

# APPENDIX L: FORMERLY USED DEFENSE SITES ENVIRONMENTAL RESTORATION PROGRESS

The goal of the Formerly Used Defense Sites (FUDS) program is to reduce risk to human health and the environment resulting from past Department of Defense (DoD) activities at properties that were formerly owned, leased, or otherwise under the jurisdiction of DoD or its Components prior to 1986.

The Army acts as the executive agent for the FUDS program, and the U.S. Army Corps of Engineers (USACE) executes the program through its divisions and districts. USACE must evaluate information about the origin and extent of contamination, land transfer issues, past and present property ownership, and program policies before it considers a property eligible for the FUDS program. At FUDS-eligible properties, USACE conducts environmental restoration activities under the Comprehensive Environmental Response, Compensation, and Liability Act. USACE sets priorities for the FUDS program based on an evaluation of relative risk and other factors, such as legal agreements, stakeholder concerns, and economic considerations.

USACE headquarters is responsible for FUDS program management and execution. The FUDS mission within USACE is executed by the field organizations, which consist of seven geographic military divisions; 22 military districts, with necessary support from civil works districts; one hazardous, toxic, and radioactive waste center of expertise; and one military munitions center of expertise. A USACE district commander serves as each property's installation commander, executing environmental restoration projects and fulfilling associated responsibilities, since DoD no longer owns or uses the FUDS properties.

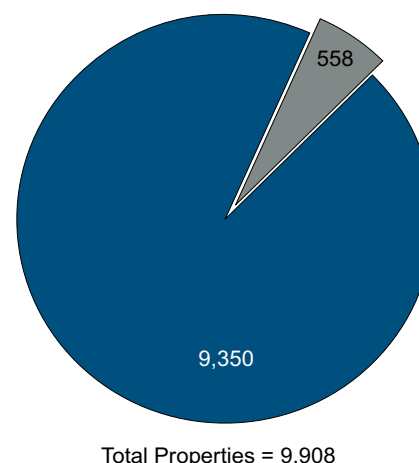
## Site Status and Progress Towards Program Goals

The scope and magnitude of the FUDS program are significant, with 9,908 properties identified for potential inclusion in the program, as shown in Figure L-1. Figure L-2 illustrates that, as of the end of Fiscal Year (FY) 2006, USACE

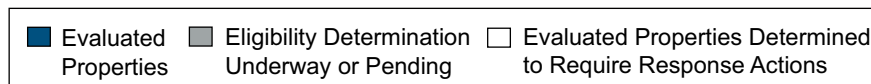
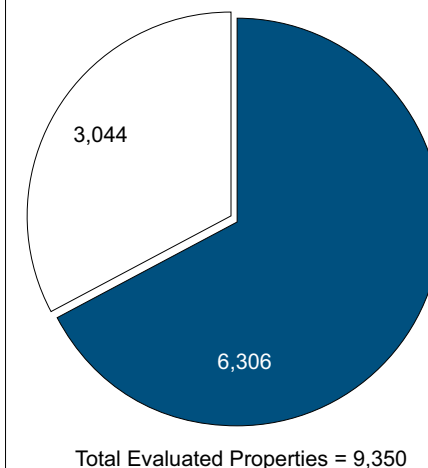
has evaluated 9,350 properties and determined that no response actions were required at 6,306 of those properties. A response action is required at the remaining 3,044 properties, which represents approximately 33 percent of the total properties.

USACE continues to emphasize project execution, FUDS property restoration, and active stakeholder involvement in the environmental restoration process. New properties and sites are continually being identified by property owners or discovered by USACE and added to the FUDS program. USACE continues evaluating potentially FUDS-eligible sites, as well as completing investigation and cleanup requirements to meet DoD management goals.

**Figure L-1**  
FY2006 Program Eligibility Status of Potential FUDS Programs



**Figure L-2**  
FY2006 Response Action Status of Evaluated FUDS Properties



As an example of active stakeholder involvement occurred at the former Camp Wheeler near Macon, GA. The USACE safely removed nearly 350 buried munitions from a residential neighborhood when homes were being built in a World War I and II training area. Constant community involvement was critical to the successful completion of the project.

