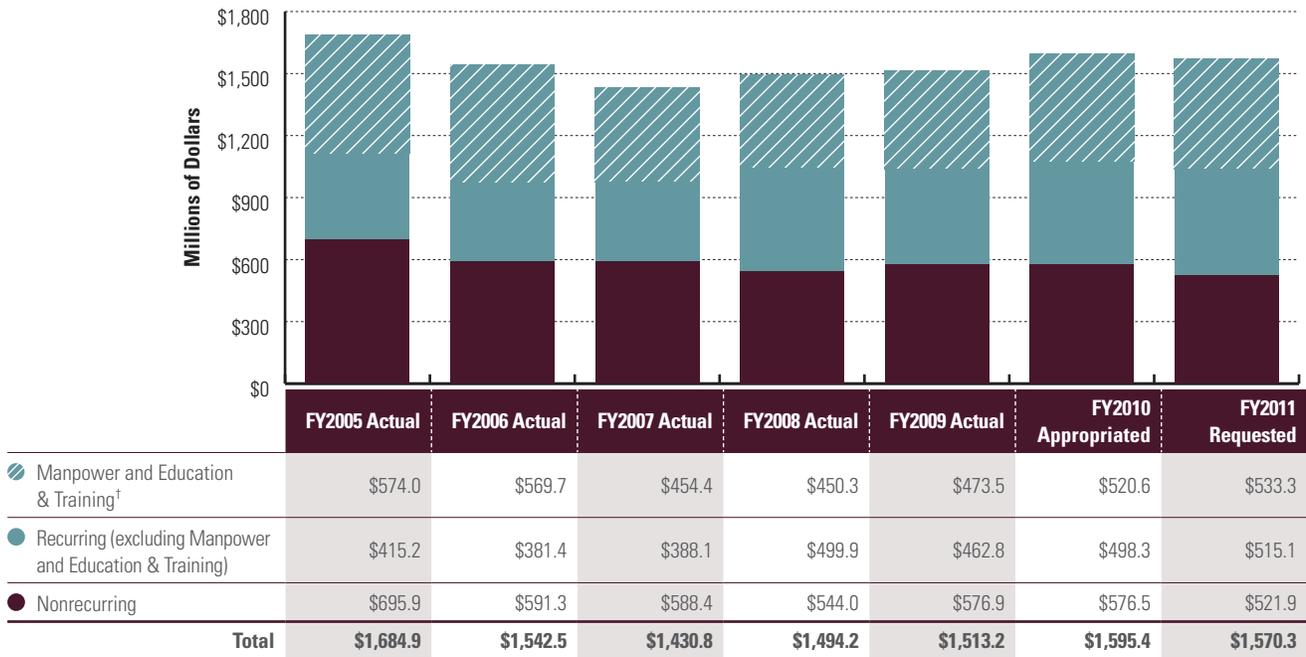
DoD complies with the same federal, state, and local environmental laws and regulations that apply to the civilian communities that surround our military facilities. Recurring compliance funding is used to cover the relatively constant activities that an installation must perform to maintain compliance with environmental regulations and permit requirements. These activities can include:

- Routine sampling and analysis of discharges to air and water
- Hazardous waste disposal
- Management of National Pollutant Discharge Elimination Systems
- Updates to Clean Air Act inventories
- Environmental self-assessments

Nonrecurring compliance activities address one-time events, such as projects to upgrade wastewater treatment facilities or install air pollution controls to meet existing standards.

In FY2009, DoD obligated \$1.5 billion for the Compliance Program (Figures 1-5 and 1-6), which is consistent with previous years. Significant increases in nonrecurring compliance funds are primarily driven by military

