

Meeting Minutes

October 28, 2010

Project: Former Camp Butner Restoration Advisory Board (RAB)

Date: October 28, 2010, 6:30 – 8:30 pm

Place: Soldier's Memorial Sports Arena
24th and D Street
Butner, NC 27509

Attendees:

RAB Members: Art Shacter, North Carolina Department of Environment and Natural Resources (NCDENR); Vicky Cates, Town of Butner (Chair-Woman); Barry Baker, Granville County Planning.

Other Attendees: Sam Colella, US Army Corps of Engineers (USACE) Wilmington District; Raymond Livermore, USACE Wilmington; Marti Morgan, NCDENR; Gerald Braddock, USA Environmental, Inc.; Vicki Ayers, USA Environmental, Inc. (USA); Tom Lane, Town of Butner; Hope Taylor, Clean Water for N.C.; Richard Veazey, Citizen of Granville County; David and Nancy Smith, Citizens of Granville County; (see Attachment 1) for attendance roster.

Prepared By: Gerald Braddock and Vicki Ayers

Topic: RAB Meeting 16

Introduction

Minutes from the April 8, 2010 meeting were approved.

Work Update

Gerald Braddock, Senior UXO Supervisor for Camp Butner with USA Environmental, briefed the RAB on work that began 12 July 2010 (see Attachment 2), describing the work procedures and results completed to date. Board members were briefed on the 95 units being cleared and status of actions taken to date in achieving this goal. Maps were handed out indicating units completed and those remaining. Recovered UXO's (total of 8) were briefed and discussion opened by Mr. and Mrs. Smith about potential UXO's on their property. They inquired as to when removal action would/could be done to accomplish clearance on all their property. Ray Livermore explained that the next phase of work to be accomplished on Camp Butner would be a Remedial Investigation and Feasibility Study (RI/FS) after which a comprehensive plan to clear identified properties would be made for future removal actions. Concern about recovered Cultural Debris

(CD) from properties was addressed with Gerald Braddock briefing that due to the value of the metal and antiquities that may be in the CD, all recovered non-munitions associated material is placed in a pile and left on the property where the owner designates so they can do as they wish with it.

Ordnance Discovery Update

Although no new ordnance has been discovered, it was pointed out that a 155mm Projectile was recovered from a residence in Complex 1 south of Enon Rd.

Environmental Security Technology Certification Program (ESTCP)

Ray Livermore of USACE gave an overview of the ESTCP Project performed this summer on Uzzle Road. He briefed that the ESTCP folks have collected the data and are currently evaluating the results in regards to what the technologies predicted the anomalies were and what was actually discovered when the anomalies were excavated. The completed analysis of that data will be presented in the next RAB meeting in April 2011. Ray also re-emphasized for the local residents, the course of action USACE will follow will be to initiate a Remedial Investigation/Feasibility Study (RI/FS) following completion of the current removal action. The RI/FS would be planned to focus on those areas determined to be areas of concern from the Engineering Evaluation/Cost Analysis (EE/CA) and ongoing removal actions. The tentative schedule is to begin the RI/FS in FY 2012.

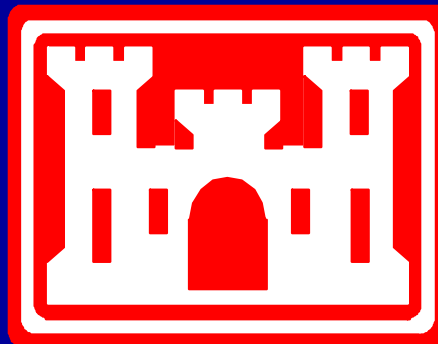
Public Questions

Questions from the public were addressed during the work update.

Closing/Action Items

The next RAB Meeting is scheduled for April 28, 2011 at 6:30 pm at the same location. At 8:30 p.m., Ms. Cates moved to adjourn and her motion was carried unanimously.