### Installation Restoration Program

USACE strives to evaluate as many Installation Restoration Program (IRP) category sites as possible to assess relative risk to human health and the environment. Besides relative risk, other management factors considered include stakeholder concerns, aid in sequencing work during FUDS planning, programming, budgeting, and project execution.

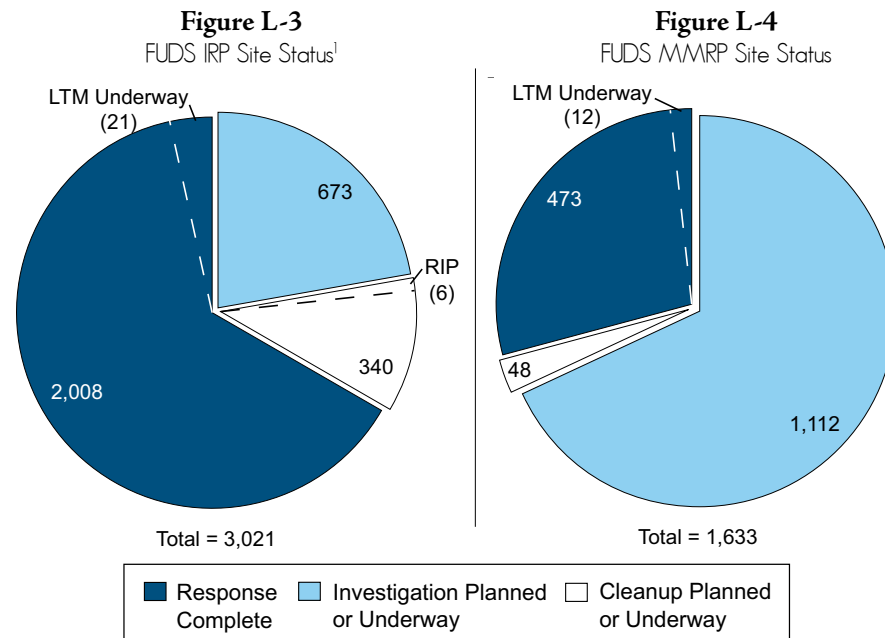
USACE currently has 2,601 IRP and 420 Building Demolition/ Debris Removal (BD/DR) category sites in the FUDS program. Of the 3,021 FUDS IRP and BD/DR sites, approximately 75 percent, or 2,277 sites, do not require a relative-risk ranking because work is ongoing or completed. Project execution figures for FY2006 demonstrate that the FUDS program continues to make significant progress. As of the end of FY2006, 2,008 FUDS IRP and BD/DR sites reached the response complete (RC) milestone, as shown in Figure L-3.

Figure L-5 provides detailed IRP site status, including phase information.

### Military Munitions Response Program

USACE also evaluates Military Munitions Response Program (MMRP) category sites for risks to human safety. MMRP assessments consist of a hazard severity assessment and a hazard probability assessment. Both are based on the best available information from archive search reports, explosive ordnance disposal incidence reports, field observations, interviews, and physical site measurements. Of the 1,633 eligible MMRP sites in the FUDS program, 473 have already achieved RC status, as shown in Figure L-4.

The MMRP, as defined in FY2004, encompasses hazards associated with munitions constituents (MC) and not just explosive hazards. Approximately 200 projects had previously been closed out because they do not pose a threat. However, to comply with new legislation and program definitions, these



<sup>1</sup> Includes BD/BR sites as of September 30, 2006.

projects were reopened during FY2005 to address the potential MC threat posed by expended small arms ammunition (i.e., lead).

To date, USACE has completed preliminary assessments (PAs) for nearly all MMRP-eligible sites, in an effort to meet the FY2007 goal for completing PAs and the FY2010 goal for completion of site inspections for sites identified in the MMRP Inventory.

