

Environmental Security Technology Certification Program (ESTCP)

**DETECTION, CLASSIFICATION, AND REMEDIATION OF MILITARY MUNITIONS
IN UNDERWATER ENVIRONMENTS**

Objective

Demonstration projects are sought for technologies to detect, classify, and remediate military munitions found at underwater sites. Technologies that will facilitate management of underwater munitions sites are also of interest. 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 proposals need not address the entire range of potential munitions with a single solution. Water depths up to 35 meters are of primary interest.

Background

Many active and former military installations have ranges and training areas that include adjacent water environments such as ponds, lakes, rivers, estuaries, and coastal ocean areas. In other sites, training and testing areas were deliberately situated in water environments. Disposal and accidents have also generated significant munitions contamination in the coastal and inland waters in the United States. Munitions may migrate in the fluid underwater environment and it is not uncommon for munitions to wash on shore during storm events. Dredging projects frequently encounter munitions.

The U.S. Army Corps of Engineers (USACE) and the U.S. Navy have identified more than 400 underwater sites that are potentially contaminated with munitions. The majority of areas are in shallow water (0-35 m) where the munitions pose a threat to human health and the environment. Some of these sites date back to the 18th century and others were used as recently as this decade. Property potentially containing munitions in underwater environments exceeds 10 million acres.

Proposed technologies should have completed required proof-of-concept work showing evidence of the technology's capabilities. Initial demonstrations may be at a controlled test site, in which case subsequent testing at live munitions response sites will depend on the performance demonstrated during the controlled tests. Demonstrations directly on live sites, with appropriate supporting performance information, will also be considered.

Technologies applicable to the detection and remediation of explosives in soil or groundwater are not responsive to this topic area.

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>.