Camp Butner Removal Action



28 October 2010

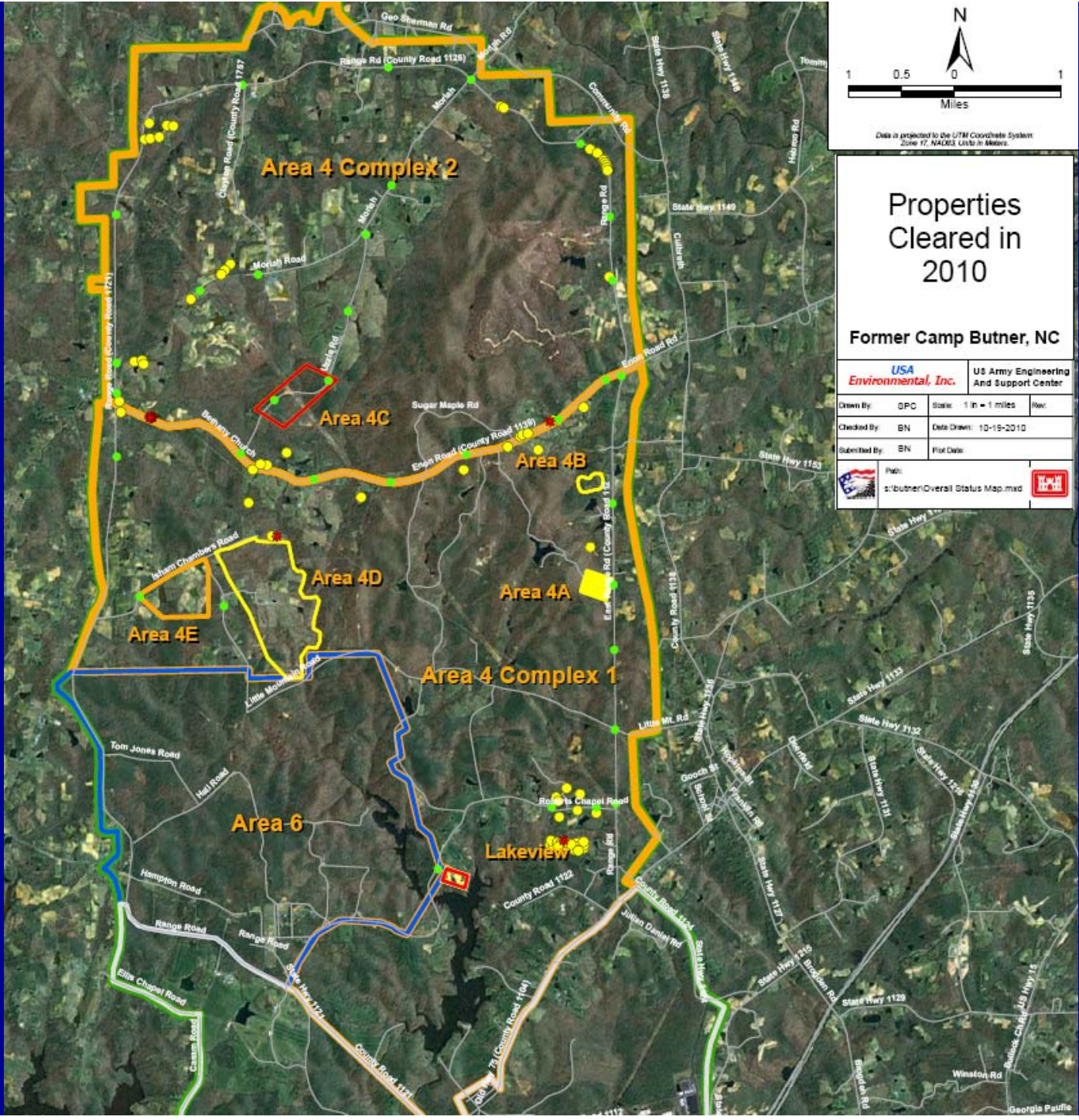
USA Environmental, Inc.

Work Completed (2010 to date)

Contract Task

Completion Date

- Complex 1, Unit 10 (5) July 20
- Complex 1, Unit 11 (10) Aug 19
- Complex 1, Unit 12 (10) Aug 24
- Complex 2, Unit 4 (10) Sep 15
- Complex 2, Unit 5 (10) Oct 07
- Complex 2, Unit 6 (10) Oct 21
- Complex 2, Unit 7 (10) Underway Nov 02 est
- Complex 1, Unit 13 (10) Underway Nov 10 est
- Complex 1, Unit 14 (10) Underway Dec 7 est
- Complex 2, Unit 8 (10) Pending Dec 16 est

