

Brief Overview of the Tobyhanna Artillery Range Formerly Used Defense Site (TOAR FUDS)

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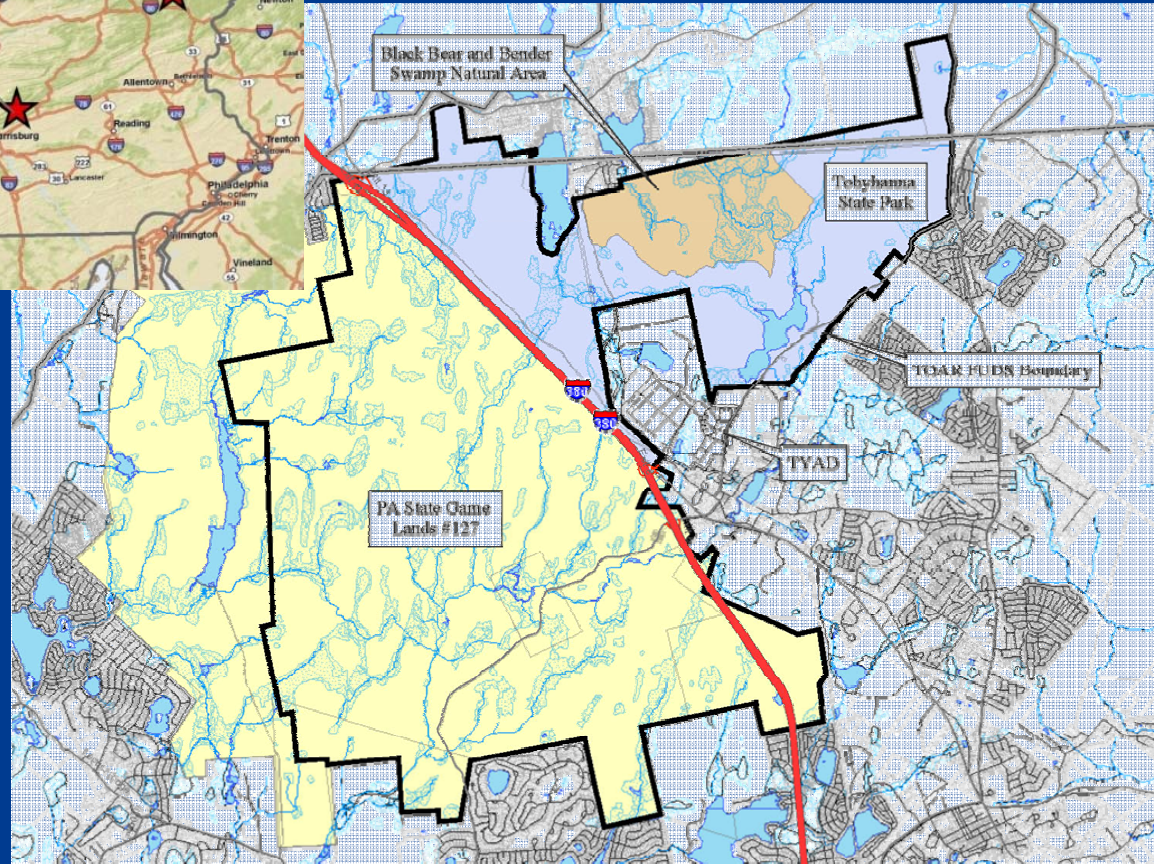
**US Army Corps
of Engineers**