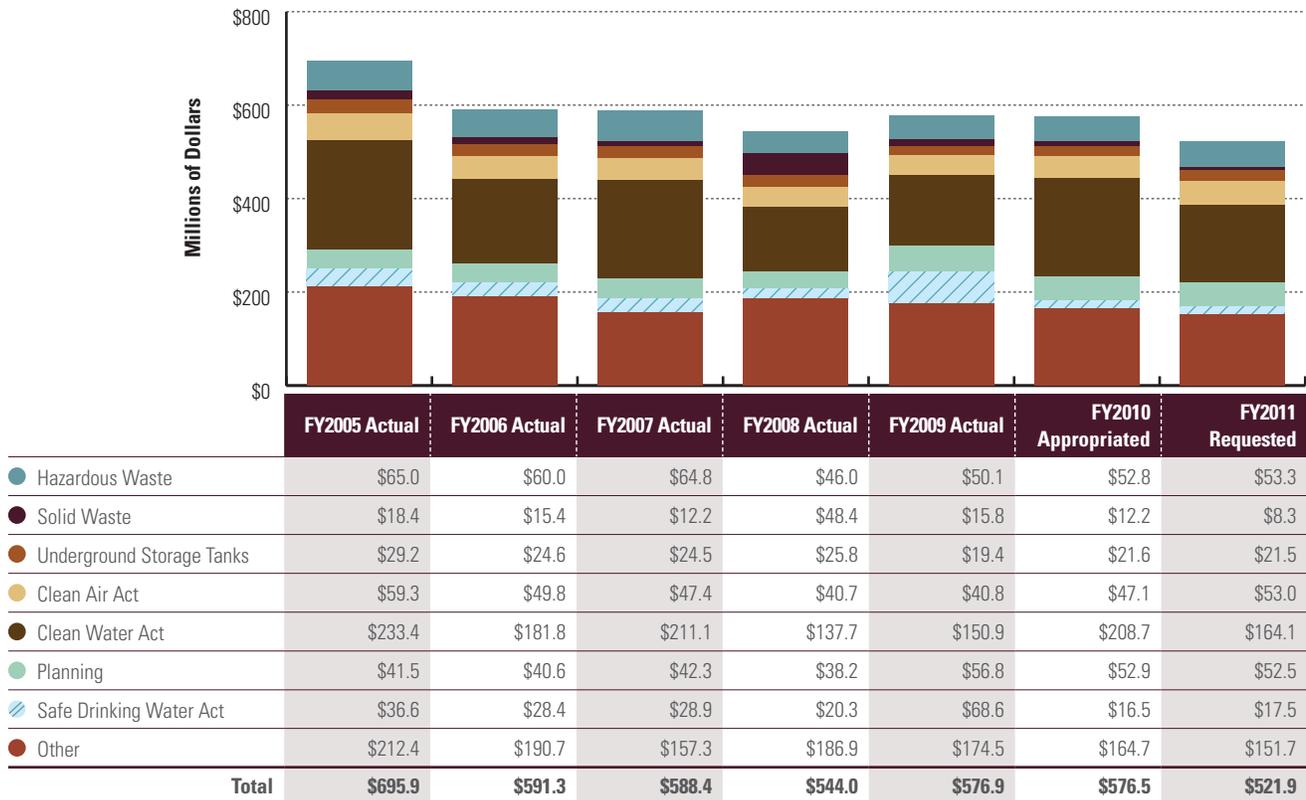
Figure 1-5 DoD Compliance Recurring and Nonrecurring Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Beginning in FY2007, DoD reported Manpower and Education & Training funds under the appropriate program areas.

Figure 1-6 DoD Compliance Nonrecurring Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

construction projects to address Clean Water Act (CWA) requirements at fuel storage and distribution facilities and the construction of drinking water treatment plants. Other nonrecurring funds—including funding for radon and asbestos investigations and mitigation, spill response plans, action to prevent pollution prevention from ships, and addressing munitions constituents on operational ranges—remain high but continue to decrease. In FY2008, solid waste funding increased due to two Marine Corps military construction projects at Camp Lejeune and Twentynine Palms landfills. In FY2009, Safe Drinking Water Act funding more than tripled as a result of a military construction project at Camp Pendleton.

Chapter 6 describes the Department’s performance within the Compliance Program. Appendix B, Figure B-1.2 contains Compliance funding data by DoD Component.

### Pollution Prevention

During FY2009, DoD committed the following resources to its environmental programs:

- Invested **\$114.4 million** for pollution prevention activities
- Decreased funding for the Pollution Prevention Program by **\$6.9 million** since the previous year

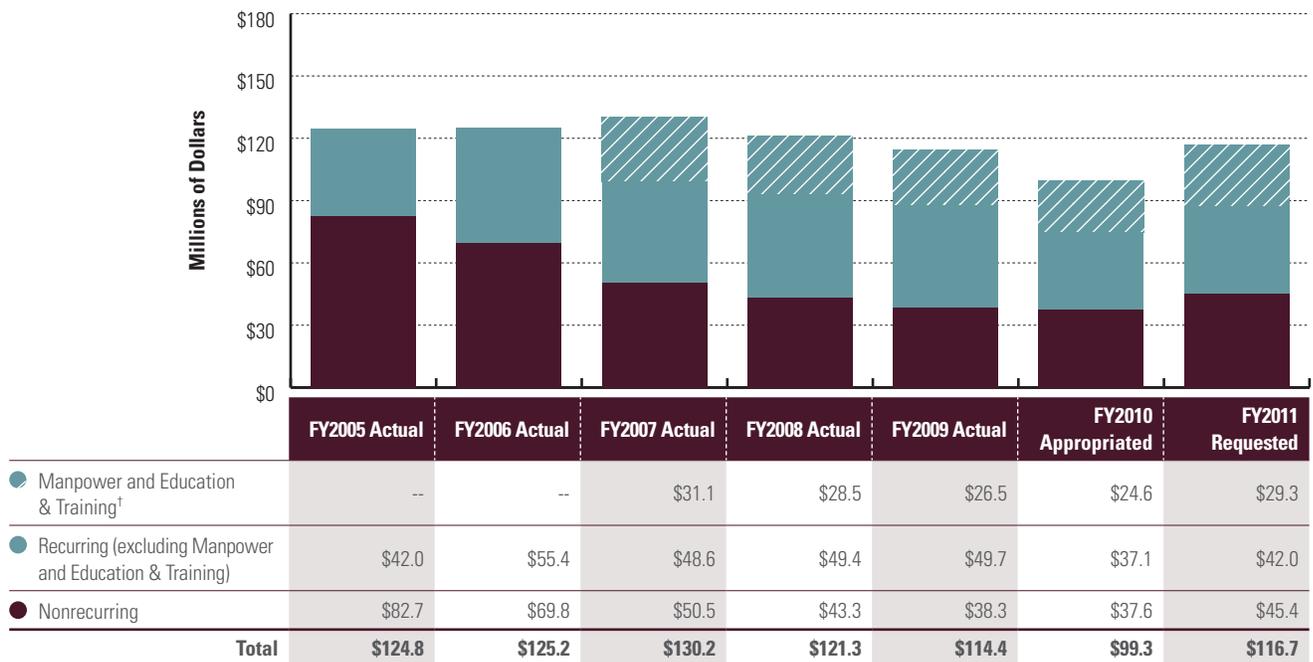
DoD employs pollution prevention efforts not only to minimize health and safety risks to its personnel and residents of nearby communities but also to reduce operating and compliance costs. The Pollution Prevention Program also enhances the military’s operating capacity by minimizing the infrastructure required to manage hazardous materials used in support of the Department’s mission. As a result, DoD’s pollution prevention investments have the potential to reduce costs Department-wide.

