



**FORMER LOWRY BOMBING AND
GUNNERY RANGE
ARAPAHOE COUNTY, COLORADO**



RESTORATION ADVISORY BOARD MEETING

November 17, 2004

**U.S. Army Corps of Engineers
Colorado Department of Public Health and Environment**

DISCUSSION TOPICS

- **Fieldwork update**
- **Area of Concern (AOC)
Execution Plans**
- **Fixed-Price Remediation
with Insurance (FPRI) pilot
project**
- **FY05 funding and activities**
- **2005 RAB meeting
schedule**
- **Summary**

FIELDWORK UPDATE

RAB AOC Prioritization

Criteria	Land Use	Overall Hazard	Type of Hazard	Access	Cost	Infrastructure	Legal Restrictions	Environmental Impact	Economic Impact	Total Score
WEIGHTING	0.381	0.365	0.159	0.063	0.032	0.0	0.0	0.0	0.0	
Jeep/Demo Range	100	100	100	100	100	100	50	25	25	100
BT6	75	100	100	100	100	75	50	25	50	90.5
Rocket Range	75	100	100	100	75	100	75	25	75	89.7
20mm RF Area B	100	75	75	100	75	75	75	25	75	86.1
AG Gunnery Range	50	100	100	100	100	100	75	25	25	81.0
BT5	75	75	75	100	75	25	75	25	50	76.6
BT2	75	100	100	50	50	25	75	25	25	76.2
BT4	75	75	75	100	25	25	25	25	50	75.0
Mortar Range	75	75	75	75	25	100	75	25	50	73.4
BT3	50	75	100	100	50	25	25	25	50	70.3
BT7	50	75	75	25	50	25	25	25	25	61.5
BT1	25	50	25	50	25	25	25	25	25	35.7
AVERAGE	68.7	83.3	83.3	83.3	62.5	56.3	54.2	25.0	41.7	77.4

FIELDWORK UPDATE
Team Distribution

Bombing Target 6 – 3 munitions response teams
FLTA – 3 munitions response teams

FIELDWORK UPDATE

Team Distribution and Breakdown

Site Manager – Morey Engle
Senior UXO Supervisor – Rick St. Amand

Safety Officer – Brian Hamilton
Quality Control Specialist – Jody Blakemore

TEAM 1 (BT6)	TEAM 2 (BT6)	TEAM 3 (BT6)	TEAM 4 (FLTA)	TEAM 5 (FLTA)	TEAM 6 (FLTA)
Irizarry (Team Leader)	Peters (Team Leader)	Glass (Team Leader)	Barker (Team Leader)	Asbury (Team Leader)	Harrison (Team Leader)
Sykes	Haupt	Vilos	Miller	Crowl	Jennings
Butler	Parker	Stanfield	Fassold	Rhodes	Fenstermacher
Gullickson	Pfertsh	Walters	Czech	Van Deman	Maitri
Bayne	Roulier	Cook	Abrams	Galvan	Sweeney
-	Nichols	Livingstone	Pellegren	Gordon	Hodgkinson
-	-	-	-	Stargardt	Herron

- In the process of hiring additional UXO Technicians to fill six teams

FIELDWORK UPDATE

Bombing Target 6

- **38 grids have been completed since the last RAB meeting**
- **807 live items found to date**
- **Summary of types of items found:**

- ✓ Incendiary bombs (4lb-10lb)
- ✓ 3lb & 100lb practice bombs
- ✓ M15 WP grenade
- ✓ M1A1 PDM
- ✓ M1A1 spotting charge
- ✓ 30cal & 50cal
- ✓ 20mm & 37mm
- ✓ Det cord conduit
- ✓ Misc fuzes
- ✓ Boosters
- ✓ Burster tubes
- ✓ Igniters/igniter tubes
- ✓ T55E1 mechanical time fuze
- ✓ 2.25" rocket
- ✓ Fuze adapter for clusters
- ✓ M125 – simulant filled