Figure L-5 provides detailed MMRP site status, including phase information.

## Financial Management

In FY2006, USACE obligated \$253.8 million for environmental restoration activities at FUDS properties. USACE is planning to expend \$253.8 million for environmental restoration activities in FY2007, with 93 percent project funds designated for investigations and cleanup actions. USACE

used the remaining funds for long-term management activities and program management. The FUDS environmental restoration funding trends are illustrated in Figure L-6.

During FY2007, cost-to-complete (CTC) efforts at MMRP sites are estimated at \$12.6 billion and IRP sites are estimated to cost \$3.4 billion.

Budget and CTC estimates at FUDS properties are shown in Figure L-6.

**Figure L-5**  
FUDS Site Status

Sites by Classification				Completed		Underway		Future		
IRP Sites		MMRP Sites		IRP	MMRP	IRP	MMRP	IRP	MMRP	
<b>Response Comp.</b>	2,008	<b>Response Comp.</b>	473	<b>Phase</b>	<b>Sites (Actions)</b>					
<b>High</b>	217	<b>RAC-1</b>	96	<b>Study</b>	2,348	521	366	662	307	450
<b>Medium</b>	99	<b>RAC-2</b>	95	<b>IRA</b>	150 (150)	66 (66)	5 (5)	1 (1)		
<b>Low</b>	64	<b>RAC-3</b>	112	<b>Design</b>	1,274	15	161	12	562	914
<b>Not Evaluated</b>	463	<b>RAC-4</b>	314	<b>RA-C</b>	1,309	39	231	59	656	923
<b>Not Required</b>	170	<b>RAC-5</b>	220	<b>RA-O</b>	24	0	11	0	202	1
		<b>Not Evaluated</b>	323	<b>LTM</b>	171	16	121	32	1,750	1,324
<b>Total IRP Sites</b>	<b>3,021</b>	<b>Total MMRP Sites</b>	<b>1,633</b>	<b>Total Number of IRP Properties with Sites</b>					<b>1,707</b>	
				<b>Total Number of MMRP Properties with Sites</b>					<b>1,541</b>	

**Figure L-6**  
FUDS Budget and CTC Estimates<sup>1</sup>

Phase	Costs Through FY2006 (\$000)		FY2006 Funds Obligated (\$000)		FY2007 Execution Planned (\$000)		FY2008 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
<b>Study</b>	\$986,724	\$289,295	\$58,327	\$38,049	\$49,736	\$42,937	\$32,826	\$46,430	<b>FY2009</b>	\$137,777	\$79,315
<b>IRA</b>	\$111,243	\$34,961	\$1,825	\$4,988	\$434	\$60	\$706	\$0	<b>FY2010</b>	\$156,398	\$77,631
<b>Design</b>	\$158,168	\$1,126	\$3,446	\$129	\$4,425	\$544	\$9,459	\$977	<b>FY2011</b>	\$157,936	\$75,514
<b>RA-C</b>	\$1,158,473	\$275,003	\$42,696	\$48,002	\$38,925	\$41,208	\$62,167	\$32,240	<b>FY2012</b>	\$161,908	\$81,731
<b>RA-O</b>	\$80,696	\$0	\$6,769	\$0	\$9,771	\$0	\$12,840	\$0	<b>FY2013</b>	<b>\$162,062</b>	<b>\$80,721</b>
<b>LTM</b>	\$38,061	\$4,298	\$5,810	\$314	\$12,785	\$762	\$15,400	\$543	<b>FY2007-Comp. IRP</b>		\$3,441,573
<b>Total</b>	<b>\$2,533,365</b>	<b>\$604,683</b>	<b>\$118,873</b>	<b>\$91,482</b>	<b>\$116,076</b>	<b>\$85,511</b>	<b>\$133,398</b>	<b>\$80,210</b>	<b>FY2007-Comp. MMRP</b>		\$12,639,516

<sup>1</sup> Excludes PA/INPR, RAB, TAPP, and program management costs.