# **1** Defense Environmental Funding

The Department of Defense (DoD) funds its environmental programs through effective planning, programming, budgeting, and execution processes that allocate financial resources where they are needed. These budget and review processes ensure that the DoD Components—Army, Navy, Marine Corps, Air Force, and the Defense agencies—identify and request adequate funding to meet their mission, legal, and regulatory environmental requirements.

The DoD Components build their Environmental Restoration budgets from the site level, but they develop their Natural and Cultural Resources, Compliance, and Pollution Prevention budgets from the installation level. These site- and installation-level estimates form the basis of the environmental budget, which is included in the overall Defense budget the President submits to Congress.

Because of the lack of Appropriations Acts, the Comptroller estimated the Fiscal Year (FY) 2011 amounts based on the FY11 President's Budget request, with an adjustment to match the annualized Continuing Resolution funding level by appropriation.

# Defense Environmental Funding at a Glance

Fiscal Year (FY) 2010 Funding: **\$4.5 billion** obligated

#### **FY10 Funding Highlights:**

- % Increased by \$251.9 million between FY09 and FY10
- Estimated \$4.2 billion for environmental programs in FY11
- % Requested \$4.2 billion for environmental programs in FY12

### **Program Summary**

Here is how the Department of Defense (DoD) obligated approximately \$4.5 billion among the following six environmental programs in FY10 (Figure 1-1):

- \$437.4 million for Natural and Cultural Resources
- \$1.5 billion for Compliance
- \$91.2 million for Pollution Prevention
- \$1.6 billion for Environmental Restoration (ER) at active installations and Formerly Used Defense Site (FUDS) properties
- \$666.7 million for environmental activities at Base Realignment and Closure (BRAC) installations
- \$255.8 million for Environmental Technology

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 remains stable.

This report shows funding for both nonrecurring (i.e., one-time projects) and recurring activities. Recurring activities include routine tasks that an installation conducts in support of its environmental programs such as:

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

# Funding Appropriations for Environmental Programs

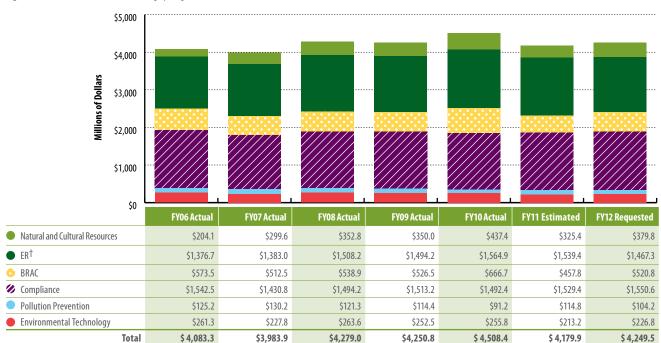
DoD funds its various environmental programs from eight funding appropriations (Figure 1-2):

- BRAC
- ER
- Defense Working Capital Fund (DWCF)
- Military Construction (MilCon)
- Operations and Maintenance (O&M)
- Procurement (PROC)
- Research, Development, Testing, and Evaluation (RDT&E)
- Other DoD Appropriations

Most funding for DoD's Natural and Cultural Resources, Compliance, and Pollution Prevention Programs comes from the O&M appropriations in the DoD Appropriations Act. DoD also uses funds obtained through the MilCon, Military Quality of Life, and Veteran's Affairs Appropriations Acts to build necessary facilities like wastewater treatment plants. Other notable DoD Appropriations Act funding includes PROC, RDT&E, and the DWCF.

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

The Compliance Program (and to a lesser degree, the Natural and Cultural Resources and Pollution Prevention



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

Figure 1-2 DoD Environmental Funding by Appropriation (Includes Environmental Technology)\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

<sup>†</sup> Includes funding for FUDS properties.

<sup>†</sup> Includes funding for FUDS properties.

Programs) includes funding for environmental activities at overseas installations. This funding includes activities such as those required to comply with existing treaties, laws, and other agreements (i.e., Final Governing Standards). DoD also funds activities within the Defense Environmental Restoration Program through the ER and BRAC accounts. The ER accounts also fund cleanup activities at active installations and FUDS properties within the United States and its territories. Separate BRAC appropriations fund cleanup activities at closing installations and address closure-related environmental cleanup, planning, and compliance activities. The Department funds restoration activities outside the United States through the Compliance Program.