FIELDWORK UPDATE

Bombing Target 6

▪ **8 demolition shots performed since the last RAB meeting**

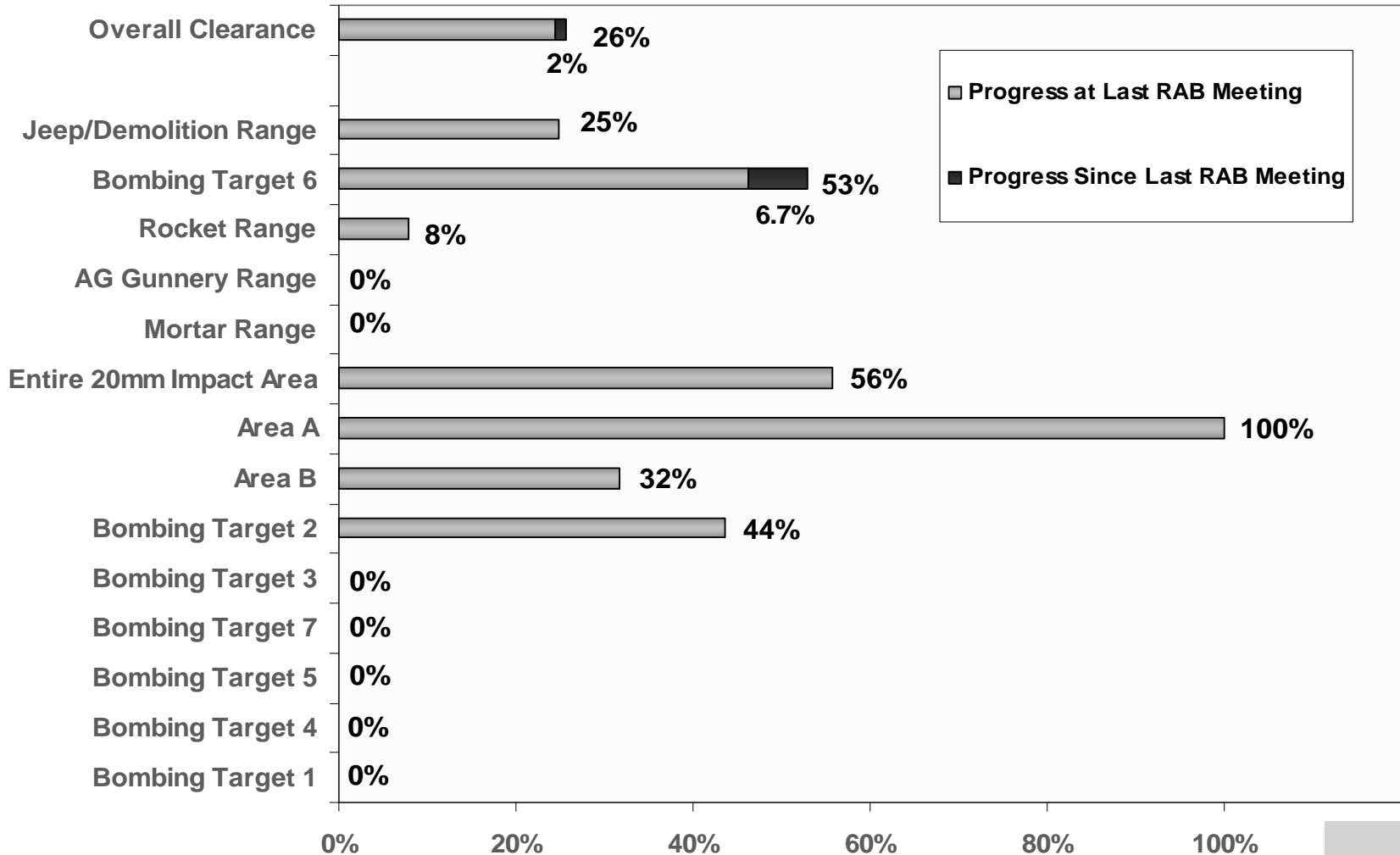
- ✓ Booster M152 fuze – 3
- ✓ M74 10 lb. incendiary bomb – 42
- ✓ M50 4 lb. incendiary bomb – 3
- ✓ Booster cup – 1
- ✓ Fuze bomb M1 – 2
- ✓ Fuze bomb M142 – 1
- ✓ Fuze bomb M152 – 2
- ✓ Igniter M23 w/ fuze – 2
- ✓ Burster tube – 1
- ✓ Fuze grenade – 1
- ✓ Det cord conduit - 1
- ✓ Igniter tube – 1

▪ **Summary of items recovered since the last RAB meeting:**

MUNITION	QUANTITY
OE Scrap	3526 (pounds)
Small Arms	786
Bomb M74 10 lb. Incendiary	55
Bomb M50 4 lb. Incendiary	526
Bomb M69 6lb. Incendiary	2
Booster Cup	20
Bomb MK23 3 lb. Practice	3
Frag Bomb HE	138
Fuze Bomb M1	2
Fuze Bomb M142	5
Fuze Bomb M152	15
Rocket 2.25"	6
Igniter M23 with Fuze	1
Projectile 20mm	2
Bomb M38 100 lb. Practice	6
Parachute Delay Mech	16
Det. Cord Conduit	1
Fuze Igniter, M1	1

