

**Former Camp Butner Public Information Session
Meeting Minutes
September 5, 2012**

Project: Former Camp Butner Public Information Session

Date: September 5, 2012, 6:00 – 8:00 PM

Place: Butner Town Hall
415 Central Avenue
Butner, North Carolina 27509

Prepared By: Jessica Berg and Kimberly Vaughn

Topic: Public Information Session Remedial Investigation (RI)/ Feasibility Study (FS) and Right-of-Entry

Summary

The U.S. Army Corps of Engineers (USACE) Wilmington District and USACE Huntsville Center hosted a public information session for the former Camp Butner to inform the public on future site investigations and to obtain right-of-entry from property owners affected.

The information session included the posters presented in Attachment 1, the presentation presented in Attachment 2, as well as an information video and access to the 3 R's safety website, <http://www.sas.usace.army.mil/UXO/public/index.html>.

ATTACHMENT 1



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Former Camp Butner Military Munitions Response Sites

IMPORTANT TERMS

- **Formerly Used Defense Site (FUDS):** Properties that were formerly owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense, and transferred from Department of Defense (DOD) control prior to October 1986.
- **U.S. Army Corps of Engineers (USACE):** The USACE is the DOD organization that is responsible for environmental restoration of FUDS properties.
- **Military Munitions Response Program (MMRP):** A DOD program under which the USACE addresses the potential explosives safety, health, and environmental issues caused by past DOD munitions related activities.
- **Military Munitions Response Sites (MRS):** A discrete location that is known to require a munitions response.
- Former Camp Butner (**site**) is a FUDS.



SITE LOCATION INFORMATION

- Former Camp Butner is located approximately 15 miles north of Durham within Granville, Person, and Durham Counties, North Carolina.
- The entire site encompasses an estimated 40,384 acres.
- Currently, the former site is owned by the Army National Guard, the State of North Carolina, local municipalities, and a number of private owners.



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Former Camp Butner Site History and Training

- Camp Butner was established in 1942 to train infantry, artillery, and engineering combat troops for deployment and redeployment overseas during World War II.
- The installation was active from 1942 until 1946 and included approximately 15 live-fire ammunition training ranges, a grenade range, a 1,000-inch range, a gas chamber, and a flame-thrower training pad.
- Training was conducted only through 1943.
- Camp Butner was declared excess on January 31, 1947.



Anti-Tank Class at Camp Butner



Mortar Class at Camp Butner



Rifle Squads at Camp Butner



Climbing Net at Camp Butner

- Munitions used at the site included 2.36-inch rockets, rifle and hand grenades, 20-mm through 240-mm high explosive projectiles, 60- and 81-mm mortars, and anti-personnel practice mines.
- Training activities also included the use of demolition items such as TNT and various initiating and priming materials.