Recurring pollution prevention investments include the following:

- Manpower and Education & Training
- Supplies
- Travel
- Data management
- Toxics Release Inventory
- Other reporting activities

Hazardous material reduction and CWA requirements are the priorities within the nonrecurring budget. These nonrecurring projects are significant drivers in reducing compliance costs. Other nonrecurring activities may include efforts to prepare and implement an acquisition strategy for alternative-fuel vehicles (excluding vehicle purchases

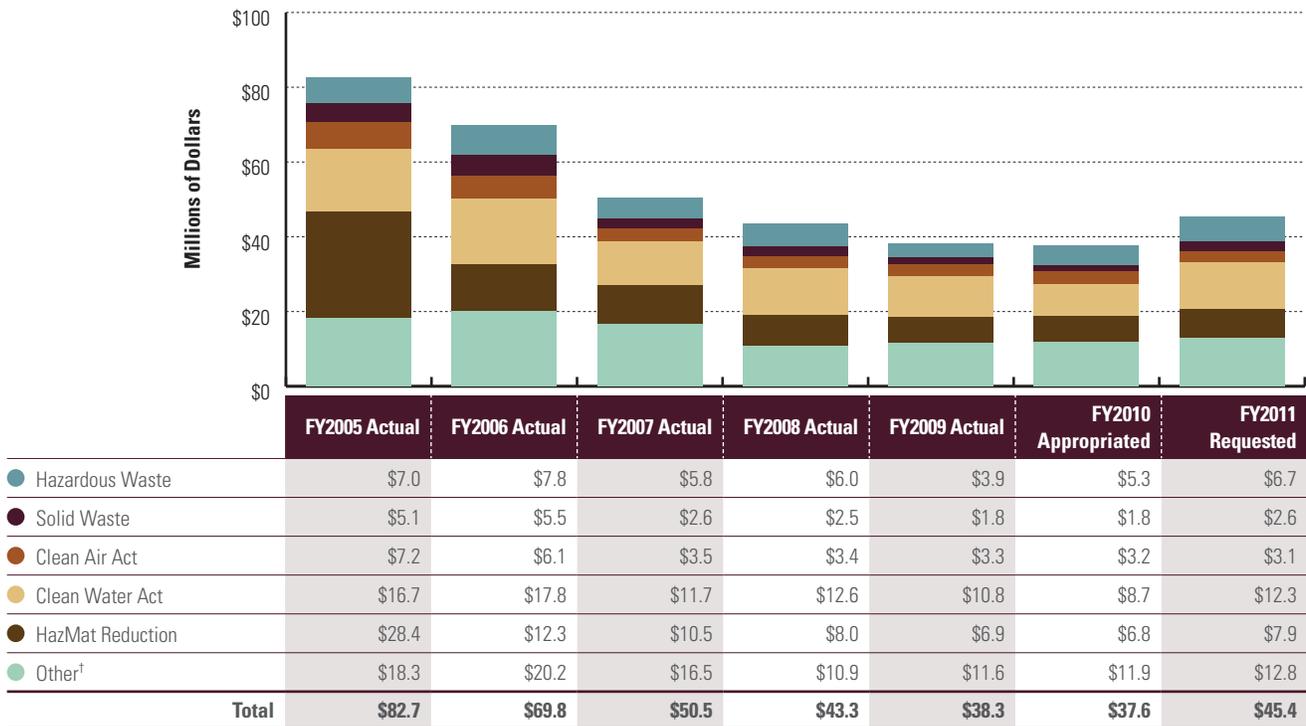
Figure 1-7 DoD Pollution Prevention Recurring and Nonrecurring Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Prior to FY2007, DoD reported all Manpower and Education & Training funds under the Compliance Program.

