



Shallow Underwater Site Characterization

Former Camp Sibert RI/FS (I04AL005704)

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG.

Objective: To collect underwater geophysical data to further characterize the Former Camp Sibert.

Problem being solved:

The RI/FS as it was previously funded did not address water bodies lying within the project bounds which represents a gap in the characterization effort. Based on information from various landowners in the area, we have reason to believe that MEC is located in the water bodies.

Technology Description:

CEHNC owns marine geophysical survey systems that include an underwater Remotely Operated Vehicle (ROV) with underwater video capabilities and surface towed underwater EM61-S and Geometrics G-881/G882 magnetometer systems. The instruments function similarly to the standard land-based versions that are in use on multiple MMRP sites, with the same basic detection capabilities. They can be mounted in various ways depending on the needs of the survey (fixed, tethered), and as with all such sensors, are limited in detection capabilities by their distance from the source object.

Technical approach:

CEHNC will work with our contractor, Parsons, to transition technology that has had limited application on FUDS sites. The team will visit the site to learn more about the current conditions of Canoe Creek and the Site 18 pond (and potentially additional ponds). Depending on the findings (water depth, obstructions, current, etc.), an appropriate platform will be built for towing the detector, which will be either the EM61, the magnetometer, or both for different areas, again depending on the existing site conditions. It is anticipated that a boat with a tethered EM61 will be used for the pond(s), and a fixed offset magnetometer will be used for the creek to maintain distance from expected obstacles. The data will be processed to determine density and character of anomalies that could potentially be due to MEC, and will be incorporated into the RI/FS report. If water conditions allow, the underwater video system will be used to further investigate anomalies detected by the other sensors to attempt tentative identification of the source of the anomalies. No intrusive effort will take place at this time.

Expected DoD Benefit:

There are two main benefits expected from this effort: (1) Additional characterization of the Former Camp Sibert, resulting in a more complete RI, and (2) Transition of technology and increased capabilities for future underwater efforts.

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