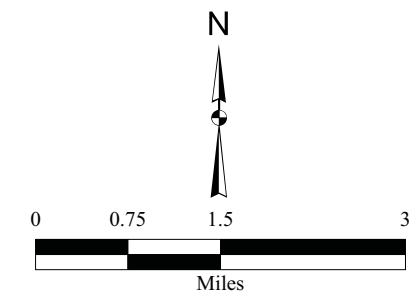
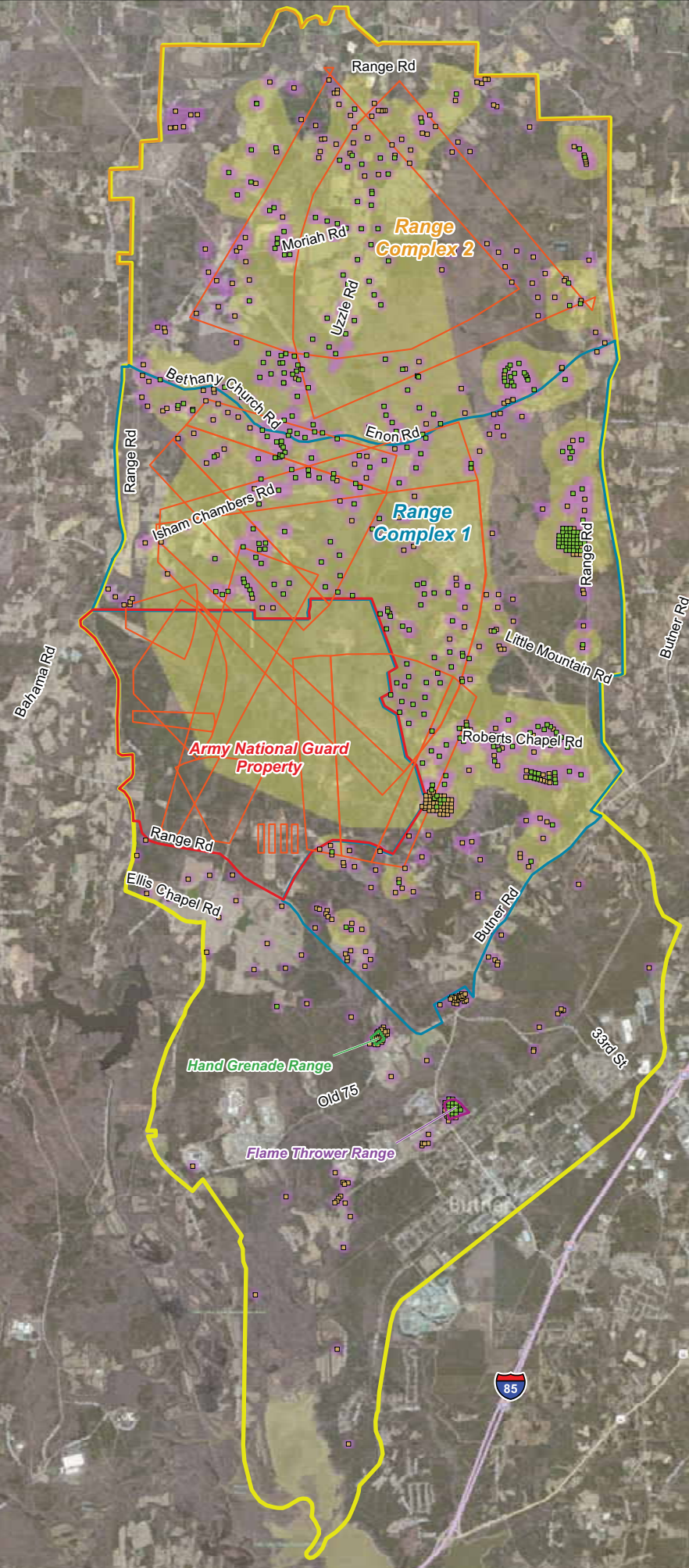
Examples of Munitions Used at Camp Butner

Areas Investigated to Date Former Camp Butner Granville County, North Carolina

- Legend**
- Munitions Present
 - Munitions Absent
 - Characterized Area
 - Suspected Munitions Use Area
 - Firing Fan
 - Flame Thrower Range
 - Hand Grenade Range
 - Army National Guard Property
 - Range Complex 1
 - Range Complex 2
 - Camp Butner FUDS Boundary

Note:
1. Includes MEC and MD. UXO is a subset on MEC.