#### **Natural and Cultural Resources**

During FY10, DoD invested:

- \$437.4 million for natural and cultural resources
- **\$87.4 million** more compared to FY09

DoD conserves, protects, and restores natural and cultural resources located on and near its installations, which also

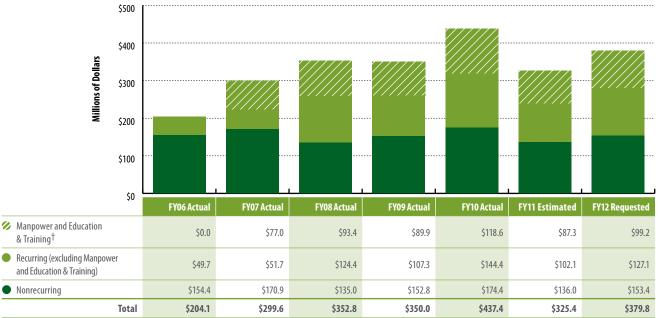
enhances and protects the military's mission. Recurring funds for the Natural and Cultural Resources Programs finance continuous management activities, such as:

- Preparing, implementing, and updating integrated natural and cultural resources management plans
- Coordinating with conservation regulatory agencies
- Monitoring threatened, endangered, and at-risk species
- · Continuing protection of archaeological sites
- · Controlling invasive species
- Ongoing erosion control measures
- Completing surveys, inventories, and monitoring requirements

Nonrecurring activities are divided into two subcategories: natural resources, and historical and cultural resources. Examples of nonrecurring natural resources activities include:

- Consultation activities under the Endangered Species Act
- Mitigation for specific actions
- Habitat restoration or creation
- · Volunteer and partnering programs
- · Wetlands protection
- Projects identified in Integrated Natural Resources Management Plans

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



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

<sup>†</sup> Prior to FY07, DoD reported all Manpower and Education & Training funds under the Compliance Program.

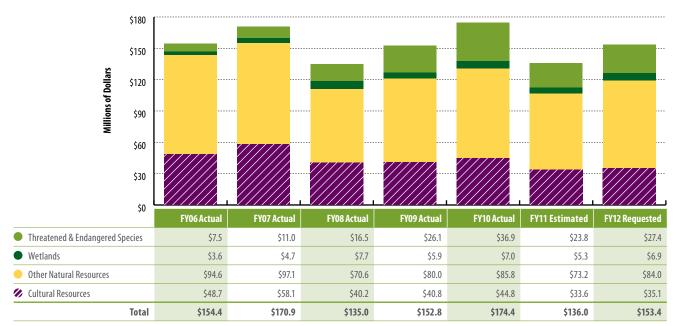


Figure 1-4 DoD Natural and Cultural Resources Nonrecurring Funding\*

Examples of nonrecurring cultural resources are:

- Baseline inventories of historic buildings
- · Initial archaeological materials curation
- Consultations with Native American groups
- Projects identified in Integrated Cultural Resources
   Management Plans

The DoD Components obligated \$437.4 million for natural and cultural resources in FY10, \$87.4 million more than FY09 (Figure 1-3). More than 39 percent of these funds was for nonrecurring, one-time projects. The funding growth that occurred between FY09 and FY10 was mostly due to additional Army recurring activities. However, funding decreased in FY11 because of a reduction in Army activities. DoD Components have requested \$379.8 million for FY12 due to an increase in Army recurring efforts and overall increases at the Department of the Navy and the Readiness and Environmental Protection Initiative (REPI) Program.

DoD budgeted \$36.9 million in FY10 funding to protect and manage threatened and endangered species in compliance with the Endangered Species Act (Figure 1-4).

Chapters 2 and 3 describe the Department's performance within the Natural and Cultural Resources Programs, respectively. Appendix D, Section 1 contains Natural and Cultural Resources funding data by DoD Component.