Figure 1-8 DoD Pollution Prevention Nonrecurring Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Includes Safe Drinking Water Act.

or leases) and conversion of regular vehicles to alternative fuels. Pollution prevention nonrecurring funds fluctuate due to the completion or addition of one-time projects.

DoD obligated \$114.4 million for the Pollution Prevention Program in FY2009 (Figures 1-7 and 1-8), which represents a 6 percent decrease from the previous year. The FY2011 funding request increased to \$116.7 million primarily as a result of an influx in Army and Air Force recurring and nonrecurring activities. The funding request for FY2011 will continue to support efforts that target hazardous materials, solid waste, toxic releases, air emissions, and water pollution at the source. These activities are part of DoD’s overall sustainability strategy, recognizing that significant cost savings and beneficial environmental outcomes can result from such endeavors.

Chapter 7 describes the Department’s performance within the Pollution Prevention Program. Appendix B, Figure B-1.3 contains Pollution Prevention funding data by DoD Component.

## Restoration

During FY2009, DoD committed the following resources to its environmental programs:

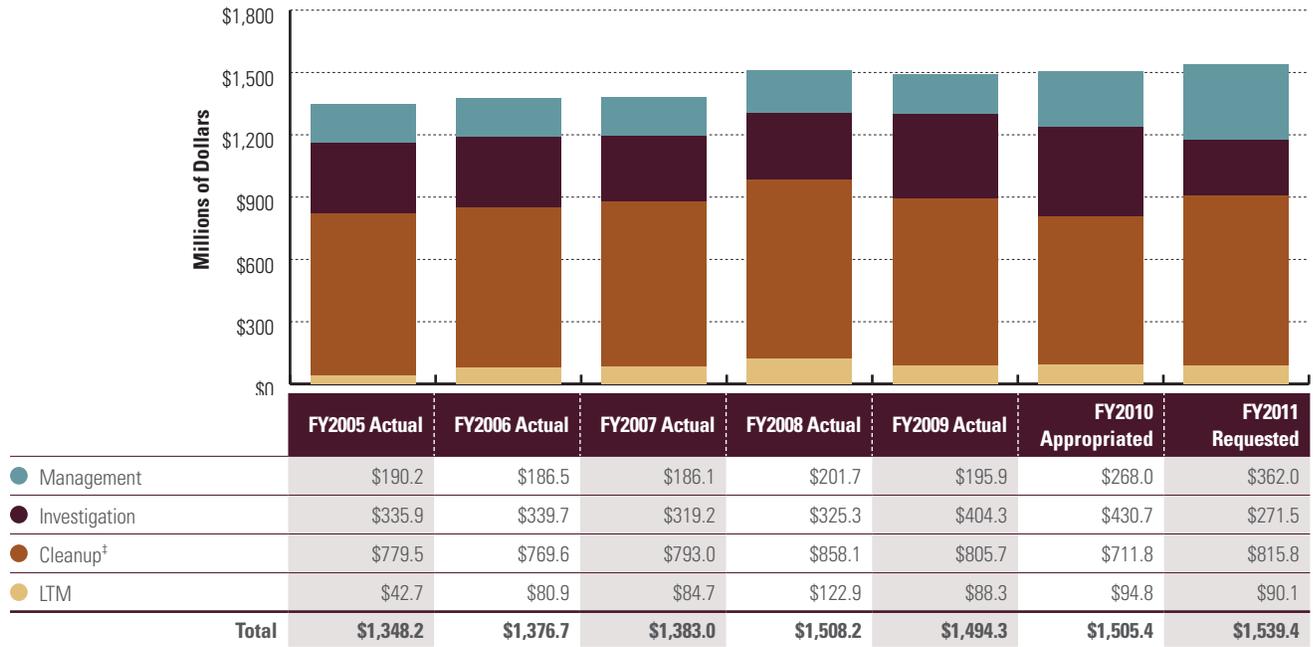
- Obligated **\$1.5 billion** in ER funding for environmental restoration activities at active installations and FUDS properties (Figure 1-9)
- Obligated an additional **\$532.2 million** for environmental activities at BRAC installations (Figure 1-10)

Of the \$2.0 billion obligated for restoration activities, \$1.5 billion funded cleanup of hazardous substances, pollutants, and contaminants from past DoD activities through the Installation Restoration Program (IRP), and \$420.4 million funded cleanup of unexploded and discarded munitions through the Military Munitions Response Program (MMRP).

## ER Account Funding

The ER accounts fund environmental restoration activities at active installations and FUDS properties. Of the \$1.5 billion obligated for ER activities in FY2009, \$1.1 billion funded cleanup activities under the IRP and \$344.5 million funded cleanup under the MMRP (Figure 1-11).