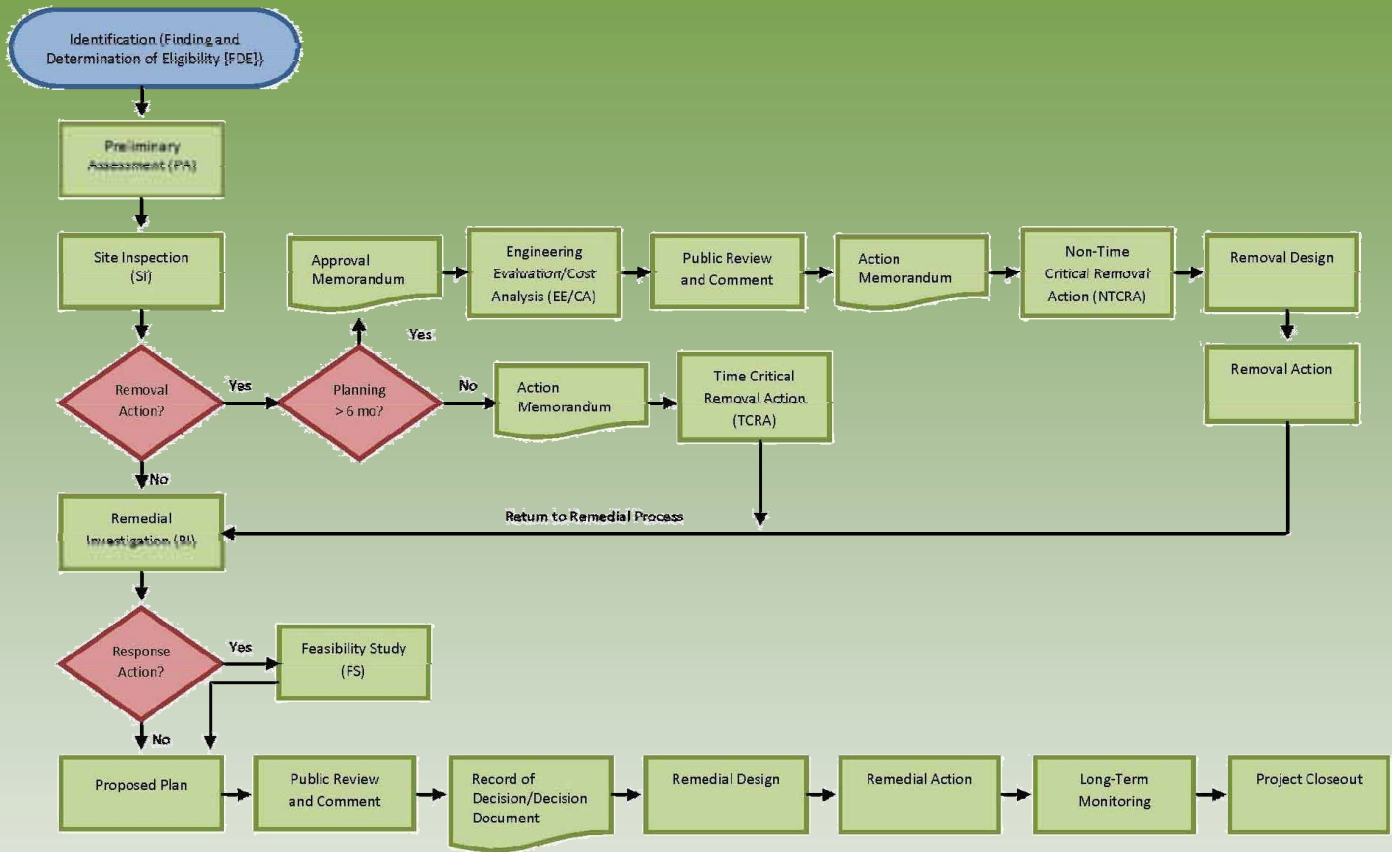
DGM = Digital Geophysical Mapping
MEC = Munitions and Explosives of Concern
MD = Munitions Debris
UXO = Unexploded Ordnance



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Source: HGL



The FUDS Process Under CERCLA



USACE Engineer Pamphlet 1110-1-18

- The USACE is the executing agent for the FUDS military munitions response program (MMRP), which DOD established in 2001 to address FUDS that have military munitions.
- The FUDS MMRP follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial process and includes the following five phases:
 1. Inventory
 2. Preliminary Assessment
 3. MMRP SI
 4. Remedial Investigation / Feasibility Study
 5. Response



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Former Camp Butner Remedial Investigation/Feasibility Study

Remedial Investigation (RI)/Feasibility Study (FS) Objectives

- Characterize the nature and potential threat posed by residual military munitions and/or hazardous substances.
- Obtain data to assess the extent to which the release poses a threat to human health, safety, or the environment.
- Obtain data to support the analysis and design of potential response actions.



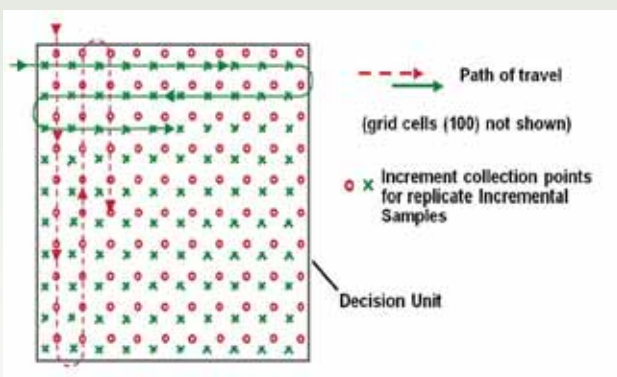
Proposed RI Environmental Sampling and Analysis for Each MRS

- Select ten 100- by 100-foot Incremental Samples (IS) sampling unit parcels based on the results of the geophysical survey and intrusive investigation
- Subdivide sampling unit into 30 uniform grid cells.
- Select single increment sampling point randomly and collect increments from same relative location within each of the grid cells.
- Analyze IS soil samples for explosives and metals.
- Collect up to 10 sediment, plus 10 co-located surface soil and shallow subsurface soil samples from within the general area sampled during the IS phase if IS sample results require.