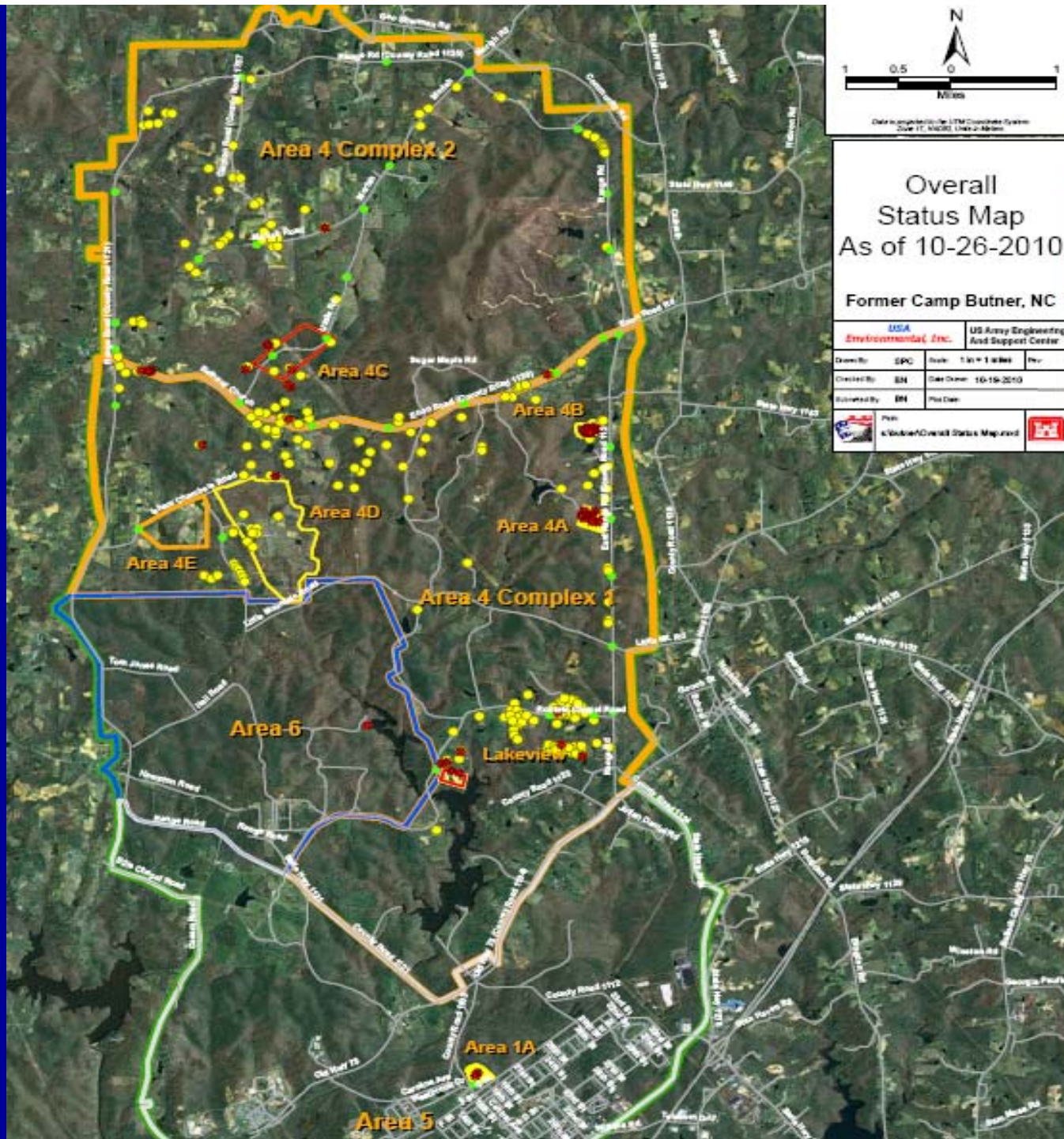


Data is projected to the UTM Coordinate System
Zone 17, NAD83 Units in Meters.

Properties Cleared in 2010

Former Camp Butner, NC

Drawn By:	GPC	Scale:	1 in = 1 miles
Checked By:	BN	Date Drawn:	10-19-2010
Submitted By:	BN	Plot Date:	
Path:			
z:\butner\Overall Status Map.mxd			



Definitions

- MEC – Munitions & Explosives of Concern
 - UXO – Unexploded Ordnance
 - DMM – Discarded Military Munitions
 - MC – Munitions Constituents
- MD – Munitions Debris
- MSD – Minimum Separation Distance
- HE – High Explosive

Project Personnel

- Mobilized Teams on 11 July 2010
- Field Organization
 - Senior UXO Supervisor
 - Field Office Administrator
 - UXO Safety Officer
 - UXO Quality Control Specialist
 - Four Team Leaders
 - Five UXO Technicians per team

Removal Procedures

- Measure 2-acre envelope around residences
- Lay out grids and lanes
- Clear vegetation and surface clutter
- Evacuations – 234 this year
- Mag/dig
- Dispose of MEC/MD

Vegetation Clearance



USA Environmental, Inc.

Cultural Debris

Over 15,000 lbs. cultural debris removed this year



Removal Action Results - 2010

Subtask	Residences	Acres	MEC Items found	# MD Reported
Complex 1, Unit 10*	5	5.8	0	70
Complex 1, Unit 11	10	13.7	0	25
Complex 1, Unit 12	10	13.8	1-60mm HE mortar	60
Complex 1, Unit 13	6		1-155mm HE projectile	170
Complex 1, Unit 14	0			
Complex 2, Unit 4	10	18.7	0	718
Complex 2, Unit 5	10	20.8	1-2.36" HE rocket	274
Complex 2, Unit 6	10	14.4	0	4
Complex 2, Unit 7	2		5-81mm HE mortars	143
Complex 2, Unit 8	0			