Figure 1-9 DoD ER Funding by Cleanup Phase\*†

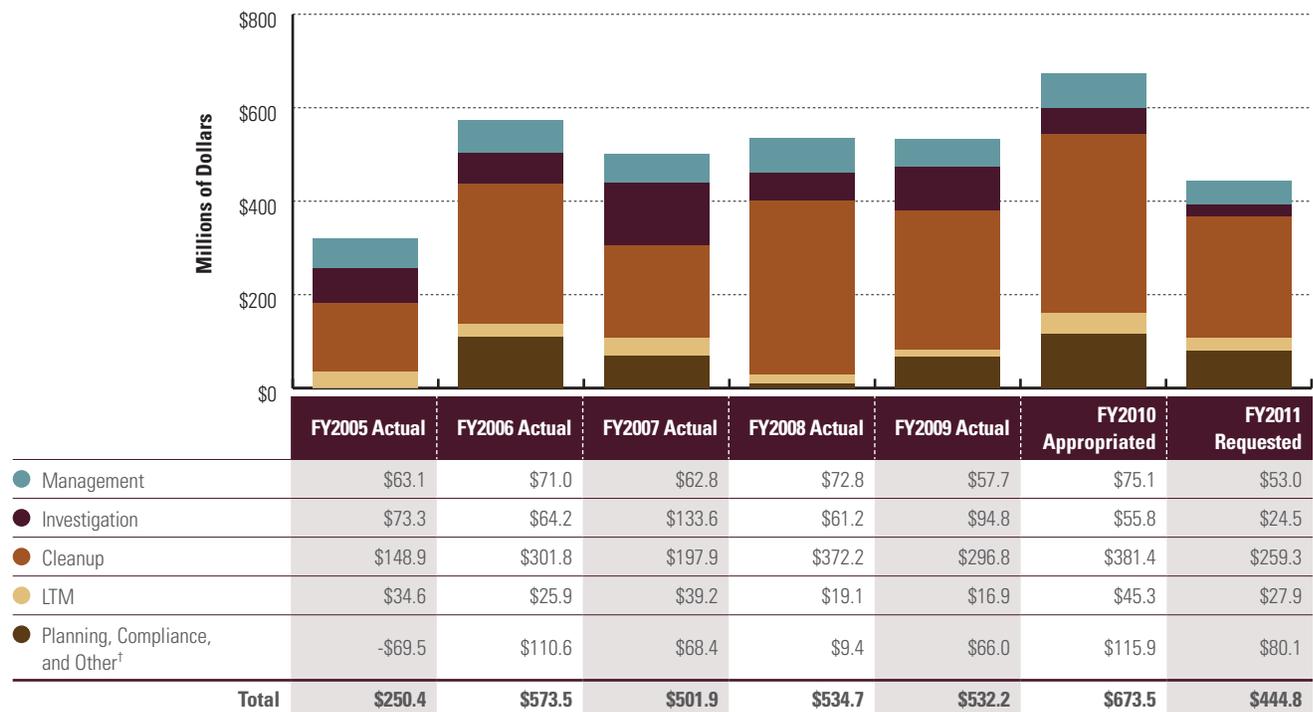


\* Subtotals may not equal fiscal year totals due to rounding.

† Includes funding for FUDS properties.

‡ Includes funding for BD/DR sites.

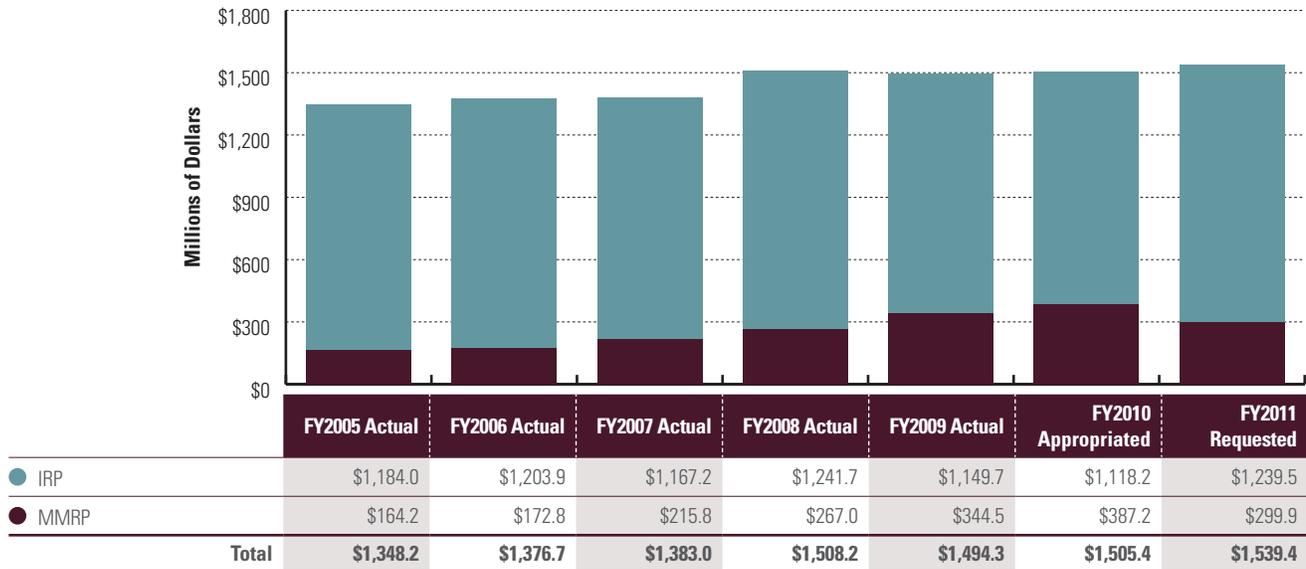
Figure 1-10 DoD BRAC Restoration Funding by Cleanup Phase\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Other may include revenue gained from land sales or execution of prior year funding. Negative values indicate years in which revenue or the execution of prior year funding exceeds funding for planning and compliance activities.

