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Field	Study Information
Title	Inventory and Assessment of Coastal and Submerged Archaeological and Historical Sites along the U.S. Caribbean Territories (NT-25-05)
Administered by	Office of Environmental Programs
BOEM Contact(s)	James Moore (james.moore@boem.gov)
Procurement Type(s)	Contract or Cooperative Agreement
Performance Period	FY 2025–2027
Final Report Due	TBD
Date Revised	January 12, 2024
Problem	BOEM is mandated to evaluate and assess impacts from approved actions to any cultural heritage (i.e., archaeological sites) and historic properties within its jurisdiction. However, currently BOEM has no baseline information about cultural or historic properties located along the U.S. Caribbean Territories, which include the Commonwealth of Puerto Rico and the U.S. Virgin Islands.
Intervention	Draft a comprehensive historical context and provide baseline geospatial data for known or reported coastal and submerged archaeological sites and historic properties for the U.S. Caribbean Territories. Shipwrecks, remains of coastal maritime infrastructure, and visual impacts from coastal properties will be included. Best practices will also be developed for BOEM consultations with local stakeholders and appropriate territorial government offices and agencies.
Comparison	This study will be similar to previous baseline studies completed for the Atlantic, Gulf of Mexico, Pacific, and the Main Hawaiian Islands.
Outcome	A thorough understanding of the maritime historical context of the U.S. Caribbean Territories and an inventory of known or reported coastal and submerged archaeological sites and historic properties. Identified best practices for National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA) consultations will be applied toward engaging local stakeholders and appropriate government territorial offices and agencies.
Context	Information will be applied toward renewable energy development off the Commonwealth of Puerto Rico and the U.S. Virgin Islands (St. Thomas, St. John, and St. Croix).

BOEM Information Need(s): BOEM is required under several mandates, including the Outer Continental Shelf Lands Act (OCSLA), the National Environmental Policy Act (NEPA), and the National Historic Preservation Act (NHPA), to consider the impacts of its approved activities on cultural resource sites (i.e., archaeological sites) and historic properties. The NHPA specifically requires BOEM to assess those cultural and historic sites that are listed or may be potentially eligible for listing on the National Register of Historic Sites (NRHP) and to identify appropriate consulting parties. Under the Inflation Reduction Act (IRA) of 2022, BOEM's jurisdiction now includes submerged lands within the exclusive economic zone (EEZ) adjacent the U.S. Caribbean Territories; BOEM needs baseline information on the types and

locations of cultural resources and historic properties that could be impacted by Bureau-approved activities. This information will also directly support future NEPA and NHPA assessments and consultations. Additionally, BOEM has no experience working with any appropriate local stakeholders or territorial government representatives, and identifying protocols for engagement and consultation with these individuals will be crucial.

Background: The IRA of 2022 delegated authority to BOEM to conduct wind energy lease sales within the EEZs of the self-governing U.S. Caribbean Territories, which include the Commonwealth of Puerto Rico, and the U.S. Virgin Islands (St. Thomas, St. John, and St. Croix). However, BOEM has no previous experience of operating or conducting environmental research in this area and has no baseline information of the types of coastal and submerged cultural resources and historic properties located there. Such baseline literature research and geospatial data syntheses have been conducted previously for BOEM's other programmatic areas, including the Atlantic, the Gulf of Mexico, and the Pacific, including the Hawaiian Islands. Information and determinations from these previous studies have served invaluable for historic preservation efforts and NHPA Section 106 and NEPA consultations across all of BOEM's programmatic areas.

The U.S. Caribbean Territories have a robust maritime history. Since initial European contact in the late fifteenth century the region has been a prominent center for exploration, colonization, trade, and naval engagements. Therefore, hundreds of coastal and submerged archaeological and historic sites, including shipwrecks, from a number of cultures may be located around the Commonwealth of Puerto Rico and the U.S. Virgin Islands. Considering BOEM has not previously worked in this area, protocols are also needed so that effective and respectful consultations can be made with local stakeholders and the respective territorial governments.