* 5 residences cleared in 2009

UXO Found

60mm Mortar – 8/22/10
(1071 Wildlife Drive)

Results of Detonation of
60mm Mortar



UXO Found

2.36-in Rocket – 9/30/10
(1077 Enon Road)

Post-Detonation Results
On 2.36-in Rocket



UXO Found

81mm Mortar – 10/13/10
(655 Bethany Church Rd)

81mm Mortar – 10/13/10
(655 Bethany Church Rd)



UXO Found

155mm projectile – 4109
Blue Mountain Road



155mm low-order
detonation



UXO Found

Results of low-order
detonation



Results of second
detonation



Demolition Process

Safety Briefing
Of Demolition Team

Blow Hole Dug for
60mm Mortars



Demolition Process

Connecting Shape Charge
to Detonation Cord



Building Sandbag Barricade
for 60mm Mortar Shot



Demolition Process

Running non-electric lead-in-line from shot



Connecting detonator – preparing to fire



Demolition Process

Demolition Shot – two
60mm Mortars



Post-Demolition Cleanup –
Recover Fragments



Work Remaining

- By December 2010
 - Complex 1, Units 13 and 14
 - Complex 2, Units 7 and 8
 - Possible clearances at 4573/4578 Uzzle Road
- By May 2011
 - Final Report for 2010 work
- Contract completion

CAMP BUTNER PILOT STUDY UPDATE

Raymond Livermore

Environmental Engineer

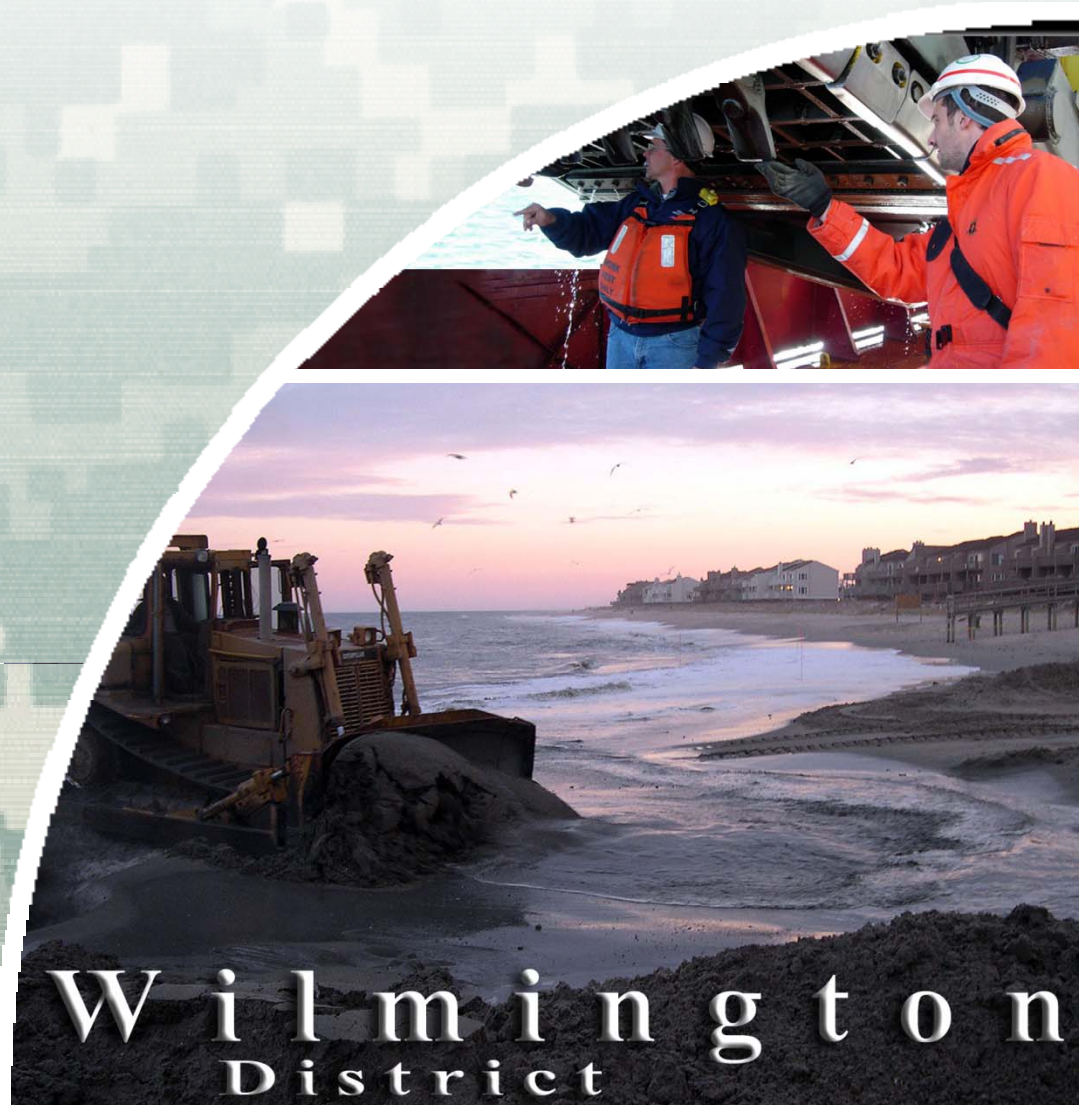
U.S. Army Corps of Engineers

Camp Butner Restoration Advisory Board
Meeting

October 28, 2010



US Army Corps of Engineers
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ESTCP Pilot Study