# **Compliance**

During FY10, DoD invested:

- \$1.5 billion for compliance activities
- \$20.8 million less compared to FY09

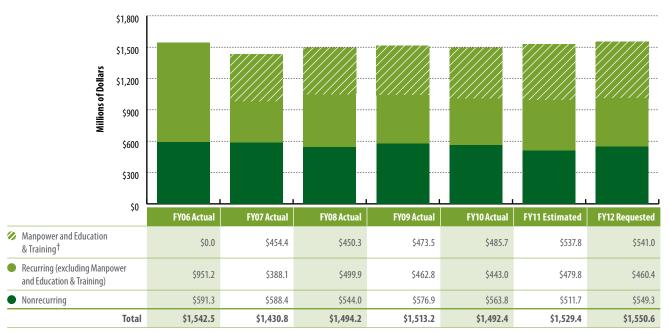
DoD uses these resources to fund recurring and nonrecurring compliance activities. The Department must perform recurring activities because they are essential for DoD to comply with federal, state and local environmental laws and regulations.

Recurring compliance activities include:

- Sampling and analysis of discharges to air and water
- Maintaining permits for regulated environmental activities
- Disposing of regulated wastes
- Maintaining and submitting required environmental plans and reports
- Conducting environmental self-assessments and audits

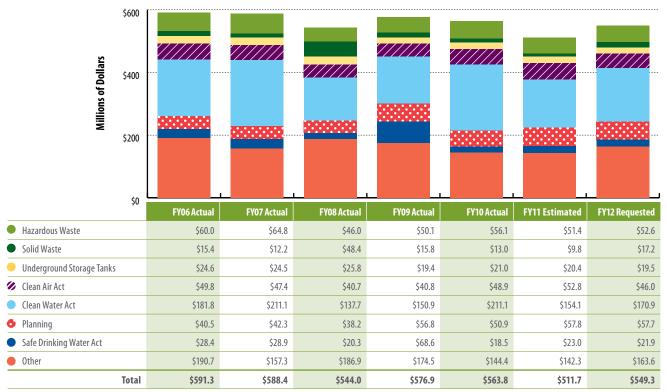
<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

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



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

Figure 1-6 DoD Compliance Nonrecurring Funding\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

 $<sup>\</sup>dagger \quad \text{Beginning in FY07, DoD reported Manpower and Education \& Training funds under the appropriate program areas}.$ 

DoD also uses these resources to fund nonrecurring compliance activities such as projects to upgrade wastewater treatment facilities or to install air pollution controls to meet existing standards.

DoD obligated \$1.5 billion for the Compliance Program in FY10 (Figure 1-5), consistent with previous years. In FY10, Defense Logistics Agency military construction projects at Point Loma Annex and Jacksonville International Airport contributed to a \$60.2 million net increase in CWA funding (Figure 1-6). However, the Department decreased nonrecurring funds for other compliance activities (e.g., radon and asbestos investigations and mitigation, spill response plans, action to prevent pollution from ships, and addressing munitions constituents on operational ranges). In FY08, DoD increased solid waste funding for Marine Corps military construction projects—like the landfills at Camp Lejeune and Twentynine Palms. Also, Safe Drinking Water Act funding more than tripled in FY09 because of a military construction project at Camp Pendleton.

Chapter 4 describes DoD's performance within the Compliance Program. Appendix D, Section 1 contains Compliance funding data for each DoD Component.

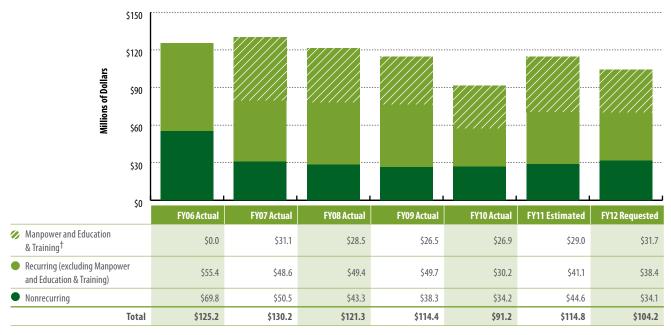
#### **Pollution Prevention**

Durina FY10. DoD invested:

- \$91.2 million for pollution prevention activities
- \$23.1 million less compared to FY09

DoD employs pollution prevention efforts to both minimize health and safety risks to its personnel and the residents of nearby communities, and to reduce its 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.