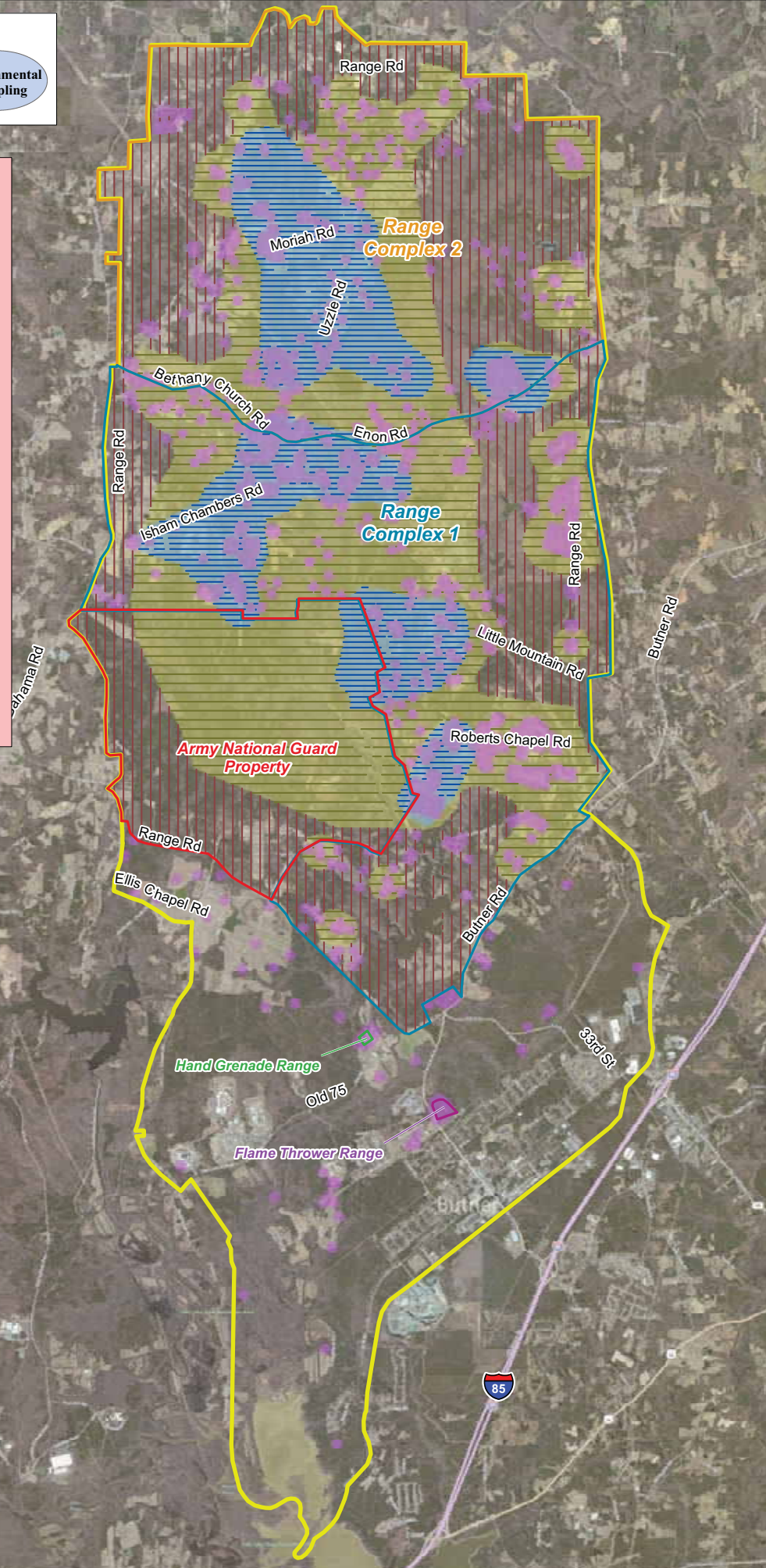
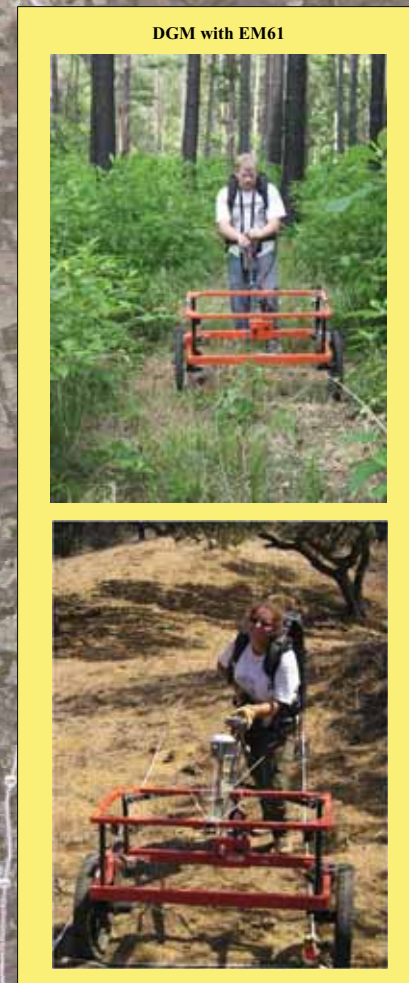
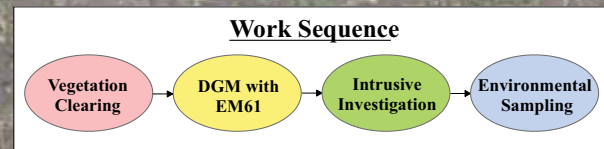


