### Thoughts on Buying Advanced Geophysical Classification

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Uniform Federal Policy for Quality Assurance Project Plans Template

Geophysical Classification for Munitions Response

Revised Beta Draft







US Army Corps of Engineers
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# Topics

- No more treatability studies
- DAGCAP to resolve issue of "Who"
- Trust the QAPP to resolve issues of which team member is the accredited entity
- GFP
- What we're buying





# **Treatability Studies**

- In general, no more treatability studies
- ESTCP demo program=TS for most scenarios



# DAGCAP

- USACE will be requiring DAGCAP accreditation
  - DoD Advanced Geophysical Classification Accreditation Program
  - Managed by DoD EDQW
- Once in place, PWS/Evaluation factors will be streamlined (will resolve the issue of "Who")
- Interim: pretty much what you've seen in SLO, Marpi, Hawthorne PWSs





# Prior to DAGCAP



#### PWS/Evaluation Criteria:

- Qualifications for Key Personnel remain the same- must demonstrate past experience
- Technical approach that is transparent, founded on logic and physics and is independently verifiable
- Conveys a thorough understanding of the requirements and level of effort (e.g. increased QC, how the QAPP will be implemented)
- Demonstrate Corporate experience with classification, including incorporation of lessons learned
- Requirement to use the GCMR UFP-QAPP template





# **Trusting The QAPP**

- Who must be accredited?
- Will the Prime listen to a Sub who says work must be re-performed?
- We will trust the QAPP to resolve issues of Prime vs. Sub as the accredited entity
- QAPP is clear- if the DQOs & Performance Criteria are not met, the government will not accept it
- Requires justification of deviations from QAPP 'black text'







## **Government Furnished Property**

- USACE not expecting to continue to provide
- Current systems reaching end of serviceability
- USACE contracts with field work expected to start after this year do not have GFP

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# What We're Buying

- We know digs = \$\$
- PWS objective can include 'fewest digs needed to meet remedial response objectives'
  - Exploring methods to include more characterization during RIs
- AGC Expertise comes with a premium
  - We expect to pay that premium; without it, we are:
    - Suspicious about ability to perform
    - Suspicious about data quality





# Cost Comparison Example (500 acre scenario like CSLO)

	No Classification	Classification - Cued Only	Dynamic + Cued w/ MM	
Item		-		
Mob/Demob	\$15,000	\$15,000	\$15,000	
Surface Sweep	\$750,000	\$750,000	\$750,000	
Seed Emplacement	\$87,500	\$87,500	\$87,500	
EM61 Survey and Analysis	\$750,000	\$750,000	\$0	
Dynamic MetalMapper Survey and Analysis	\$0	\$0	\$1,625,000	
Cued MetalMapper Collection and Analysis	\$0	\$3,030,000	\$1,980,000	
Seeds Dug	\$125,000	\$125,000	\$125,000	
Native UXO Dug	\$31,250	\$31,250	\$31,250	
Clutter Dug	\$12,500,000	\$1,250,000	\$1,250,000	
Fixed Costs	\$400,000	\$400,000	\$400,000	
TOTAL with Extra QC	\$14,658,750	\$6,438,750	\$6,263,750	





#### Cost Difference As A Function Of Different Per-Cue Costs Comparisons To Current DGM Approach

Variable (x-axis): Cost per	80.0%						
advanced sensor cue.							% Difference-All Advacned Sensors-100K anoms
Range: \$25 to \$67 in \$3	70.0%						
increments	60.0%						% Difference-All Advacned Sensors-50K anoms
Other variables held constant at	00.070						% Difference-
assumed values:	50.0%						DGM&Cueing-100K anoms
Seeding costs: \$250/acre	40.0%						% Difference- DGM&Cueing-50K anoms
<ul> <li>Advanced sensor dynamic</li> </ul>	40.070						% Difference-
detection mapping: \$5,000/	30.0%						DGM&Cueing-25K anoms
acre	00.00 <i>/</i>						% Difference-All Advacned Sensors-25K anoms
DGM mapping: \$1,500/acre	20.0%						% Difference-
Digging: \$125/dig	10.0%	10.0%					DGM&Cueing-10K anoms
							% Difference-All Advacned Sensors-10K anoms
	0.0%	<b>\$</b> 20	¢ 40	<b><b><b><b></b></b></b></b>	<b>*CO</b>	<b>#7</b> 0	
	\$20	\$30	\$40	\$50	\$60	\$70	
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## **Detection Cost Comparison**