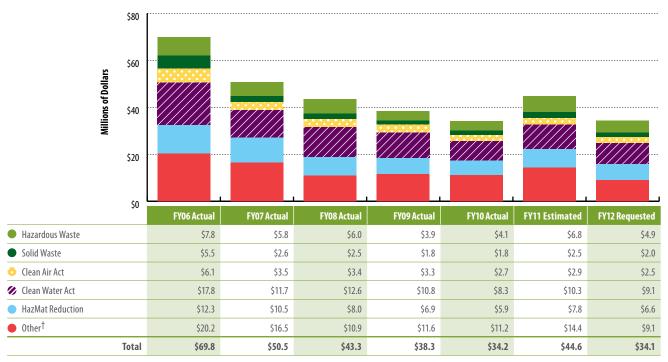
Figure 1-7 DoD Pollution Prevention Recurring and Nonrecurring Funding\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

<sup>†</sup> Prior to FY07, DoD reported all Manpower and Education & Training funds under the Compliance Program.

Figure 1-8 DoD Pollution Prevention Nonrecurring Funding\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

Recurring pollution prevention investments include:

- Manpower
- · Education and 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 or leases) and to convert regular vehicles to use alternative fuels.

DoD obligated \$91.2 million for the Pollution Prevention Program in FY10 (Figure 1-7), a 20 percent decrease from the previous year. This decrease is due to fewer Army, Navy, and Air Force recurring requirements. The FY11 funding estimate increased to \$114.8 million primarily because of an influx in Army and Navy recurring and Air Force recurring and nonrecurring activities.

The funding request of \$104.2 million for FY12 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 5 describes the Department's performance within the Pollution Prevention Program. Appendix D, Section 1 contains Pollution Prevention funding data by DoD Component.

<sup>†</sup> Includes Safe Drinking Water Act.

#### Restoration

During FY10, DoD invested:

- **\$1.6 billion** in ER funding for environmental restoration activities at active installations and FUDS properties
- **\$666.7 million** for environmental activities at closing installations under BRAC

Of the \$2.2 billion obligated for restoration activities, \$1.6 billion funded cleanup of hazardous substances and pollutants or contaminants from past DoD activities through the Installation Restoration Program (IRP). The Military Munitions Response Program (MMRP) funded \$460.2 million for the cleanup of unexploded and discarded munitions. The remaining obligations funded planning and compliance activities at BRAC installations.

#### **ER Account Funding**

The ER accounts fund environmental restoration activities at active installations and FUDS properties. In FY10, \$1.6 billion was obligated for ER activities.

DoD continues to invest a significant portion of ER funding in cleaning up its remaining sites. The amount of ER

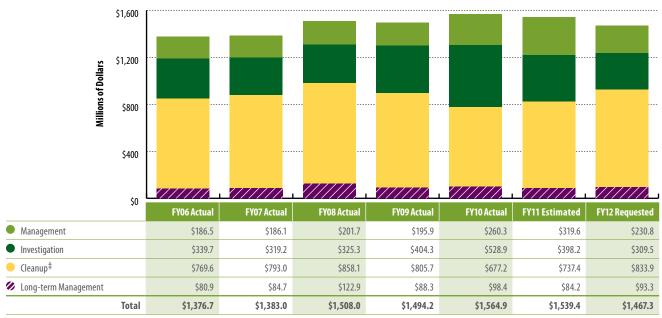
funding dedicated to cleanup increased from \$677.2 million in FY10 to \$737.4 million in FY11 and increases to \$833.9 million in FY12 (Figure 1-9).

DoD addresses both the IRP and the MMRP in the Defense Environmental Restoration Program. As shown in Figure 1-10, funding for these two programs remains relatively stable.

Of the \$1.6 billion obligated for ER activities in FY10, \$1.1 billion funded restoration activities under the IRP. The remaining \$416.0 million funded restoration under the MMRP (Figure 1-10). New requirements for addressing emerging contaminants (e.g., perchlorate, naphthalene, and 1, 4-dioxane) also drive investments in cleanup. DoD will continue to modify its plans and programs to address these challenges and adjust total cleanup cost-to-complete estimates accordingly.

Chapter 6 describes the Department's performance within the Restoration Program. Appendix D, Section 1 contains ER funding data by DoD Component.

