Environmental Studies Program: Ongoing Study

Title	Coastal and Submerged Historic Properties and Precontact Sites on the Alaska Outer Continental Shelf (AK-21-05)
Administered by	Alaska OCS Region
BOEM Contact(s)	Jeffrey Brooks, PhD (jeffrey.brooks@boem.gov)
Procurement Type(s)	Contract
Conducting Organization(s)	Gray and Pape Heritage Management, Inc.
Total BOEM Cost	$423.946
Performance Period	FY 2021–2024
Final Report Due	January 2024
Date Revised	September 12, 2022
PICOC Summary	
Problem	Energy and marine minerals development activities on the sea floor and coast could affect submerged and terrestrial historic properties and precontact sites. Spatial data about these resources should be updated to ensure accurate consultations with the State Historic Preservation Office and other parties. The lack of data could delay approval of exploration and development plans.
Intervention	The study will develop information on Alaska's submerged and coastal historic properties and precontact sites, including their known, reported, or potential locations.
Comparison	BOEM will compare results with existing geo-referenced databases in the state and other regions.
Outcome	These data will inform efforts to describe the affected environment, develop alternatives to proposed actions, analyze potential effects, develop mitigation measures, and conduct consultations. The study will add the Alaska OCS to the national database.
Context	This study is relevant to all Alaska OCS planning areas.

BOEM Information Need(s): An inventory and analysis of submerged and coastal historic properties and precontact sites will help inform environmental impact assessments and mitigation of potential impacts to resources. Specific mission-critical assessments include visual impacts, affected environment, cumulative effects, and site-specific disturbances to the seafloor. These assessments are required under the National Environmental Policy Act, Section 106 of the National Historic Preservation Act, and Executive Order 11593. BOEM is required to apply the National Register Criteria to properties that may be affected by its undertakings and consult with the Alaska State Historic Preservation Office (SHPO) and other parties. The information from this study will help BOEM analysts interpret and evaluate specific archaeological surveys conducted by operators to comply with Federal regulations at 30 CFR 550.194.

Background: For the Alaska OCS, BOEM has assembled a shipwrecks list prior to 2011 (www.boem.gov/Alaska-Coast-Shipwrecks). This study will update data in the current shipwrecks list and could include new discoveries, shipwreck names, vessel types, site locations, site descriptions, and

geology. Updating shipwreck information will enhance BOEM's assessments of potential effects to the resources.

The Alaska OCS holds potential for submerged and coastal precontact sites related to human migration into and settlement of the Americas. The study will properly compile and analyze existing information on precontact sites from different sources. This study will provide a framework to better predict locations of paleo landforms and potential precontact sites.

Project proponents and operators conduct site-specific surveys on a project-by-project basis. Information from this proposed study will inform these site-specific surveys. BOEM has systematically collected this information for all planning areas except in Alaska. This proposed study will add the Alaska OCS to the national database.

Objectives:

- Develop a geo-referenced inventory of known, reported, and potential historic shipwreck and aircraft wreck sites for the Alaska OCS.
- Assess potential precontact sites, developing a GIS-based model to help indicate where intact submerged paleo landforms might be expected to occur.
- Develop a geo-referenced database of coastal precontact sites that could be impacted by onshore infrastructure tied to future development in the Alaska OCS.
- Develop a geo-referenced database of coastal historic properties that could be impacted by alteration of the adjacent seascape.

Methods: The proposed study will compile existing data from the State of Alaska, published research, and archival documents (e.g., maps, charts, ethnographies, maritime surveys). Researchers will provide a literature review and synthesis to help support required consultations with the SHPO and other consulting parties. Researchers will develop a GIS-based inventory of known, reported, and potential historic properties, precontact sites, and other cultural and historic resources important to Alaska Native tribes and corporations. The database will be compatible with Arc-GIS. Researchers will discuss results in relation to current and evolving theories of precontact settlement patterns, paleo-shorelines, sea level rise, and regional geology. Researchers will include properties nominated to or eligible for listing in the National Register of Historic Places. They will provide a final report and databases like those developed for the Pacific, Gulf of Mexico, and Atlantic OCS regions (e.g., ICF International et al., 2013; NOAA Maritime Heritage Program, 2017; Pearson et al., 2003; Von Tilburg et al., 2017; Watson et al., 2017).

Specific Research Question(s):

1. What are the types and potential locations of submerged historic properties and precontact sites in the Exclusive Economic Zone of the Alaska OCS?
2. What are the types and potential locations of terrestrial historic properties and precontact sites in Alaska's coastal areas?
3. What types of cultural and historic resources could be affected by OCS development?

Current Status: Ongoing, data collection and analyses underway.

Publications Completed: None

Affiliated WWW Sites: None

References:

ICF International, Davis Geo-archaeological Research, and Southeastern Archaeological Research. 2013. Inventory and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf. OCS Study BOEM 2013-0115. Camarillo, CA: U.S. Department of the Interior, Bureau of Ocean Energy Management, 280 pp.

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Pearson, C.E., S.R. James, Jr., M.C. Krivor, S.D. El Darragi, and L. Cunningham. 2003. Refining and Revising the Gulf of Mexico Outer Continental Shelf Region High-Probability Model for Historic Shipwrecks: Final report. OCS Study MMS 2003-060 Volume I: Executive Summary. New Orleans, LA: U.S. Department of the Interior, Minerals Management Service, 13 pp.

Van Tilburg H, T.K. Watson, K. Faria, K. Hoomanawanui, I. Ho-Lastiama, W. Ritte, K. Maly, M. Nahoopii, K. Horcajo, K. Kaupiko, D. Ball D. 2017. A Guidance Document for Characterizing Native Hawaiian Cultural Landscapes. OCS Study BOEM 2017-023. Camarillo, CA: U.S. Department of the Interior, Bureau of Ocean Energy Management, 208 pp.

Watson TK, K. Hoomanawanui, R. Thurman, B. Thao, K. Boyne. 2017. Na ‘Ikena I Kai (Seaward Viewsheds): Inventory of Terrestrial Properties for Assessment of Marine Viewsheds on the Eight Main Hawaiian Islands. OCS Study BOEM 2017-022. Camarillo, CA: U.S. Department of the Interior, Bureau of Ocean Energy Management, 137 pp.