

Environmental Security Technology Certification Program (ESTCP)

MUNITIONS RESPONSE (MR) IN UNDERWATER ENVIRONMENTS

Proposals in this topic area should address the reduction of the Department's current liabilities under the Military Munitions Response Program due to unexploded ordnance (UXO) and discarded military munitions at underwater sites. Capabilities are needed for a wide variety of aquatic environments such as ponds, lakes, rivers, estuaries, and coastal and open ocean areas. Munitions of interest range from small projectiles and mortars to large bombs, although technologies proposed need not address the entire range of potential munitions with a single solution. Many of the sites of interest have depths less than 5 meters although water depths up to 35 meters are of concern. Areas of high priority include:

Wide Area and Detailed Surveys

Technologies are needed to allow rapid assessment of large 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 to be contaminated, data will be required to define the nature and extent of munitions contamination. 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

Technologies are needed to cost-effectively and safely recover munitions in the underwater environment. Current practices employing divers for manual retrieval of targets are dangerous and prohibitively expensive. Proposals should focus on recovery in the shallow water environment, where munitions are likely to be encountered by the public (up 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.

Point of Contact

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For pre-proposal submission due dates, instructions, and additional solicitation information, visit the ESTCP website at <https://www.serdp-estcp.org/Funding-Opportunities/ESTCP-Solicitations/Environmental-Technologies-Solicitation>.