Figure 1-11 DoD ER IRP\* and MMRP Funding†



\* Includes funding for BD/DR sites.

† Includes funding for FUDS properties.

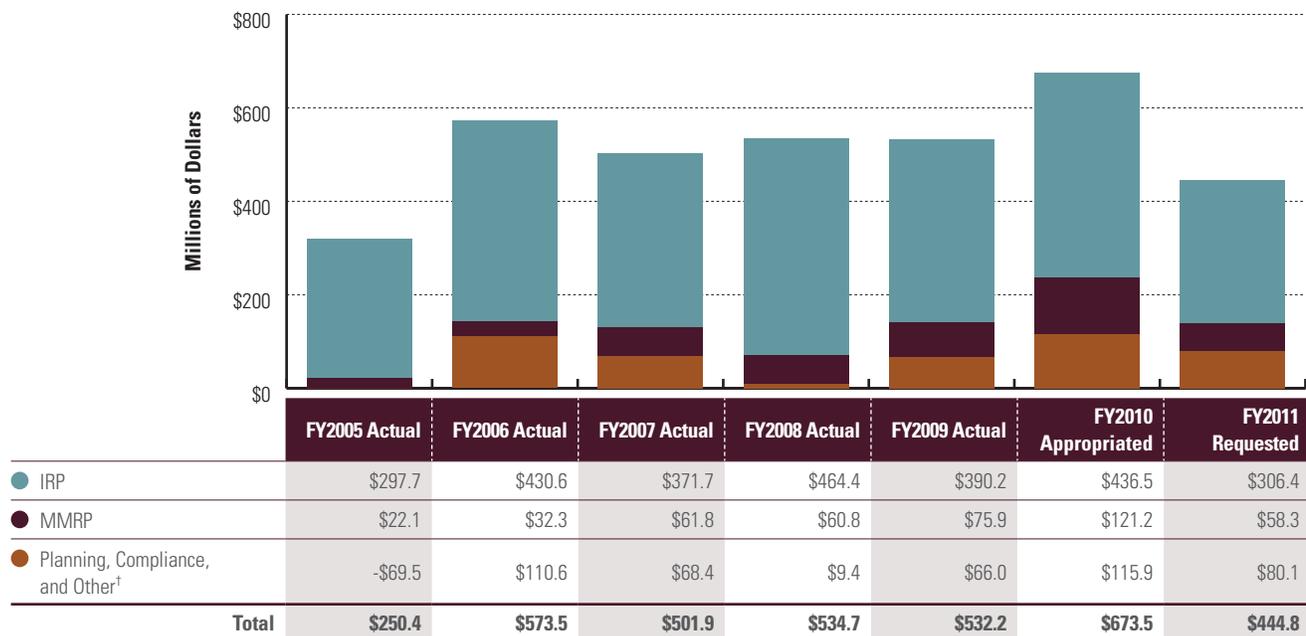
‡ Subtotals may not equal fiscal year totals due to rounding.

The Department continues to invest a significant portion of IRP funding in its remaining high relative risk sites. As the amount of funding required to cleanup these sites decreases, priorities will shift to medium relative risk sites. DoD has set a goal for implementing remedies at all medium relative risk sites at active installations and

FUDS properties by the end of FY2011, which explains the increase in ER funding for cleanup phases to \$815.8 million in FY2011 (Figure 1-9).

DoD also continues to investigate and prioritize munitions response sites and implement cleanup remedies in support of MMRP goals. The Department has set a goal for completing site inspections at all munitions response

Figure 1-12 DoD BRAC IRP and MMRP Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

† Other may include revenue gained from land sales or execution of prior year funding. Negative values indicate years in which revenue or the execution of prior year funding exceeds funding for planning and compliance activities.

sites at active installations and FUDS properties by the end of FY2010, which explains the decrease in ER funding for investigation phases to \$271.5 million in FY2011 (Figure 1-9).

Funding amounts for FY2005 through FY2011 also reflect the transfer of funds from the ER accounts to the BRAC accounts for cleanup activities at sites impacted by BRAC 2005. These funding shifts are permanent.