- Environmental Security Technology Certification Program (ESTCP) is a Department of Defense (DoD) program that promotes innovative, cost-effective environmental technologies through demonstration and validation at DoD sites.
- ESTCP is currently conducting a Classification Pilot Program. The objective of the program is to demonstrate advanced classification technologies for distinguishing intact munitions from harmless metal and geology prior to excavation.



Metal Mapper



4.2 in mortar



Half shell



Base plate



Cultural clutter



TEMTADS



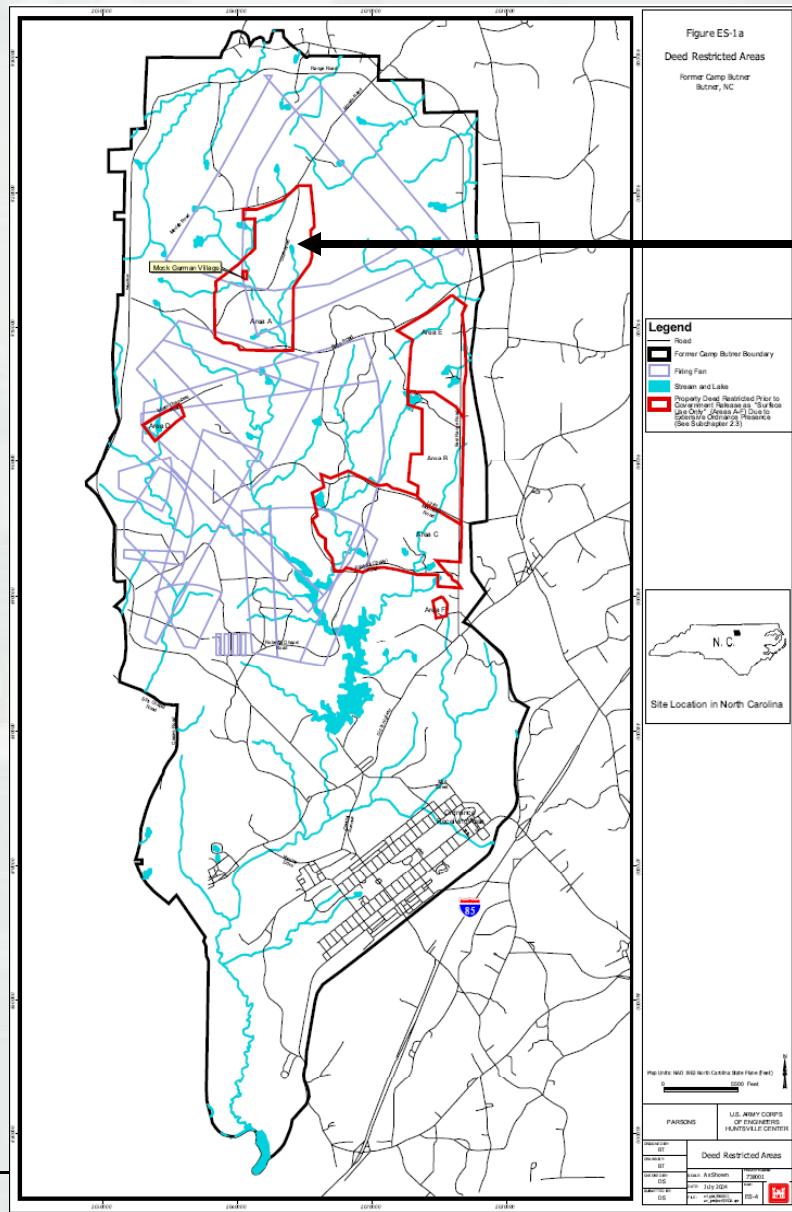
ESTCP Pilot Study (cont.)

- The former Camp Butner is the third demonstration site following the former Camp Sibert (AL) and Camp San Luis Obispo (CA). Camp Butner was selected for the following reasons:
 - More complicated munition type mix which includes a mixture of small (37 mms) and larger munition types (up to 155 mm)
 - Terrain and vegetation allow for good quality data collection
 - Regulatory and stakeholder interest
- The pilot study is being conducted at a former artillery impact area in Range Complex 2 of the former Camp Butner. The study area is an open field east of Uzzle Road.



