

Environmental Studies Program: Ongoing Study

Field	Study Information
Title	Battle of the Pacific: Guam – A Multi-Partner Collaboration on Underwater Cultural Heritage, Mapping, and Engagement (PC-24-x04)
Administered by	Pacific OCS Region
BOEM Contact(s)	Bert Ho (bert.ho@boem.gov), James Moore (james.moore@boem.gov)
Procurement Type(s)	Cooperative Agreement
Conducting Organization(s)	Scripps Institution of Oceanography
Total BOEM Cost	\$450,000
Performance Period	FY 2024–2026
Final Report Due	TBD
Date Revised	May 29, 2025
Problem	BOEM requires an inventory and evaluation of underwater cultural heritage sites, including many World War II-related losses offshore Guam, to inform consideration of historic properties under the National Historic Preservation Act (NHPA), provide baseline environmental data, and offer pathways for public engagement. This information is timely and relevant as BOEM's jurisdiction, as a component of BOEM Pacific Region's portfolio, was recently expanded to include Guam, and first planning steps for this territory are in initial phases; environmental and cultural information is needed to inform future decision-making.
Intervention	Build from ongoing desk-based study (PC-22-07b) and available renewable energy and marine mineral resource information to share mutually beneficial data in areas of interest to multiple federal partners, develop a field investigation footprint, and deploy marine remote sensing survey technologies. This field investigation will also serve as the focus point for a complementary study (PC-24-x05) that explores public engagement for underwater cultural heritage.
Comparison	This effort will build from PC-22-07b and be similar to previous Battle of the Atlantic and Gulf of Mexico Expeditions conducted by BOEM and its partners, as well as baseline and best practices efforts that were completed for the Pacific, Atlantic, and Gulf of Mexico outer continental shelf (OCS).
Outcome	Compile baseline field information to enable site documentation and public engagement in support of NHPA consultation and National Environmental Policy Act (NEPA) analysis to support agency decision-making.
Context	This is a baseline effort for the U.S. Pacific Island territory of Guam and surrounding OCS waters.

BOEM Information Need(s): The Inflation Reduction Act (IRA) of 2022 contained several provisions relevant to BOEM's offshore energy program, including amending the definition of Outer Continental Shelf (OCS) in the OCS Lands Act to include submerged lands within the exclusive economic zone adjacent to U.S. territories, including Guam. Given the expectation of increased interest in the Pacific

OCS, BOEM needs to gather baseline information on archaeological and cultural resources that could be affected by these activities. This information will directly support NEPA and NHPA assessments and consultation.

Background: A desktop cultural resources study is currently underway for Guam as a component of PC-22-07b, which aims to provide a geospatial database of underwater cultural heritage based on primary source and historical research, as well as protocols for engagement and consultation with Indigenous Pacific Islander communities. However, the locations of much of the underwater cultural heritage associated with World War II are only cursorily described in the historical literature, or not yet located. Baseline environmental and archaeological survey is required to provide necessary data on these Pacific Theatre sites (including unexploded ordnance), as well as the locations of other submerged archaeological sites. These data can support the delineation of battlefield landscapes in addition to individual site assessments and will be crucial for NHPA Section 106 and NEPA consultations in the future. To avoid duplication of any previous research and resurveying known sites, prime project partners include Department of Defense POW/MIA Accounting Agency, National Oceanic and Atmospheric Administration, and U.S. Navy History and Heritage Command/Underwater Archaeology Branch. These project partners will coordinate on search areas, survey protocols, and permissions associated with this survey, particularly for sites believed to be associated with sunken military craft of Allied or Japanese ownership or missing military personnel.

Objective(s): The objective of this study is to progress from archival data to field investigation of submerged archaeological resources, as well as gather mapping and survey information in areas of potential offshore wind interest as feasible, and advance BOEM's ability to conduct public engagement in Guam.

Methods: The proposed study will accomplish the following:

1. Delineate an investigation area based on archival research and the sharing of mutually beneficial data in areas of interest to multiple federal partners.
2. Conduct a marine-remote sensing survey of the area via Scripps' AUV platforms to investigate the marine environment and identify underwater archaeological sites.
3. Support public engagement efforts (conducted under BOEM Study PC-24-x05) to enhance public understanding of the submerged cultural heritage offshore Guam.
4. Interrogate and document identified archaeological sites via a NOAA Ocean Exploration Underwater Cultural Heritage-specific cruise developed in partnership with this Study, scheduled to immediately follow the BOEM-funded underwater survey.
5. Synthesize all resulting data into the database developed for ongoing study, "Maritime Heritage of Guam and Northern Mariana Islands" (PC-22-07b) for NHPA and NEPA review applications.
6. Produce a final report(s) of findings that details these efforts.

Specific Research Question(s):

1. Where are the underwater cultural heritage sites within the OCS of Guam that could be impacted by offshore wind development or marine mineral extraction?
2. Does a battlefield cultural landscape in Guam need to be considered in relation to offshore wind development or marine mineral extraction?

Current Status: All funding paused as of 20 January 2025 due to E.O. 14154's freeze on Inflation Reduction Act funding.

Publications Completed: None

Affiliated WWW Sites: None

References:

- Bureau of Ocean Energy Management. 2023. Maritime Heritage of Guam and Northern Mariana Islands (PC-22-07b). U.S. Department of the Interior, Bureau of Ocean Energy Management. October 31, 2023. 4 p. <https://espis.boem.gov/study%20profiles/BOEM-ESP-PC-22-07b.pdf>
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- Pearson CE, James Jr. SR, Krivor MC, El Darragi SD, Cunningham L. 2003. Refining and revising the Gulf of Mexico Outer Continental Shelf Region high-probability model for historic shipwrecks: Final Report. Volume II: Technical Narrative. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2003-061, 195 p., 3 volumes. <https://espis.boem.gov/final%20reports/3034.pdf>
- Terrill EJ, Moline MA, Scannon PJ, Gallimore E, Schramek T, Nager A, Hess R, Cimino M, Colin PL, Pietruszka A, Anderson MR. 2017. Project Recover: Extending the applications of unmanned platforms and autonomy to support underwater MIA searches. *Oceanography* 30(2):150–159.
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