New requirements to address emerging contaminants (e.g., perchlorate; naphthalene; and 1,4-dioxane) also drive investments in cleanup. The Department will continue to modify its plans and programs to meet these challenges and adjust total cleanup cost-to-complete estimates accordingly.

Chapter 8 describes the Department’s performance within the Restoration Program. Appendix B, Figure B-1.4 contains ER funding data by DoD Component.

### BRAC Environmental Funding

The BRAC accounts provide funding for restoration, closure-related compliance, and planning activities at closing or realigned military installations in the United States and its territories. Unlike other appropriations, Congress provides BRAC funding according to BRAC rounds and allows it to remain available until expended—there are no expiration dates for these funds. Revenue

gained from the sale of closing installations may also be used to fulfill cleanup requirements. FY2005 through FY2011 funding levels reflect funding for restoration at BRAC rounds I-IV, as well as BRAC 2005 installations.

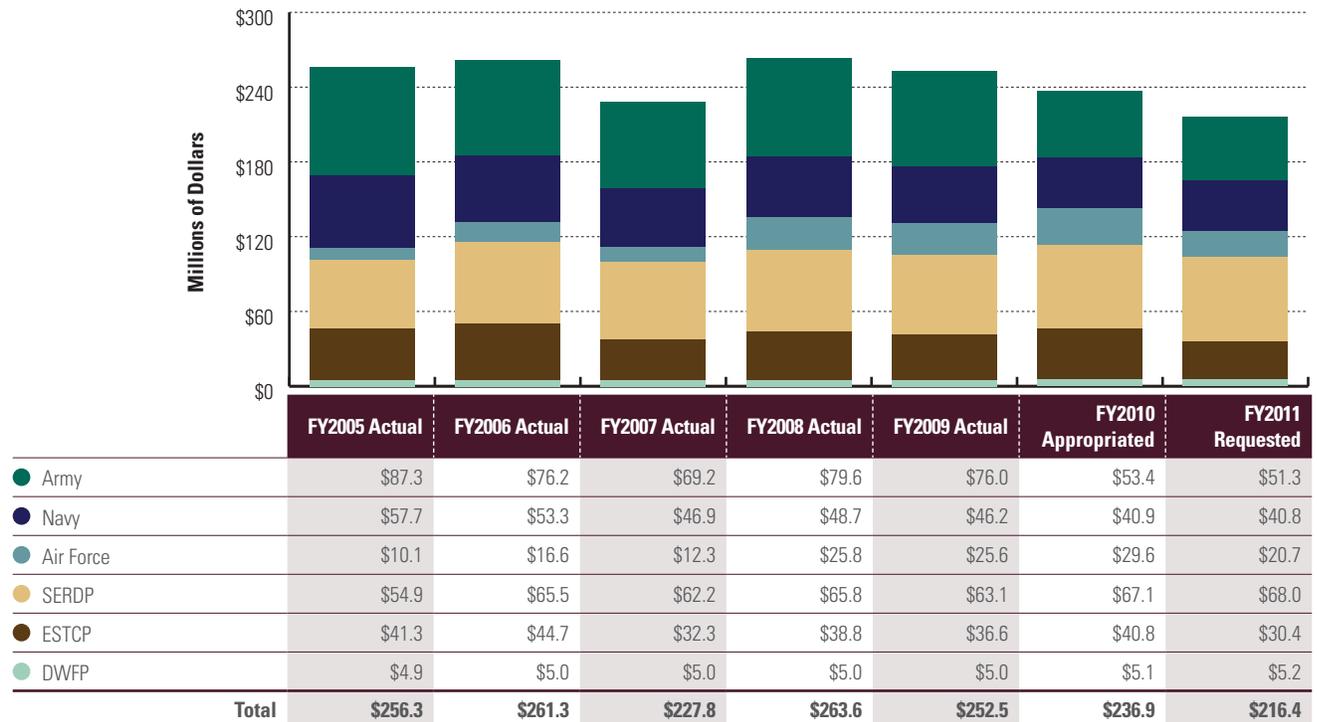
The FY2009 budget for BRAC environmental activities was \$532.2 million; DoD requested \$444.8 million for FY2011. Of the \$532.2 million obligated for BRAC activities in FY2009, \$390.2 million funded cleanup activities under the IRP and \$75.9 million funded cleanup under the MMRP (Figure 1-12). The remaining obligations fund planning and compliance activities. In FY2005, the Navy’s cleanup work at BRAC installations totaled \$102.5 million; however, its BRAC funding was completely offset due to revenue generated from the previous year’s land sale of BRAC property. As a result, the amount of cleanup work executed at BRAC installations exceeded the Department’s BRAC funding obligations in FY2005.

Chapter 8 describes the Department’s performance within the Restoration Program. Appendix B, Figure B-1.4 contains BRAC funding data by DoD Component.