Proposed RI Environmental Sampling Method

- Incremental Samples (IS) soil sub-samples advanced 0 to 6 inches.
- Incremental soil samples obtained either with a specialized coring device, or with a stainless steel trowel.
- Subsurface samples (2 feet below ground surface) will be collected with a hand auger or similar.
- Discrete surface, subsurface, and sediment samples will also be collected, if necessary, based on pathway analysis.



Systematic Radom Mode of Sub-Sampling

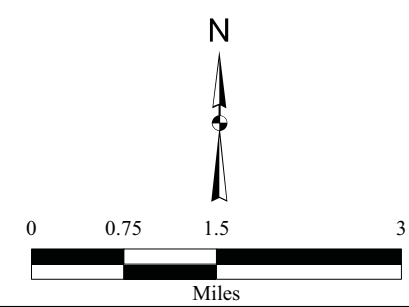


**Planned Investigation
Former Camp Butner
Granville County, North Carolina**

- Legend**
- DGM Transect (300ft Spacing)
 - DGM Transect (500ft Spacing)
 - Reconnaissance Transect (500ft Spacing)
 - Characterized Area
 - 37mm Projectile Use Area
 - Suspected Munitions Use Area
 - Flame Thrower Range
 - Hand Grenade Range
 - Army National Guard Property
 - Range Complex 1
 - Range Complex 2
 - Camp Butner FUDS Boundary

Note:
Transects are spaced at 300ft in areas where 37mm projectiles have been found. Transects are spaced at 500ft in all other areas. Non-intrusive DGM transects will be used to determine the extent of areas with elevated anomaly concentrations. After initial transect investigation, grids will be placed to define nature of anomalies. DGM Grids will be placed at 20% of DGM Transect acreage and intrusively investigated. DGM Grids will also be placed in areas where TEC Historical Analysis is not covered by DGM Transects at a rate of 3% of the TEC acreage. Reconnaissance Transects will be non-intrusive, instrument assisted transects to verify the absence of MEC use. Areas presently characterized will not be investigated.

TEC = Topographic Engineering Center
DGM = Digital Geophysical Mapping
MEC = Munitions and Explosives of Concern
MD = Munitions Debris
UXO = Unexploded Ordnance



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Source: HGL





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How to Obtain More Information

Public Involvement Initiative

- Encourage two-way communication
- Provide an overview of the FUDS inspection and remedial process
- Invite community involvement in the decision-making process
- Provide a fact sheet and develop a mailing list for future fact sheet distribution

Additional Information Available

Camp Butner Administrative Record
South Granville County Library
1550 S. Campus Drive
Creedmoor, North Carolina 27522

Public Affairs Office

U.S. Army Corps of Engineers—Wilmington District
69 Darlington Avenue
Wilmington, North Carolina 28403
(910) 251-4626
Email: ann.johnson@usace.army.mil

