

## Restoration | Appendix L: Formerly Used Defense Sites Environmental Restoration Progress

the former Tulalip Backup Storage Ammunition Storage Depot near Tulalip, Wash., illustrates, it can lead to information that helps FUDS project managers better characterize and remove environmental dangers. Using an old photograph and a letter from a concerned resident, members of the USACE Huntsville Engineering and Support Center and the Seattle District were able to trace the location of chemical warfare materiel at the former Tulalip site. The photograph showed a Soldier from 1946 pointing to a sign that said “Poison gas area, do not dig for one year from date below, June 18, 1946”. With the letter and photography in hand, the team found the site, performed a time-critical removal action, and a recommendation has been made to now characterize the site as No Further Department of Defense Action Indicated.

### 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 are considered during FUDS planning, programming, budgeting, and project execution, including stakeholder concerns and aid in sequencing work.

In Fiscal Year (FY) 2007, USACE had 2,612 IRP and 422 Building Demolition/ Debris Removal (BD/DR) category sites in the FUDS program. Of the 3,034 FUDS IRP and BD/DR sites, 2,056 sites had reached the remedy in place (RIP) or response complete (RC) milestone, as illustrated in Figure L-1.

The Formerly Used Defense Sites (FUDS) program aims to minimize the threat to human health and the environment posed by activities that took place on properties formerly owned, leased, or otherwise under the jurisdiction of the Department of Defense (DoD) or its Components prior to 1986.

Army is the executive agent for the FUDS program, with the U.S. Army Corps of Engineers (USACE) implementing the program through its divisions and districts. The origins and extent of contamination, land transfer issues, past and present property ownership, and program policies are evaluated by USACE before the property can be considered for eligibility in the FUDS program. USACE conducts environmental restoration activities under the Comprehensive Environmental Response, Compensation, and Liability Act at those properties deemed eligible for the FUDS program. USACE determines the order of priority for cleanup in the FUDS program by evaluating relative risk and other factors, such as legal agreements, stakeholder concerns, and economic considerations.

FUDS program management and execution takes place at USACE headquarters. The USACE field organizations are accountable for the FUDS mission, and consist of seven geographic military

divisions, thirteen military districts with necessary support from other districts and from the Environmental and Munitions Center of Expertise. The number of districts responsible for FUDS program and project management was reduced from 22 to 13 in order to increase management effectiveness. Since DoD no longer owns or uses the FUDS properties, each property has a USACE district commander responsible for ensuring the implementation of environmental restoration projects and performing related responsibilities.

### Site Status and Progress Toward Program Goals

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 sites potentially eligible for FUDS, as well as completing investigation and cleanup requirements to meet DoD management goals.

Stakeholder involvement can take many diverse forms, and sometimes, as this example from

## Military Munitions Response Program

USACE also evaluates munitions response sites (MRSs) under the Military Munitions Response Program (MMRP) to evaluate the potential risks to human health and 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 1,650 MRSs in the FUDS program during FY2007, 403 had achieved RC, as shown in Figure L-2.

To date, USACE has completed preliminary assessments for nearly all MRSs in an effort to meet the DoD's FY2007 goal. USACE is making good progress completing Site Inspections, however based on current funding only about 70 percent will be complete by 2010.

As evidence of a continually maturing MMRP, the Components began to report results from the application of the Munitions Response Site Prioritization Protocol (MRSP) in FY2007. The MRSP assigns a relative priority for MRS cleanup.

With FY2007 serving as a transition year, Components had the opportunity to report relative priorities for sites under the MRSP or Risk Assessment Code (RAC) scores for those sites awaiting prioritization in accordance with the new requirements. In cases where sites were reported with both scores, the relative priorities took precedence over the RAC scores for those sites. Beginning in FY2008, the Components will report relative priorities for all MRSs.

Figures L-3 and L-4 provide detailed status for sites addressed under both the IRP and MMRP, including relative risk and cleanup phase information.

## Financial Management

In FY2007, USACE obligated \$262.7 million for environmental restoration activities at FUDS properties, which includes program management costs. USACE plans to expend \$278.9 million for environmental restoration activities in FY2008, with a significant majority of project funds designated for investigations and cleanup actions. Remaining funds finance long-term management (LTM) activities and program management.

During FY2008, cost-to-complete (CTC) efforts at MRSs are estimated at \$13.0 billion and IRP sites are estimated to cost \$3.2 billion. The FUDS environmental restoration funding trends are illustrated in Figure L-5. Additional information on the FUDS budget is available in Appendix D: Restoration Budget Overview.