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Camp Butner Study Area

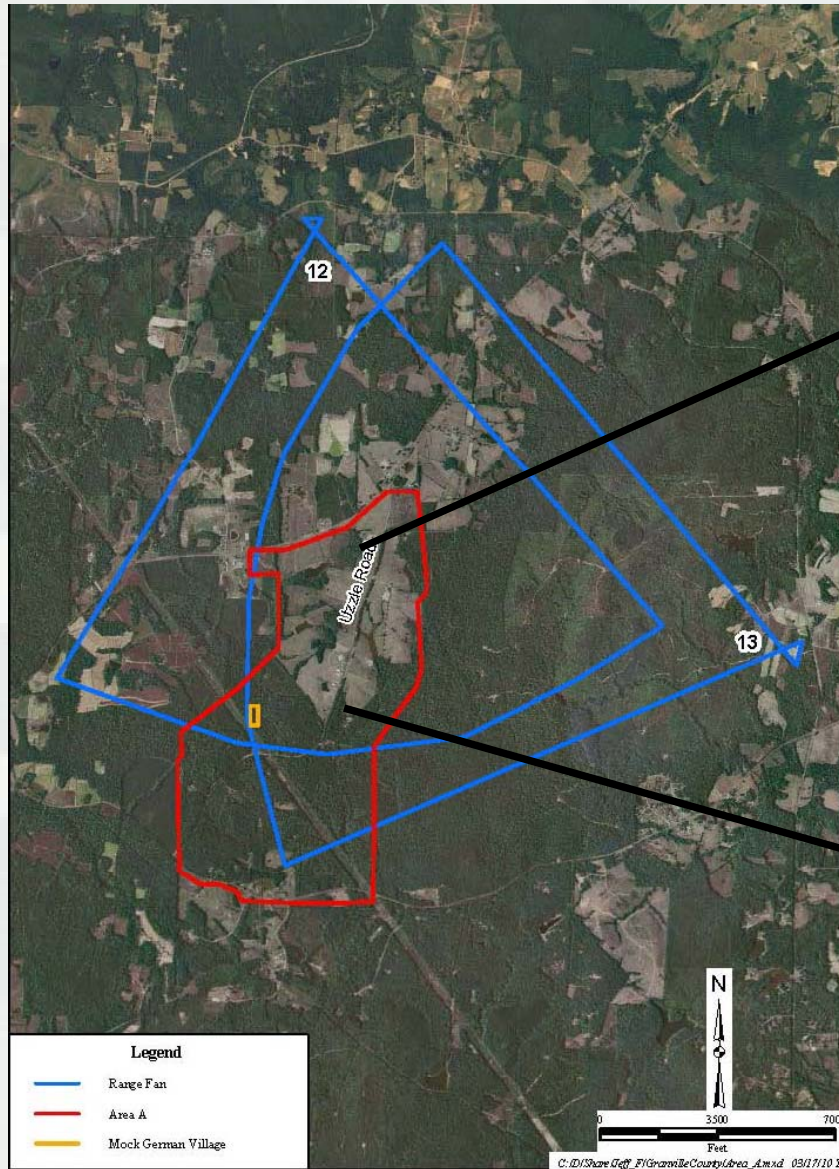


Area A- Artillery Impact Area



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Camp Butner Study Area



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Site Preparation and Characterization

- Vegetation Clearance and On-going Mowing
- Surface clearance- crew removes metallic surface items
 - ▶ Safety
 - ▶ Subsurface items focus of demonstration
- Transect Survey - Estimate anomaly density and guide site selection
- 100% coverage pre-survey- further characterize the site and provide locations for seed items
 - ▶ EM61 cart
- Seeding- bury intact inert munitions at known locations to validate technology performance
 - ▶ Approximately 200 items
 - ▶ Inert 37mms, 105mms, and fuze with burster surrogates