<http://www.saw.usace.army.mil/campbutner/>

ATTACHMENT 2

Remedial Investigation/Feasibility Study

Former Camp Butner
Remedial Investigation (RI)/Feasibility Study (FS)

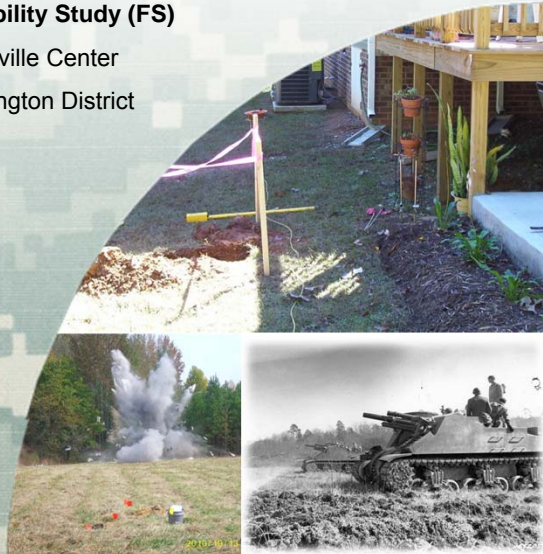
US Army Corps of Engineers, Huntsville Center

US Army Corps of Engineers, Wilmington District

5 September 2012



US Army Corps of Engineers
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Munitions and Explosives of Concern (MEC) Safety



RECOGNIZE

Military items can be
DANGEROUS.

RETREAT

DO NOT TOUCH IT!
Move away from the area.

REPORT

CALL 911.




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Goals of the RI/FS


- **Protect Human Health and Welfare**
- **Protect and Preserve the Environment**
- **Manage Risk**



Project Delivery Team

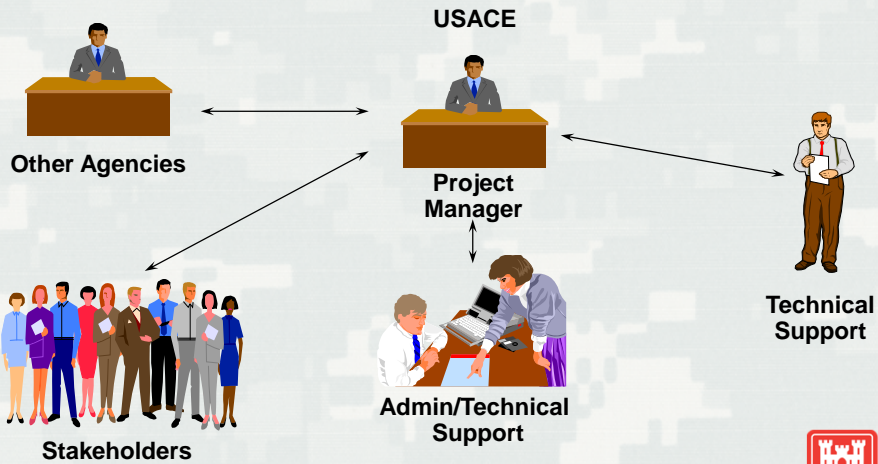
US Army Corps of Engineers  US Army Corps of Engineers

North Carolina Department of Environment and Natural Resources 


HydroGeoLogic, Inc. (HGL) 



Project Team Composition




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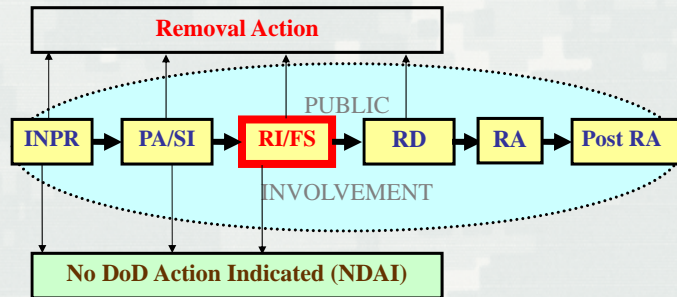
FUDS Program

- Congress established the Formerly Used Defense Sites (FUDS) Program in 1986.
- The USACE manages the FUDS program for the Department of Defense (DoD).