Location of Site



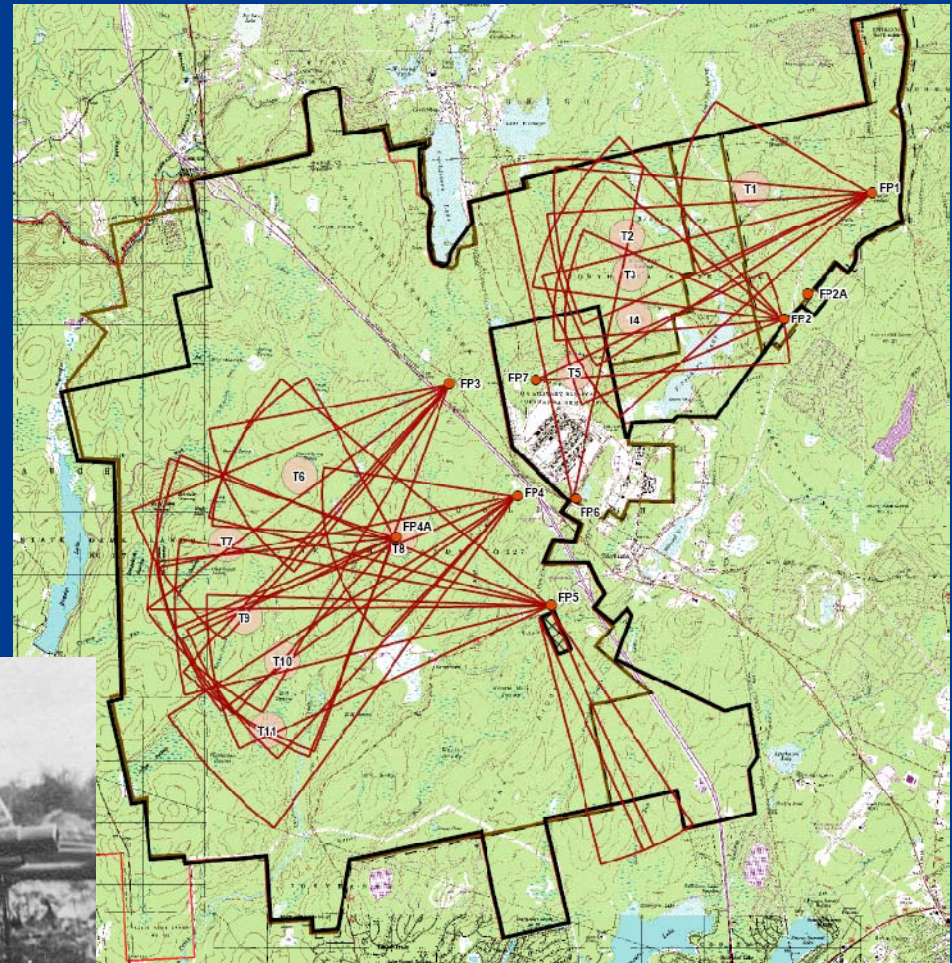
**25,218 acres located in
Tobyhanna, PA**

**Consists of
Tobyhanna
State Park and
State Game
Lands 127**



Former Military Activities

- 1912 - Army acquired land for military training
- Intensive artillery training during World War II
- 1949 - Land transferred to Commonwealth of PA for State Park and Game Lands



Former Artillery Ranges

Unexploded Ordnance (UXO) at Site

- UXO consist of 37-mm, 75-mm, and 155-mm high explosive and shrapnel artillery rounds