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



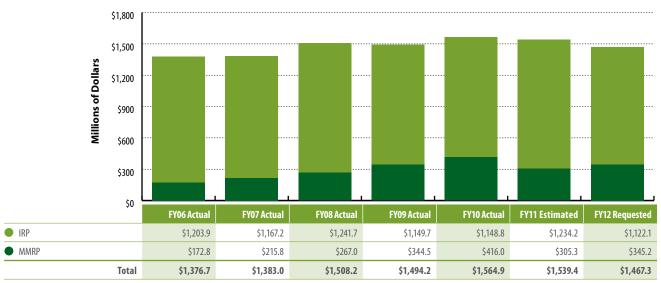
 $<sup>\</sup>begin{tabular}{ll} * & Due to rounding, subtotals may not equal fiscal year totals. \end{tabular}$ 

 $<sup>\</sup>dagger \quad \text{Includes funding for FUDS properties}.$ 

 $<sup>\</sup>ddagger \quad Includes \ funding \ for \ Building \ Demolition/Debris \ Removal \ (BD/DR) \ sites.$ 

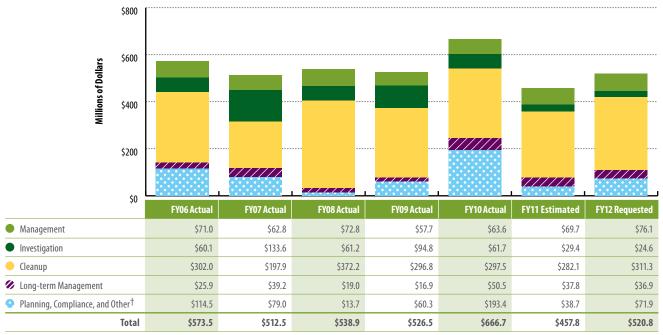
#### **Chapter 1: Defense Environmental Funding**

Figure 1-10 DoD ER IRP<sup>†</sup> and MMRP Funding<sup>‡</sup>\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

**Figure 1-11** DoD BRAC Restoration Funding by Cleanup Phase\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

<sup>†</sup> Includes funding for BD/DR sites.

<sup>‡</sup> Includes funding for FUDS properties.

<sup>†</sup> 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.

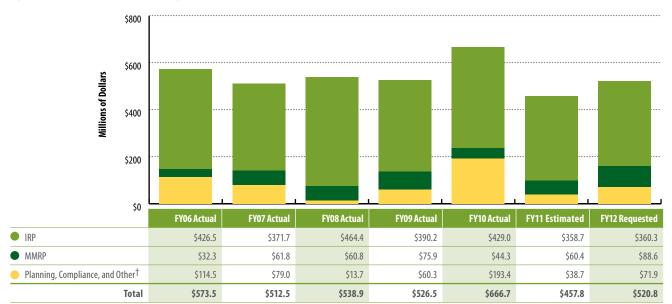


Figure 1-12 DoD BRAC IRP and MMRP Funding

#### **BRAC Environmental Funding**

The BRAC accounts provide funding for restoration, closure-related compliance, and planning activities at closing military installations in the United States and its territories. Unlike other appropriations, Congress provides BRAC funding according to BRAC rounds. As such, funding remains available until expended; BRAC funds do not expire. Revenue gained from the sale of property at closing installations can be used to fund cleanup requirements.

The FY10 funding of BRAC environmental activities totaled \$666.7 million (Figures 1-11 and 1-12). However, DoD estimates \$457.8 million in funding for FY11 and requests \$520.8 million for FY12. Of the \$666.7 million obligated for BRAC activities in FY10, \$429.0 million funded restoration activities under the IRP and \$44.3 million funded restoration under the MMRP (Figure 1-12). The remaining obligations funded planning and compliance activities. DoD funding for environmental activities at closing installations increased by 25 percent in FY10 because of an increase in Army Legacy BRAC and Army BRAC 2005 funding.

Chapter 6 describes DoD's performance within the Restoration Program. Appendix D, Section 1 contains BRAC funding data by DoD Component.