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MMRP Project Process



- MMRP: Military Munitions Response Program
- INPR: Inventory Project Report
- PA: Preliminary Assessment
- SI: Site Inspection
- RI/FS: Remedial Investigation/Feasibility Study
- RD: Remedial Design
- RA: Remedial Action



Munitions and Explosives of Concern (MEC)

Our focus is minimizing the safety hazards from MEC remaining at this FUDS site.



MK II Hand Grenade



81mm Mortar



60mm Mortar



37mm Projectile



Munitions and Explosives of Concern (MEC)



75mm Projectile



M9A1 Rifle Grenade



M8 3.5-inch Rocket



M6 2.36-inch Rocket



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Past Investigations

- **Engineering Evaluation (EE)/Cost Analysis (CA) 2001**
 - ▶ An EE/CA evaluated 77 acres including 330 grids throughout MRS Range Complexes 1 and 2.
- **GIS-Based Historical Photographic Analysis 2001**
 - ▶ An analysis of 1943, 1945, and 1949 aerial photos identified MEC-related features (e.g., crater fields, bombing targets, etc.).
- **Removal Actions (RAs) 2003, 2004, 2006, 2008-2010**
 - ▶ RAs covered approximately 20 acres at the Flame Thrower Range, 26 acres at the Lakeview Subdivision, and 250 parcels (averaging 1.75 acres each) throughout Range Complexes 1 and 2.
- **ESTCP Pilot Study 2011**
 - ▶ An advanced technology study covered 30 acres for detection of 37mm, 105mm, and 155mm projectiles.



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RI/FS Objectives and Tasks



Define the **NATURE** and **EXTENT** of MEC Contamination

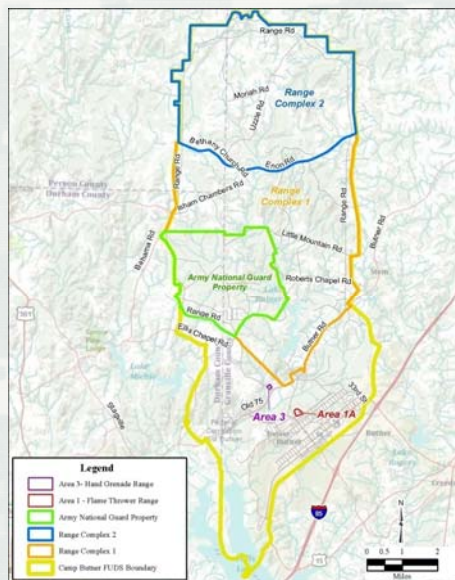
- Brush clearing
- DGM transect survey
- DGM grids survey followed by intrusive investigation within grids
- Environmental sampling for munitions constituents (MC)



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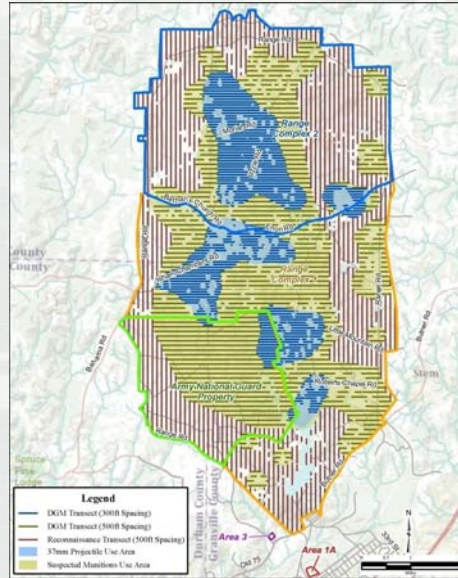
Munitions Response Sites (MRSS)



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Transects



- Reconnaissance transects will be conducted outside of Suspected Munitions Use Areas and will be spaced 500 feet apart.
- Digital geophysical mapping (DGM) transects will be conducted within Suspected Munitions Use Areas and will be spaced at 300 feet in areas where 37mm projectiles are expected and 500 feet where all other munitions are expected.
- Grid locations will be based on transect survey results.



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Planned Site Coverage

	Response Munitions Site*	Number of Grids	Miles of DGM Transects**	Miles of Reconnaissance Transects**
Remedial Investigation	Range Complex 1	131	68.9	41.1
	Range Complex 2	156	68	40
	Army National Guard	75	49	28

*The Flame Thrower Range and Hand Grenade Range were sufficiently characterized during previous field activities. No additional fieldwork is anticipated in these areas.

