

Environmental Studies Program: Ongoing Study

| | |
|----------------------------|--|
| Field | Study Information |
| Title | Archaeological Investigations in Support of Development of Energy and Mineral Resources on the U.S. Outer Continental Shelf (NT-19-07) |
| Administered by | Office of Renewable Energy Programs |
| BOEM Contact(s) | Christopher Horrell (christopher.horrell@boem.gov) |
| Procurement Type(s) | Contract |
| Conducting Organization(s) | Cardinal Point Captains, Inc. |
| Total BOEM Cost | \$1,500,000 |
| Performance Period | FY 2019–2025 |
| Final Report Due | May 31, 2026 |
| Date Revised | August 29, 2024 |
| Problem | BOEM requires developers to avoid all geophysical targets (scan sonar contacts and magnetic anomalies) that may potentially represent an archaeological resource. Previously identified geophysical targets may prove to be significant archaeological resources that should be avoided, or may prove not to be significant and therefore should not prevent development. |
| Intervention | Additional ground truthing investigations of previously identified geophysical targets that may potentially represent archaeological resources allow BOEM to determine whether they are archaeological in nature, and, if so, whether they are nationally significant and eligible for listing on the NRHP. These investigations also allow BOEM to collect baseline data either in areas either not previously subjected to geophysical survey but for which future development is contemplated or for which pre-construction baseline data would be useful for future, post-construction monitoring of archaeological resources. |
| Comparison | For each prioritized target selected for ground truthing, BOEM will ask, (1) does this target represent an archaeological site or not? And (2) if this target <i>does</i> represent an archaeological site, is it national significant and eligible for listing on the National Register of Historic Places? |
| Outcome | A better understanding of whether previously identified geophysical targets represent archaeological sites that may be eligible for listing on the NRHP. |
| Context | Atlantic, Gulf of Mexico, and Pacific OCS planning areas. |

BOEM Information Need(s): To effectively minimize impacts to archaeological sites without unnecessarily constraining development, BOEM needs to gather additional information on previously identified geophysical targets that may potentially represent archaeological sites eligible for listing on the NRHP. By confirming the presence of these sensitive resources or confidently clearing the area for development, BOEM is using the best available science in bureau decision making.

BOEM requires developers to avoid all geophysical targets (scan sonar contacts and magnetic anomalies) that may potentially represent an archaeological resource. In actuality, previously identified geophysical targets may prove to be significant archaeological resources that should be avoided, or they may prove not to be significant archaeological resources and therefore they should not prevent development. Archaeological ground-truthing of potential targets and determinations of significance and eligibility for listing on the National Register of Historic Places (NRHP) is necessary for BOEM to make informed, responsible decisions and for compliance with the National Historic Preservation Act.

Background: BOEM's overarching strategic goal is to achieve expeditious and orderly development of energy and mineral resources, while minimizing impacts on the environment, including impacts to archaeological sites. BOEM is contemplating issuing leases and grants and approving various plans and permits related to conventional and renewable energy and marine minerals sources in each of its regions and programs. BOEM needs data in these areas in order to make sound decisions about how to effectively minimize impacts to archaeological sites without unnecessarily constraining development, and to meet its responsibilities under Sections 110(a)(2)(A), (B), (C), and (E) and 110(b) of the National Historic Preservation Act (NHPA).

Objective(s): The primary objective is to conduct additional investigations of previously identified geophysical targets that may potentially represent archaeological resources. These additional investigations will consist of ground-truthing geophysical targets to determine whether they are archaeological in nature, and, if so, determining their significance and eligibility for listing on the NRHP. This objective will recover data that would (1) confirm which geophysical targets are archaeological sites and (2) produce the site documentation and the recording of diagnostic features and artifacts necessary for completing the process of nomination to the NRHP. A secondary objective is to collect baseline data either in areas either not previously subjected to geophysical survey but for which future development is contemplated or for which pre-construction baseline data would be useful for future monitoring of resources.

Methods: Field operations will involve collecting additional high resolution geophysical data, to relocate each target and ascertain its suitability for diving or Remotely Operated Vehicle (ROV) investigations and executing diver or ROV investigations with photography and videography to accurately document the resource. Specifically, methods will include: (1) conducting high resolution side scan sonar and high density magnetometer surveys of each identified priority target; (2) determining whether or not the priority target warrants further investigation; (3) completing a rapid assessment exterior survey, via divers or Remotely Operated Vehicles (ROV), of those targets warranting further investigation; (4) completing detailed video and photographic surveys of those targets warranting further investigation; (5) as conditions allow, producing a cursory site map (or photomosaic) of each confirmed archaeological site for interpretation; (6) assessing the historical significance and archaeological integrity of each confirmed archaeological site; (7) determining eligibility of each confirmed archaeological site for nomination to the NRHP; and (8) identifying to what degree site preservation is influenced by environmental and anthropogenic formation processes. Annual research designs are prepared collaboratively and focus on geographic areas which BOEM anticipates represent the bureau's highest priorities for both energy and marine minerals development activities and for archaeological resource protection needs for the upcoming year. Scientific activities supporting other disciplines (e.g., biological, water quality) that are complementary to the field operations are also being conducted in concert with the archaeological investigations.

Specific Research Question(s): Research questions are organized hierarchically. For each prioritized target selected for ground truthing, BOEM will ask:

1. Does this target represent an archaeological site or not?
2. And if this target *does* represent an archaeological site, is it national significant and eligible for listing on the National Register of Historic Places?

If a site is not present, or if a site is present but not eligible, then the avoidance will be cleared for development. If a site is present and eligible, BOEM will document the site as a significant archaeological resource on the OCS and may use the collected information as baseline data to support future monitoring activities.

Current Status: Task order 1 is complete. Reports from task orders 2 and 3 are under review. Task orders 4 and 5 will be in FY 2025.

Publications Completed: None

Affiliated WWW Sites: None

References: None