Transect Survey

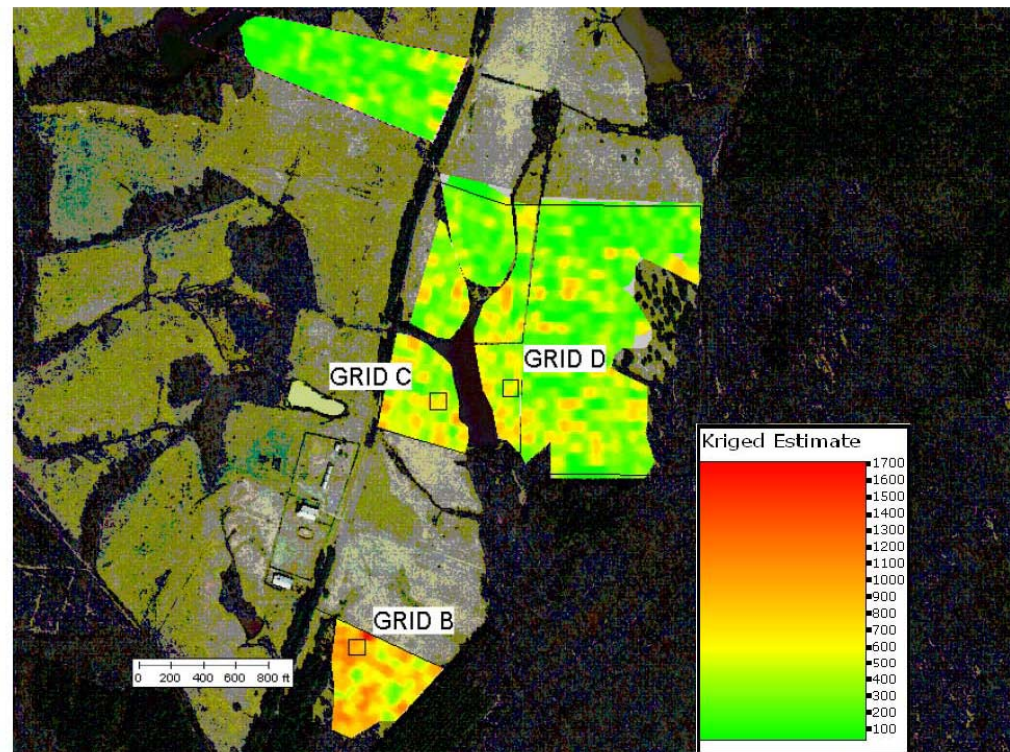
- EM61 cart on 112 acres
- 20m line spacing



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100% Site Characterization Grids

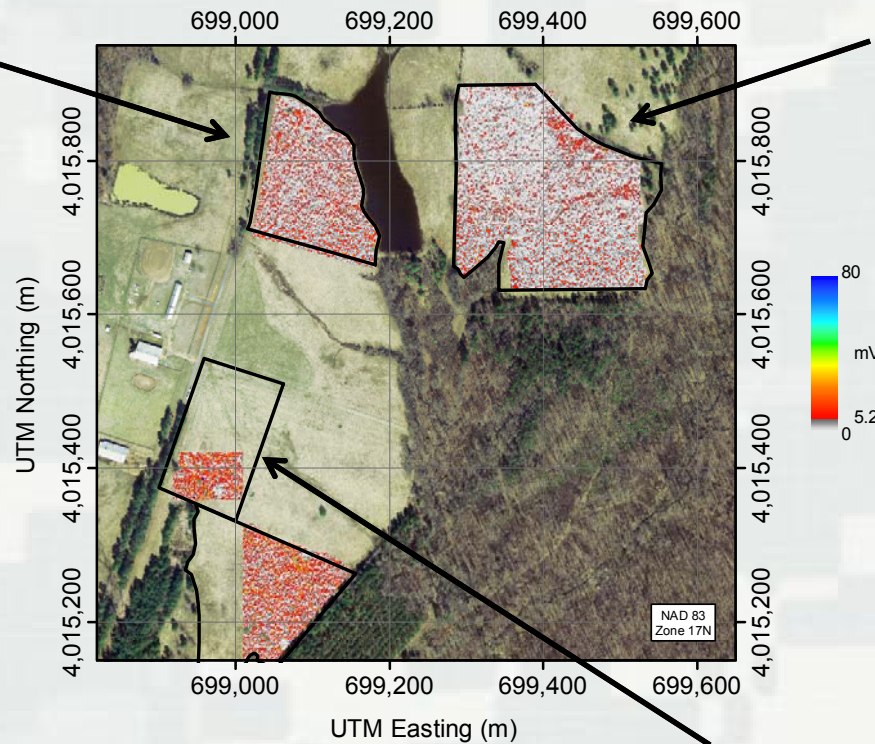
- Three areas
- 30 m X 30 m (100' X 100')
- Surveyed with EM61 cart
- Dug southern parcel (highest density) for site characterization grid
- Grid findings included: 428 munitions debris (including 37, 105, and 155 mm) and 155 cultural debris items.