# **Environmental Technology**

During FY10, DoD invested:

- **\$255.8 million** for environmental technology
- **\$62.3 million** for the Strategic Environmental Research and Development Program (SERDP) and \$41.0 million for the Environmental Security Technology Certification Program (ESTCP)

The Office of the Secretary of Defense (OSD) administers SERDP and ESTCP. DoD's environmental technology programs provide new and improved methods, equipment, materials, and protocols to meet military readiness needs. For example, these programs 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, fulfilling Congressional reporting

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

<sup>†</sup> 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 1-13 DoD Environmental Technology Funding\*



<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

requirements. Environmental technology is only included in this section of the report to ensure completeness of the environmental budget discussion.

SERDP and ESTCP focus on the highest priority environmental technology needs that apply to more than one DoD Component and help avoid duplication among the Components. A portion of environmental technology funding is also invested in Defense Warfighter Protection (DWFP). DoD obligated \$255.8 million in environmental technology in FY10 (Figure 1-13). The Department estimates \$213.2 million for these activities in FY11 and requests \$226.8 million in FY12. The increase in funding from FY11 to FY12 is primarily due to an increase in Army and ESTCP funding.

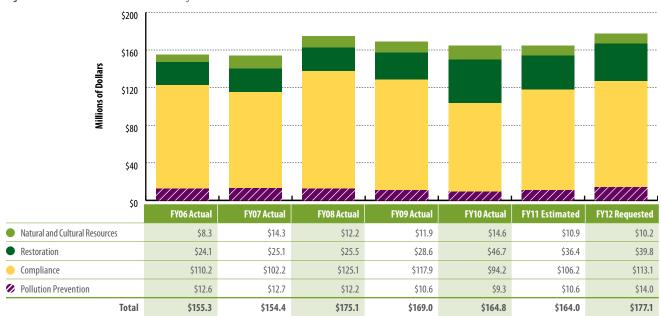
#### **Overseas Environmental Activities**

During FY10, DoD invested:

- **\$164.8 million** for environmental activities at overseas installations
- **63 percent** more funding for Restoration cleanup at overseas locations than in FY09

DoD complies with the environmental requirements of international agreements, country-specific Final Governing Standards, DoD 4715.05-G "Overseas Environmental Baseline Guidance Document," and DoD Instruction 4715.8 "Environmental Remediation for DoD Activities Overseas." Investments in overseas environmental programs are necessary to continue the use of, and access to, the infrastructure and natural resources needed to meet the military mission. Although overseas environmental funding is included in the Natural and Cultural Resources, Compliance, and Pollution Prevention funding charts, it is also displayed separately in Figure 1-14. Funding for cleanup activities abroad is included in the overseas compliance activities budget.

Appendix D, Section 1 contains overseas funding data by DoD Component.



DoD Overseas Environmental Funding\* Figure 1-14

# Miscellaneous Environmental **Programs**

During FY10, DoD invested:

- **\$50.3 million** for the Readiness and Environmental Protection Initiative (REPI) Program
- \$12.2 million for the Native American Lands Environmental Mitigation Program (NALEMP)
- \$6.8 million for the Legacy Resource Management Program
- **\$9.3 million** for the Defense Environmental International Cooperation (DEIC) Program
- \$1.1 million for the Emerging Contaminants Program

OSD administers several miscellaneous environmental programs to support the military mission while protecting human health and the environment.

• The REPI Program protects installations and ranges from encroachment by working with surrounding communities and organizations to secure buffer lands and habitats.

- DoD developed NALEMP to gather, document, and mitigate environmental impacts on American Indian and Alaska Native lands in response to a Congressional mandate.
- The Legacy Resource Management Program, also required by Congress, attempts to balance the use of DoD lands for military testing and training with the need to protect natural and cultural resources.
- The DEIC Program serves as a forum to:
  - Share environmental information across national boundaries
  - Counter the proliferation of weapons of mass destruction
  - Partner to maintain access to resources for training and readiness
  - Promote regional cooperation
  - Foster a global military environmental ethic
  - Improve interagency processes, focus, and integration
- The Emerging Contaminants Program tracks and analyzes changes to environmental standards for hazardous substances that have the potential to impact DoD military operations and environmental activities.

<sup>\*</sup> Due to rounding, subtotals may not equal fiscal year totals.

Figure 1-15 DoD Miscellaneous Environmental Programs Funding



Funding for these miscellaneous environmental programs is included in the Natural and Cultural Resources,
Compliance, and Pollution Prevention funding charts;
however, it is also displayed separately in Figure 1-15.