FIELDWORK UPDATE

Estimated Percent Complete



AOC EXECUTION PLANS

- **Developed for each AOC (except BT5)**
- **Purpose:**
 - ✓ Assure we are utilizing the most cost-effective approach (i.e. “mag-and-dig” or “map-and-dig”)
 - ✓ Better define AOC extent
 - ✓ Refine cost-to-complete
 - ✓ Refine schedules

AOC EXECUTION PLANS

- **Reviewing all known data**
 - ✓ Historical information
 - ✓ Historical aerial photographs
 - ✓ Previous munitions response actions
- **Additional characterization**
 - ✓ Determine best application of “map-and-dig” versus “mag-and-dig”
 - ✓ AOC boundary delineation
 - ✓ Test grids
- **Develop post-removal verification approach**

FIXED-PRICE RESPONSE WITH INSURANCE (FPRI) PILOT PROJECT

2004 National Defense Authorization Act strongly encouraged use of FPRI contracts

- **Worldwide Military Munitions Response Services**
- **Fixed Price Remediation w/Insurance**
- **ID/IQ Multiple Award Remediation Contract (MARC)**
- **\$250M shared capacity**
- **Two-year base contract w/three one year options**
- **Three firms selected**
 - ✓ CH2M Hill Constructors
 - ✓ Tetra Tech FW, Inc.
 - ✓ Weston Solutions
- **Programs Supported**
 - ✓ Formerly Used Defense Sites (FUDS)
 - ✓ DoD Base Realignment and Closure (BRAC)
 - ✓ Active DoD Installations
 - ✓ Other Government agencies

FIXED-PRICE RESPONSE WITH INSURANCE (FPRI) PILOT PROJECT

- **CH2M Hill, Inc.**
 - ✓ Zurich American Insurance Group
 - ✓ USA Environmental, Inc.
 - ✓ G-tek
- **Objective** - Munitions & Explosives of Concern (MEC)
response complete at Bombing Target 5
- **Bombing Target 5**
 - ✓ 493 acres (RFP acreage)
 - ✓ Current land use is farming
 - ✓ Future land use anticipated to be residential/commercial
 - ✓ RAB priority = 6 of 12
 - ✓ Confirmed munitions
 - 3lb and 100lb practice bombs
 - Incendiary bombs
 - Photo flash bombs
 - Munitions debris

FIXED-PRICE RESPONSE WITH INSURANCE (FPRI) PILOT PROJECT

- **\$4.62M – including insurance premium**
- **Three phases**
 - ✓ Planning, October 2004 – February 2005
 - ✓ Field operations, February 2005 – July 2005
 - ✓ Reporting & project closeout, July 2005 – August 2006
- **Proposed military munitions response actions**
 - ✓ Sifting
 - ✓ Mag and dig
 - ✓ Map and dig

FIXED-PRICE RESPONSE WITH INSURANCE (FPRI) PILOT PROJECT

- **Colorado Department of Public Health and Environment (CDPHE)**
 - ✓ Consistent w/ongoing MMR actions
 - ✓ In accordance w/Settlement Agreement

- **FLBGR RAB**
 - ✓ Corps/CDPHE committed to providing meaningful public involvement
 - ✓ Consistent w/ongoing MMR actions

FY05 FUNDING AND PLANNED ACTIVITIES

FY05 funding level is \$8M

FY05 planned project activities:

- **Continued munitions response activities at AOCs, per the RAB prioritization**
- **Continued efforts associated with the FLBGR geophysical mapping program**
- **Completion of wide-area assessment efforts (Final Report, etc.)**
- **Corps of Engineers in-house support costs**
- **Litigation support for cost-recovery lawsuit**

2005 RAB MEETING SCHEDULE

- **Third Wednesday of every other month**
- **Proposed dates:**
 - ✓ January 19
 - ✓ March 16
 - ✓ May 18
 - ✓ July 20
 - ✓ September 21
 - ✓ November 16
- **Locations of meetings yet to be determined and will be posted on the FLBGR website later this month**

www.flbgr.org

THE END

- **Your next RAB meeting is scheduled for January 19, 2005 (6:00-8:30pm) – location to be determined**