Objective(s): The objectives of this study are to (1) acquire and synthesize archival information on the coastal and submerged cultural resources and historic properties along the U.S. Caribbean Territories that could be affected by offshore wind energy leasing; and (2) determine the appropriate local stakeholders and territorial government representatives to engage for NHPA Section 106 and NEPA consultations.

Methods:

- Research and compile information from primary and secondary sources for known, reported, and potential coastal and submerged archaeological and historic sites within the EEZ of the Commonwealth of Puerto Rico and the U.S. Virgin Islands (St. Thomas, St. John, and St. Croix) that could be impacted by BOEM-approved offshore wind energy leasing, including visual impacts.
- 2. Synthesize site location information into geospatial data. All geospatial data will be transferred to BOEM's Office of Renewable Energy Programs (OREP) for inclusion in a historic preservation database.
- Compile and synthesize information pertaining to appropriate local stakeholder and territorial government contacts for BOEM to engage for required NHPA Section 106 and NEPA consultations and develop best practice protocols for scheduling and holding these consultations.
- 4. Create visual impact simulations of offshore wind turbines at variable distances from the U.S. Caribbean Territory islands.

5. Prepare a final report of findings that details all study-related efforts and provides a historic context of all aforementioned site types that are or may be located in the project areas.

Specific Research Question(s):

- What are the types of coastal and submerged cultural resources and historic properties within the EEZ of the U.S. Caribbean Territories of the Commonwealth of Puerto Rico and the U.S. Virgin Islands, and where are they located? If their exact locations are unknown, where are their reported or potential locations?
- 2. Which cultural resources or historic properties could be impacted by BOEM-approved offshore wind energy activities, including visual impacts?
- 3. Who are the appropriate local stakeholders and territorial government representatives to contact for NHPA Section 106 and NEPA consultations, and what are the best practices for engaging with them to establish and build trust and to ensure consultations are effective?

Current Status: N/A

Publications Completed: N/A

Affiliated WWW Sites: N/A

References:

- ICF International, Davis Geoarchaeological Research, and Southeastern Archaeological Research (San Diego, CA). 2013. Inventory and analysis of coastal and submerged archaeological site occurrence on the Pacific Outer Continental Shelf. Camarillo (CA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 366 p. Report No.: OCS Study BOEM 2013-0115. https://espis.boem.gov/final%20reports/5357.pdf.
- NOAA Maritime Heritage Program. 2017. The unseen landscape: inventory and assessment of submerged cultural resources in Hawai`i. Camarillo (CA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 240 p. Report No.: OCS Study BOEM 2017-021. https://espis.boem.gov/final%20reports/5620.pdf.
- 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. New Orleans (LA): U.S. Department of the Interior, Minerals Management Service. 195 p. Report No.: OCS Study MMS 2003-061. https://espis.boem.gov/final%20reports/3034.pdf.
- Sullivan RG, Kirchler LB, Cothren J, Winters SL. 2013. Offshore wind turbine visibility and visual impact threshold distances. Environ Pract. 15(1):33–49.
- TRC Environmental Corporation. 2012. Inventory and analysis of archaeological site occurrence on the Atlantic Outer Continental Shelf. New Orleans (LA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 324 p. Report No.: OCS Study BOEM 2012-008. <u>https://espis.boem.gov/final%20reports/5196.pdf</u>.
- Watson TK, Hoomanawanui K, Thurman R, Thao B, Boyne K. 2017. Na 'Ikena I Kai (Seaward Viewsheds): inventory of terrestrial properties for assessment of marine viewsheds on the eight Main Hawaiian Islands. Camarillo (CA): U.S. Department of the Interior, Bureau of Ocean

Energy Management. 140 p. Report No.: OCS Study BOEM 2017-022. https://espis.boem.gov/final%20reports/5619.pdf.