155-mm High Explosive Projectile



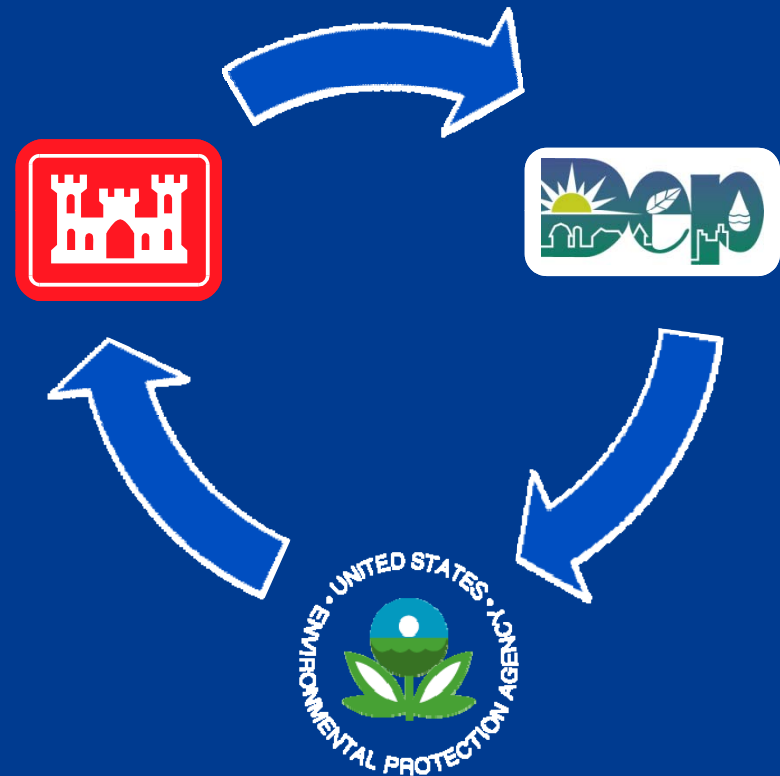
37-mm Projectile



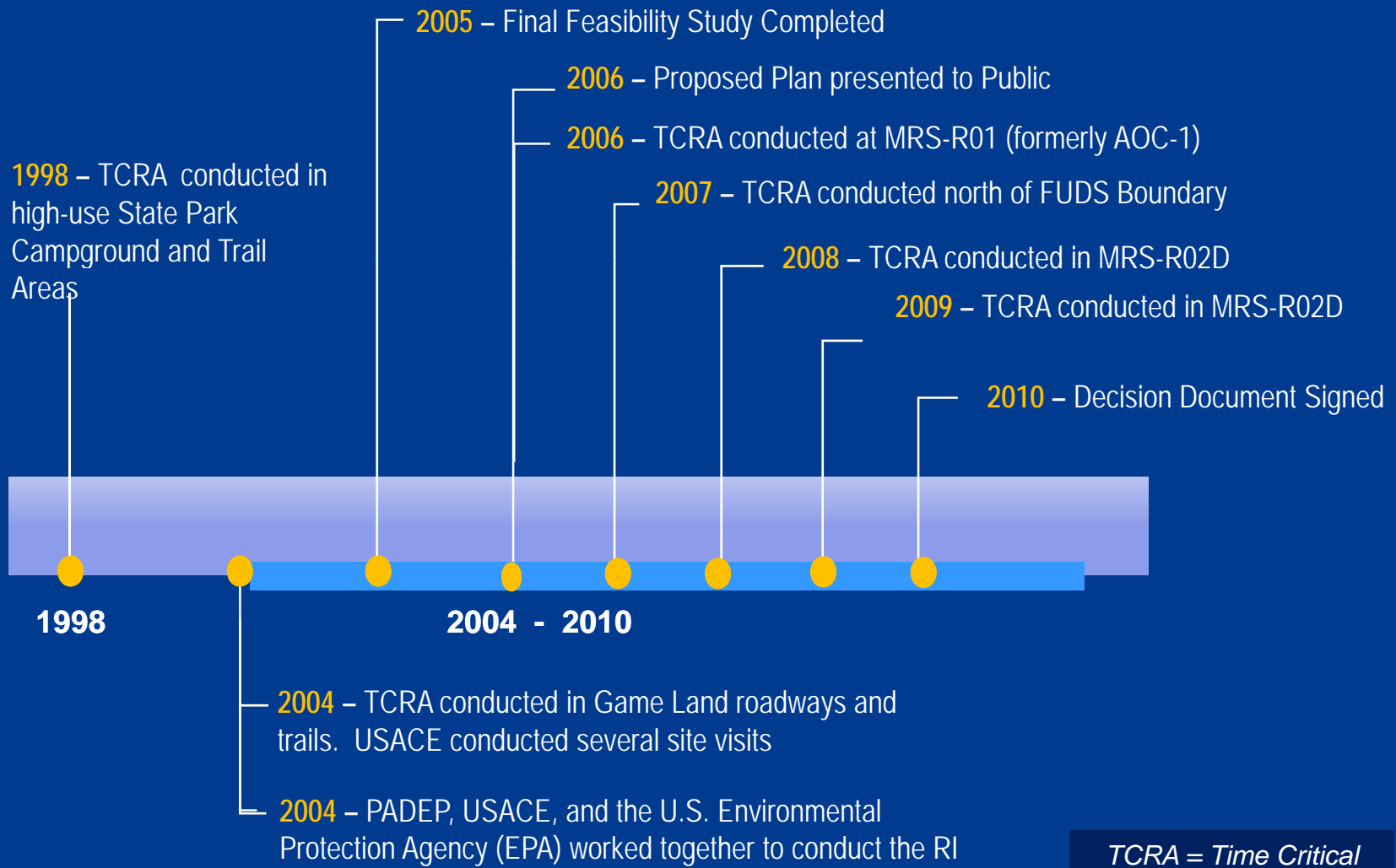
75-mm High Explosive Projectile

Project Partnership and Regulatory Participation

- USACE and PADEP relationship
- Memorandum of Understanding for completion of remedial investigation
- Early involvement of EPA
- PADEP continued focus on public safety
- PADEP urged funding



Timeline of Munitions Response Activities



TCRA = Time Critical Removal Action

Amount of UXO Recovered During RI/FIS Activities

Year	Munitions Response Activity	No. of UXO Recovered
1998	TCRA – State Park Campgrounds and Trails	278
2004	TCRA – State Game Lands Roadways and Trails	1
	Site Visit – State Park	3
	Site Visit – State Game Lands	2
	RI – State Park	40
	RI – State Game Lands	38
2006	TCRA – MRS-R01 (formerly AOC-1)	44
	TCRA – Transects within areas north of MRS-R01 (Lakeview Estates Community)	2
2007	TCRA conducted north in local community north FUDS boundary.	2
	TCRA – West of MRS-R01	0
2008	TCRA – MRS-R02D	413
2009	TCRA – MRS-R02B	316
	TOTAL	1,139

Remedial Investigation

- UXO recovered in impact areas and buffer zones
- 95% UXO found within 12 inches of the ground surface
- Developed munitions response sites corresponding to impact areas and buffer zones
- MRSs designated as having high, low-moderate or low risk