### Environmental Technology

*During FY2009, DoD committed the following resources to its environmental programs:*

**Figure 1-13** DoD Environmental Technology Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.

- Obligated **\$252.5 million** in environmental technology
- Provided **\$63.1 million** and **\$36.6 million** for the Strategic Environmental Research and Development, and Environmental Security Technology Certification Programs, respectively

DoD's environmental technology programs provide new and improved methods, equipment, materials, and protocols to meet military readiness needs. For example, these programs have produced increased efficiency in paint application and metal plating, resulting in less hazardous waste and lower associated treatment costs. The DoD Environmental Technology Annual Report to Congress covers this area in more detail and fulfills Congressional reporting requirements. Environmental technology is included exclusively in this section of the report to ensure completeness of the environmental budget discussion.

The Office of the Secretary of Defense administers the Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP). SERDP and ESTCP focus on the highest-priority environmental technology needs that apply to more than one DoD Component and help avoid duplication of effort among DoD Components with similar problems. A portion of environmental technology funding is also invested in Defense Warfighter Protection (DWFP).

DoD obligated \$252.5 million in environmental technology in FY2009 (Figure 1-13). The funding request for FY2011 decreased to \$216.4 million, primarily due to a Congressional add for ESTCP in FY2010 and a reduction in the Air Force's pollution prevention technology investments.

### Overseas Environmental Activities

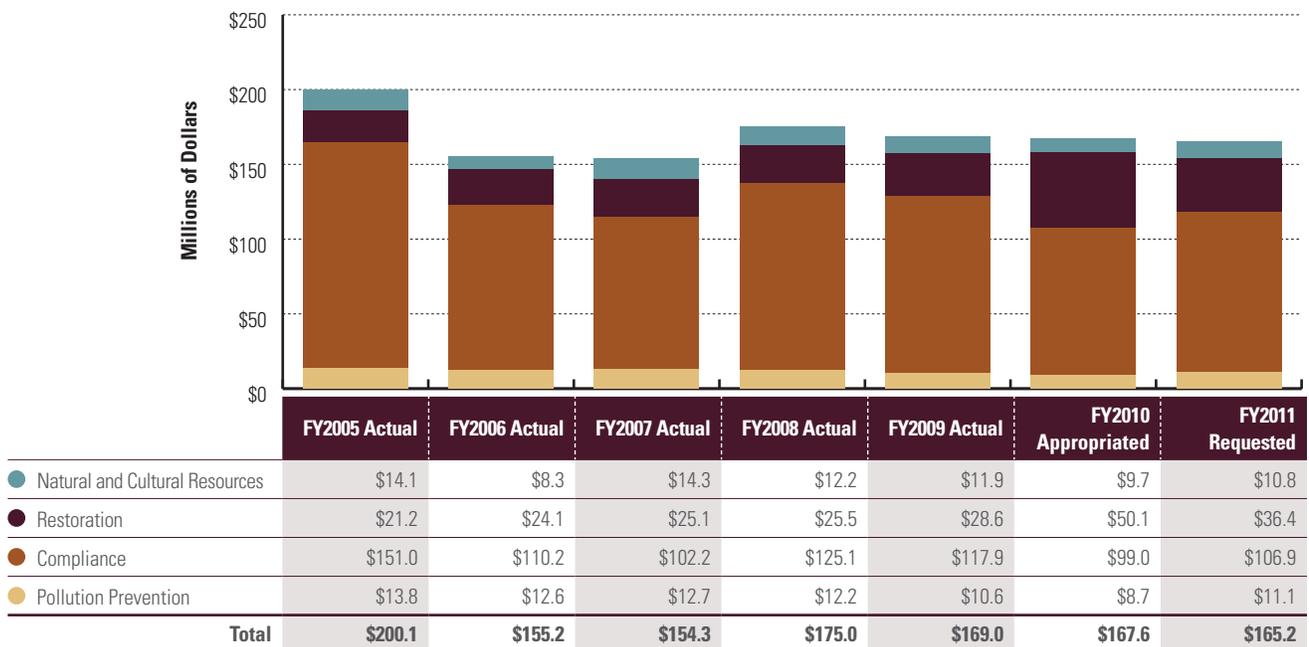
During FY2009, DoD committed the following resources to its environmental programs:

- Obligated **\$169.0 million** in environmental activities at overseas installations
- Increased funding for cleanup at overseas installations by **12 percent** compared to the previous year

The Department complies with environmental requirements of host nations overseas as determined by review of the Final Governing Standards. Investments in overseas environmental programs similar to those that have proved to be successful domestically are necessary to continue the use of, and access to, the infrastructure and natural resources needed to meet the military mission. Overseas environmental funding is included in the Natural and Cultural Resources, Compliance, and Pollution Prevention funding charts; however, it is also displayed separately in Figure 1-14. Funding for cleanup activities abroad is included in the overseas compliance activities budget.

Appendix B, Figure B-1.5 contains overseas environmental funding data by DoD Component.

Figure 1-14 DoD Overseas Environmental Funding\*



\* Subtotals may not equal fiscal year totals due to rounding.