

Environmental Security Technology Certification Program (ESTCP)

MUNITIONS RESPONSE (MR) IN UNDERWATER ENVIRONMENTS

Proposals should address survey techniques or recovery methods to find or remediate unexploded ordnance (UXO) and discarded military munitions at underwater sites, to reduce the Department's current liabilities under the Military Munitions Response Program. Many sites affected by munitions have depths less than 5 meters although water depths down to 35 meters are of concern. Aquatic environments include ponds, lakes, rivers, estuaries, and coastal or open ocean areas. Munitions of interest range from small projectiles and mortars to large bombs. Technologies proposed may address only a subset of the entire range of potential munitions or environments. ESTCP has particular interest in technologies addressing the following two areas:

WIDE AREA AND/OR DETAILED SURVEY TECHNIQUES

Systems are needed to cost-effectively survey large (kilometer-scale) areas to identify concentrations of munitions and areas free of munitions. Technologies addressing this aspect of the problem must provide high areal coverage rates but may be successful with only modest probabilities of detection and classification. In areas found likely to be contaminated, subsequent detailed data collection may be required to define the nature and extent of munitions contamination. In this regime, individual items must be detected with high probability and sufficient location accuracy that they may be unambiguously identified for retrieval or continued monitoring.

Proposals addressing novel sensors, platform integration, or large-scale collection of field data at real munitions sites will be considered.

COST-EFFECTIVE RECOVERY AND DISPOSAL METHODS

Improved methods are needed to cost-effectively and safely recover munitions from the underwater environment. Current practices employing divers for manual retrieval of targets are typically dangerous and expensive. Proposals should focus on recovery in the shallow water environment, where munitions are likely to be encountered by the public (to depths routinely accessed by recreational divers), and should address explosive safety issues. Cost-effective, safe, and environmentally acceptable remediation techniques are also needed for underwater items that cannot be moved due to explosive safety concerns and where blow-in-place operations underwater can significantly impact marine life.

Relevant existing projects can be viewed on the [ESTCP website](#).

SPECIAL INTEREST TOPIC

ESTCP has issued one topic area of general interest through a Broad Agency Announcement (BAA) to the private sector:

- Innovative Technology Transfer Approaches

DoD investigators are encouraged to submit proposals through the DoD submittal process that responds to this BAA topic area.

POINT OF CONTACT

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