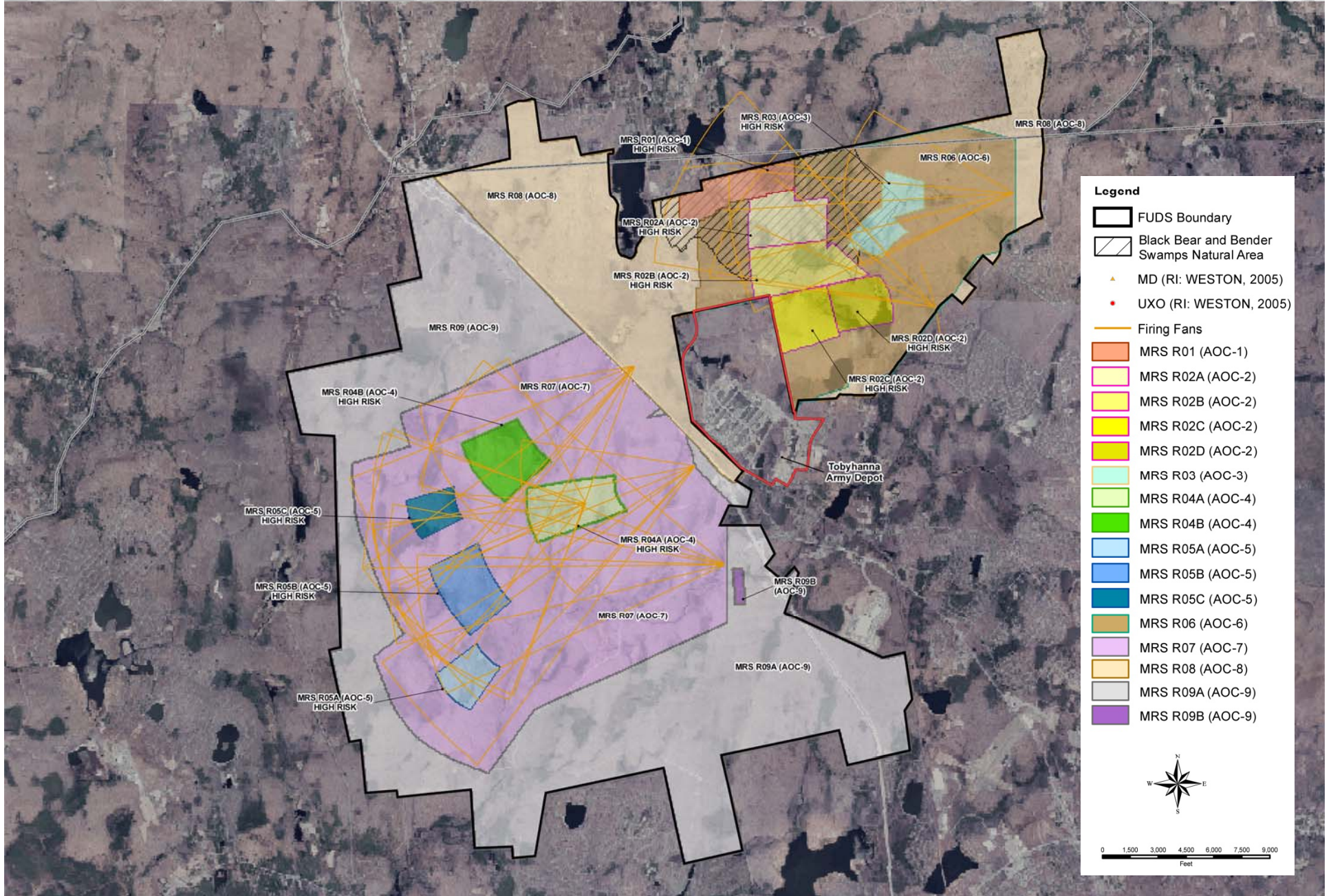


Stakeholders and the Community

- Formed Technical Review Committee
 - Representatives from Township, County, State & Federal & The Public
- Coordinated closely State Park and Game Land officials to coordinate work efforts – limited interruptions to recreational and maintenance activities
- Public Meetings



Munitions Response Sites





Remedial Action Alternatives

Five Remedial Alternatives Developed and Evaluated:

Alt. 1: No Action

Alt. 2: Land Use Controls (LUCs)

**Alt. 3: Surface Removal of
UXO with LUCs**

**Alt. 4: Removal of UXO
to One Foot with LUCs**

**Alt. 5: Removal of UXO
to Detection Depth with LUCs**

Selected Remedies

MRSs with Low or Low-Moderate Risk - **\$2,659,000**

- Alternative 2:
Land Use Controls
 - UXO Hazard Warning Signs
 - Community Education



UXO Safety Education Program
UneXploded Ordnance

Responding to dangers from the past

the 3Rs of UXO Safety:

- R**ecognize
- R**etreat
- R**eport

KIDS: Learn the 3Rs of UXO safety with Sgt. Woof!

[Program Overview](#)
[About UXO](#)
[Photo Gallery](#)
[UXO Incidents](#)
[Learning Tools](#)
[Explosives Safety Guides](#)
[Related Topics](#)
[Chemical Agent Safety](#)
[Firefighting Safety](#)



Selected Remedies

MRSs with High Risk - **\$52,345,000**

- Alternative 5:
Removal of UXO to
Detection Depth
 - Land Use Controls
 - Recurring Reviews





Current Project Status

- Record of Decision signed September 2010
- Remedial Action work to begin in 2011
- 5 to 15 years to complete – depending on available funding

Questions