** Miles of DGM and reconnaissance transects are based on rights of entry granted as of the September 5th meeting.

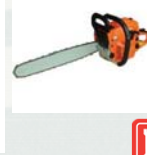
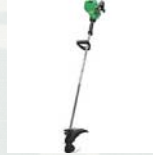


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Brush Clearing

Transects and grids will be cleared of vegetation to facilitate intrusive operations.



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Surveying



Transect and grid locations will be recorded with GPS survey instruments.



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Digital Geophysical Mapping



EM61-MK2

Data Logger

GPS for Positioning

Single 1-meter Coil



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Intrusive Investigation Team



Instrument Operator
(Detects Anomalies
using a Metal
Detector)

UXO Technician
(Excavates
Anomalies using a
Shovel)

Data Logger
(Records Intrusive
Results)



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Environmental Sampling



Soil Sampling



Sediment Sampling



Soil Sampling



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Environmental Sampling

	Munitions Response Site*	Incremental Surface Samples	Incremental or Discrete Surface Samples ⁺	Discrete Sub-surface Samples ⁺	Discrete Sediment Samples ⁺	Background Incremental Samples and Drinking Water Well Samples
Remedial Investigation	Range Complex 1	10	10	10	10	10
	Range Complex 2	10	10	10	10	
	Army National Guard	10	10	10	10	

*The Flame Thrower Range and Hand Grenade Range were sufficiently characterized during previous field activities. No additional fieldwork is anticipated in these areas.

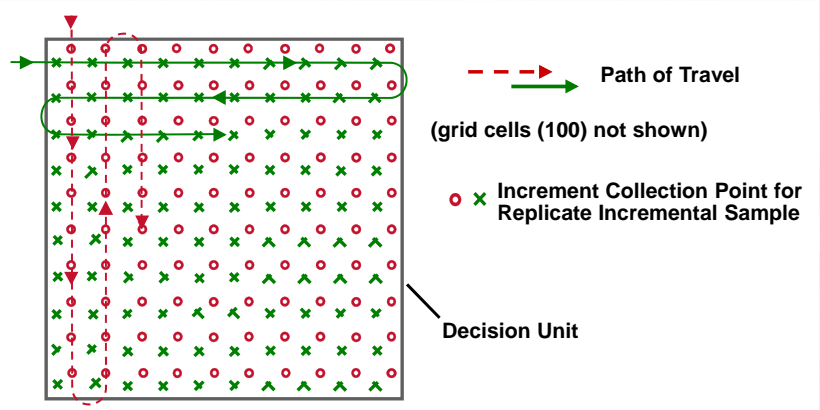
⁺Samples will be collected if incremental sample results exceed screening levels.



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Environmental Sampling

Systematic Random Mode of Sub-sampling



Environmental Sampling

- Incremental sample (IS) sub-samples will be obtained with either a specialized coring device or a stainless steel trowel.
 - Subsurface samples will be collected with a hand auger or similar.
 - IS and discrete soil and sediment samples will be analyzed for explosives and select metals.*
 - Background IS samples will be analyzed for select metals.*
 - Background drinking water well samples will be analyzed for perchlorate and lead.
- * copper, lead, antimony, and zinc



Remedial Investigation Report

- **Remedial Investigation**

- ▶ The first part will detail how the work was done and the findings.

- **Risk Assessment**

- ▶ The second part will assess risk, specifically the following:



- MEC Risk

- ▷ Evaluates Risk to Humans Presented by Munitions



- Human Health Risk

- ▷ Evaluates Risk to Human Health Presented by Munitions Constituents



- Ecological Risk

- ▷ Evaluates Risk to the Environment Presented by Munitions Constituents



What's Next?

- RI/FS Work Plan: September 2012
- Secure Rights of Entry: April 2012 – September 2012
- RI/FS Fieldwork: October 2012 – February 2013*
- RI Report: March 2013*
- FS Report: May 2013*
 - ▶ Analyzes Remediation Alternatives
- Proposed Plan: June 2013*
 - ▶ Public Meeting
 - ▶ 30-Day Public Review
- Decision Document: September 2013*



* Pending Rights of Entry and Work Plan Approval



How to Obtain More Information

Camp Butner Website

<http://www.saw.usace.army.mil/campbutner/index.htm>

Camp Butner Administrative Record

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1550 S. Campus Drive
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Public Affairs Office

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Email: ann.johnson@usace.army.mil