Figure L-1 FUDS IRP Site Status\*

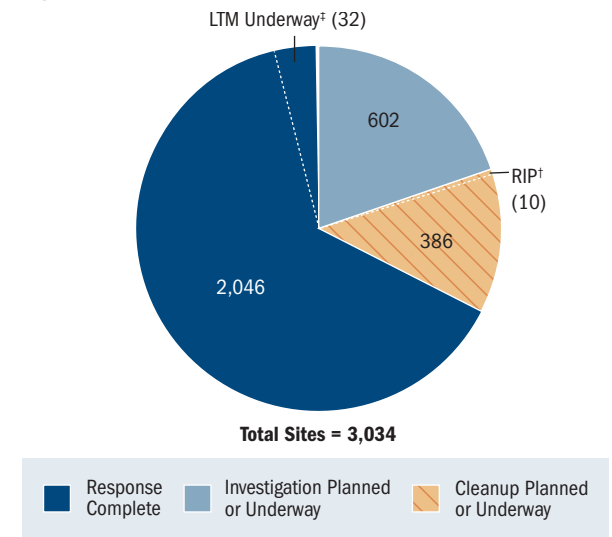


Figure L-2 FUDS MRS Status

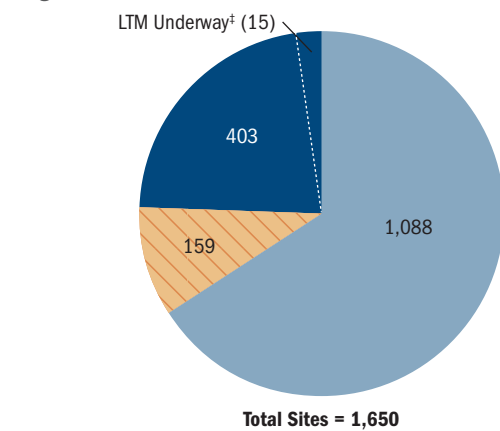


Figure L-3 FUDS Properties Site Status by Relative Risk

Sites by Classification			
IRP Sites		MMRP Sites	
Response Complete	2,046	Response Complete	403
High	213	MRSPP-1	0
Medium	95	MRSPP-2	0
Low	65	MRSPP-3	0
Not Evaluated	462	MRSPP-4	0
Not Required	153	MRSPP-5	0
<b>Total IRP Sites</b>	<b>3,034</b>	MRSPP-6	0
RAC-1	95	MRSPP-7	0
RAC-2	114	MRSPP-8	0
RAC-3	135	Evaluation Pending	0
RAC-4	371	Not Known/Suspected	0
RAC-5	323	No Longer Required	0
Evaluation Pending	209	<b>Total MMRP Sites</b>	<b>1,650</b>
<b>Total Number of IRP Properties with Sites</b>			<b>1,708</b>
<b>Total Number of MMRP Properties with Sites</b>			<b>1,544</b>

Figure L-4 FUDS Properties Site Status by Cleanup Phase

Phase	Completed		Underway		Future	
	IRP	MMRP	IRP	MMRP	IRP	MMRP
	Sites (Actions)					
Study	2,432	562	322	757	280	331
IRA	160 (160)	69 (69)	3 (3)	0	--	--
Design	1,375	22	141	17	483	950
RA-C	1,440	49	216	63	557	948
RA-O	28	0	16	0	186	1
LTM	287	42	235	57	1,617	1,359

Figure L-5 FUDS Properties Budget and CTC Estimates\*

Phase	Costs Through FY2007 (\$000)		FY2007 Funds Obligated (\$000)		FY2008 Execution Planned (\$000)		FY2009 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$1,105,380	\$340,973	\$54,442	\$51,103	\$43,816	\$44,270	\$38,111	\$37,003	FY2010	\$154,015	\$78,461
IRA	\$113,247	\$40,414	\$2,004	\$5,020	\$889	\$0	\$2,688	\$0	FY2011	\$171,386	\$72,014
Design	\$162,433	\$1,322	\$4,212	\$196	\$9,307	\$704	\$12,107	\$356	FY2012	\$183,468	\$57,864
RA-C	\$1,201,003	\$320,886	\$39,974	\$45,883	\$65,797	\$41,267	\$64,977	\$36,820	FY2013	\$154,150	\$97,880
RA-O	\$90,091	\$0	\$9,395	\$0	\$19,354	\$0	\$15,473	\$0	FY2008-Complete IRP		\$3,249,261
LTM	\$44,556	\$4,954	\$6,495	\$656	\$12,667	\$756	\$18,728	\$920	FY2008-Complete MMRP		\$13,022,981
<b>Total</b>	<b>\$2,716,710</b>	<b>\$708,549</b>	<b>\$116,522</b>	<b>\$102,858</b>	<b>\$151,830</b>	<b>\$86,997</b>	<b>\$152,084</b>	<b>\$75,099</b>	FY2008-Complete		<b>\$16,272,242</b>

\* Totals reflect installation project funding allocated to individual sites and do not include program management and other support costs.