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Pre demo Em61 Survey

Northwest Parcel
4308 Targets
172 per grid



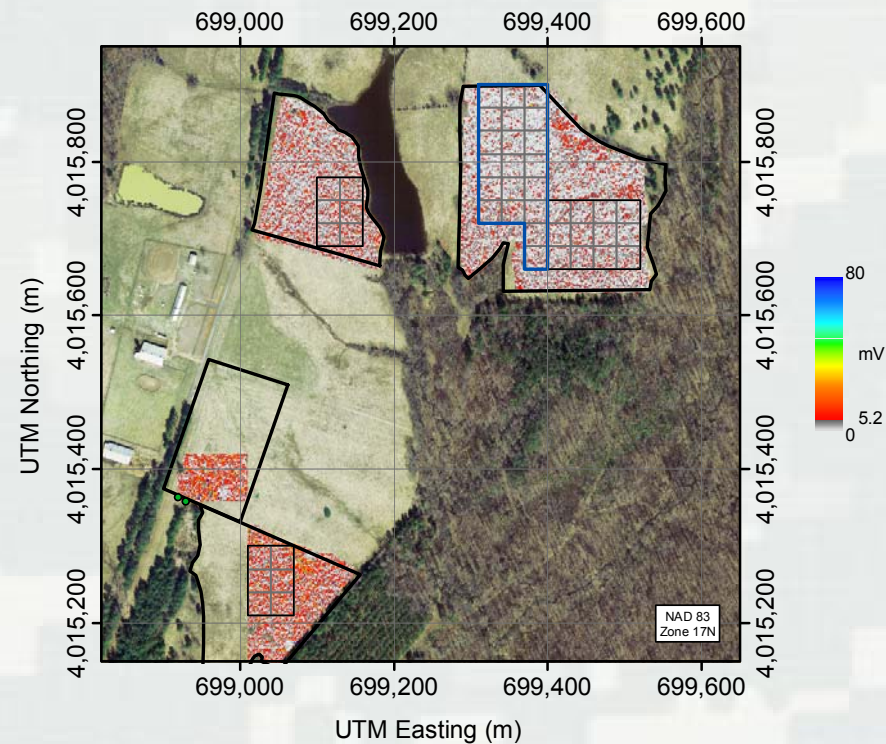
Northeast Parcel
7366 Targets
127 per grid

South and West Parcels
4995 Targets
217 per grid



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Final Site Boundary



- Anomaly density considerations:
 - Afford approximately 2000-2500 targets
 - Space to place seeds
 - Costed survey data for larger area



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Pilot Study UXO Discoveries

- As of October 2010, seven (7) 37 mm high explosive (HE) projectiles have been discovered during the pilot study.
- Appropriate demolition/disposal of the unexploded ordnance (UXO) is being handled under the current Explosive Safety Submission (ESS) being used for the ongoing removal actions at the former Camp Butner.



Pilot Study Schedule

- 2010

- ▶ April

- Surface clearance
 - 100% coverage pre-survey

- ▶ May /June

- Seeding
 - Data collection

- ▶ July/August

- Validation digging

- ▶ August/September

- Data processing

- ▶ October/November

- Technology performance scoring

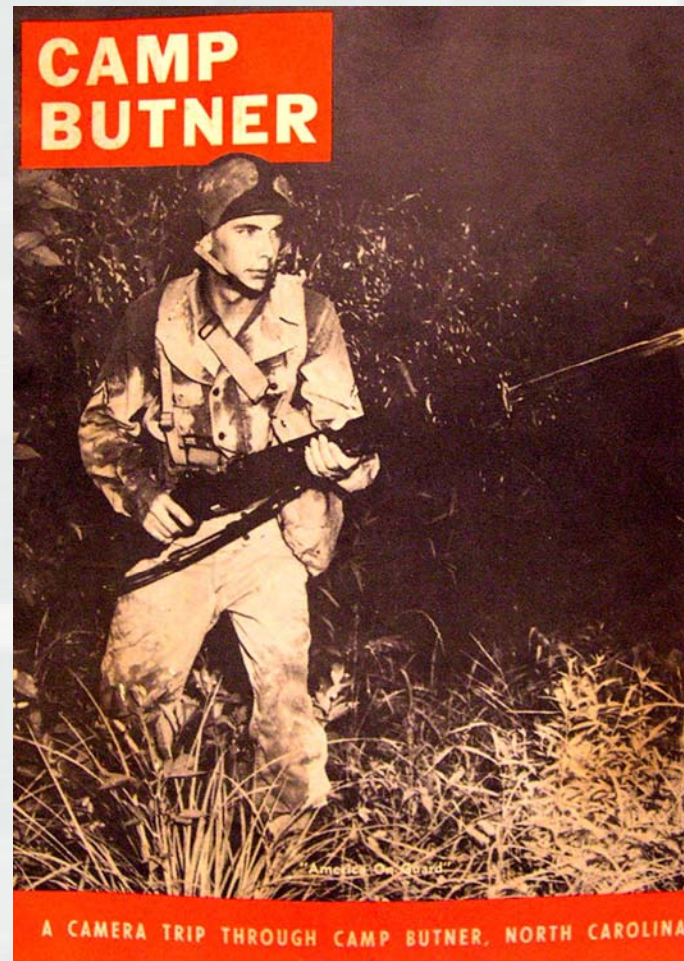
- 2011

- ▶ April: Presentation of results to Camp Butner RAB



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Questions



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



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