STUDY TITLE: Maritime Cultural Resource Site Assessment in the Main Hawaiian Islands

**REPORT TITLE:** Vol. 1: The Unseen Landscape: Inventory and Assessment of Submerged Cultural Resources in Hawai`I; Vol. 2: A 'Ikena I Kai (Seaward Viewsheds): Inventory of Terrestrial Properties for Assessment of Marine Viewsheds on the Main Eight Hawaiian Islands; Vol. 3: A Guidance Document for Characterizing Native Hawaiian Cultural Landscapes

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AFFILIATION (OF PROJECT MANAGERS): Maritime Heritage Program, Office of National Marine Sanctuaries (ONMS), National Oceanic and Atmospheric Administration

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**BRIEF ABSTRACT:** Understanding the types and locations of significant archaeological and cultural resources is essential to their preservation and consideration during planning for offshore renewable energy development. The State of Hawaii has hundreds of submerged aircraft and shipwreck sites and other types of sunken properties. This project compiled the known, reported, and potential submerged cultural resources inventory as well as the cultural, environmental and historic context to that database (2,120 entries) for use as a resource management tool. This included significant Native Hawaiian cultural viewsheds between selected properties on the islands. ONMS, in collaboration with local contractor Honua

Consulting, completed a Microsoft Access database of terrestrial properties, locations nominated to or eligible for listing on the National Register of Historic Places (NRHP), that could be visually affected from offshore renewable energy projects like floating wind turbines. Through engagement with a facilitator and federal/state/community representatives, a guidance process/document for characterizing Native Hawaiian cultural landscapes and resources was also developed to provide a proactive approach to identifying areas of significance that need to be considered during such planning processes.

**BACKGROUND:** The State of Hawai'i has mandated a goal of achieving 70% clean energy by 2030. In order to meet this goal, development of offshore renewable energy resources and construction of inter-island transmission cables will be necessary. BOEM is charged with the responsibility of considering the effects of its actions on cultural resources that are listed or eligible for listing on the National Register of Historic Places. This information is necessary under Section 106 of the NHPA, which requires that federal agencies must apply the National Register Criteria to properties that may be affected by a federal undertaking. The information will also be used to support reviews under NEPA and other federal laws.

**OBJECTIVES:** The project's main objective was to develop a MS Access geo-referenced database of known, reported, and potential submerged cultural resources (e.g., shipwrecks, airplanes, etc.) on the Outer Continental Shelf (3-200mi) of the main Hawaiian Islands, emphasizing the use of primary sources. BOEM allowed the inclusion of properties within State (0-3mi) waters and land-based historic properties that could be adversely impacted by the alteration of ocean views in support of a more comprehensive landscape approach. An assessment of the accuracy of each listing's location and interactive GIS product were also included. Collaboration between resource agencies and indigenous Native Hawaiian communities was also facilitated by creating a process to identify cultural resources, landscapes, and other areas of significance that need to be considered in the planning process for offshore energy development. This process, or guidance document, must include community points of contact, reciprocal data-sharing, historical context of cultural resources from a Native Hawaiian perspective, and a list of topics that should be consistently asked for by project proponents.

**METHODS:** All accessible local and national primary and secondary sources in archives, collections, court records, libraries, museums, archaeological field data etc were examined. The Access database, based on BOEM's Pacific OCS shipwreck database (OCS Study BOEM 2013-0115), was adapted and refined/enhanced for Hawaiian waters. Location accuracy categories were established as: 1) confirmed; 2) good; 3) fair; and 4) poor. The cultural landscape approach was chosen for the contextual report as best for providing historical background, cultural context, and patterns of submerged resource distribution. Honua Consulting also conducted independent research at the State of Hawai'i Historic Preservation Division and related collections to develop the report and digital file of terrestrial properties that may be visually affected. The data collected included historic and archaeological information related to all properties, including those properties nominated to - or eligible for listing on - the NRHP. Additionally, the contractor drew from a breadth of Hawaiian language resources to develop a wholly unique thematic inventory consisting of two subcategories. The first subcategory is "akua viewsheds" or viewsheds that are significant through their historic association with spiritual figures or deities. The second subcategory is "ali'i viewsheds," which are viewsheds that are culturally significant through their association with Hawaiian chiefs.

ONMS also worked with facilitator Honua Consulting to identify a consultative working group that included representatives from each of the main Hawaiian Islands (including island districts and/or counties). The working group developed the Native Hawaiian cultural landscapes (NHCL) guidance document through a series of workshops, meetings, trainings, and consultations throughout the islands during the project. The guidance document was then refined by implementing the analysis process for the creation of case studies at selected areas (ahupua`a or land/sea divisions of Lāna`i, Waikīkī, and Waialua).

**RESULTS:** The database provides comprehensive historical/archaeological data on 2.120 property entries. Volume 1 of the report provides thorough cultural, environmental and historic context to the inventory of known, reported, and potential submerged resource sites. Volume 1 also includes a description of research and analysis methods, environmental description for the study area, discussion of site formation processes affecting submerged properties, cultural landscape summary of historic periods from the original Polynesian discovery of the islands to the post-World War II era, conclusions, references, maps, and supporting appendices. It is a work of synthesis, providing context and analysis at the cultural landscape level. Volume 2 presents a new paradigm in understanding the marine viewsheds of 190 significant sites in Hawai'i and a new and helpful baseline for assessing how renewable energy projects may impact those historic viewsheds. The methodology employed here is one to model, as it demonstrates that use of federal and state registers alone (NRHP "nominated to or eligible for") is often insufficient in identifying places of historic significance to indigenous populations. Volume 3 provides a process that can be used by Native Hawaiian communities to recognize and record areas of cultural importance. It also provides a vocabulary for agencies and Native Hawaiians to facilitate communication and identify areas that could be impacted from proposed undertakings. The process is transferable, helping agencies and stakeholders to: 1) properly engage with indigenous communities prior to the proposal of activities; 2) involve indigenous communities in the identification of their own significant resources and areas; and 3) elucidate indigenous interests in specific planning areas.

## **CONCLUSIONS:**

Vol. 1: The oceans surrounding the Hawaiian Islands retain a wide diversity of submerged cultural resources. The variety of vessel types in the inventory reflects specific influential periods and activities, and major historic events. Furthermore, the archaeological record of submerged vessels is biased, heavily influenced by the processes of site formation/deterioration in the subtropical high-energy marine environment. Analysis of the many types of submerged cultural resources in the Hawaiian Islands, combined with historical and cultural background, allows for a clearer understanding of the nature of these submerged properties, crucial to the NHPA and NEPA review processes.

Vol. 2: The methodology defined in this project initially revealed very few viewsheds that qualified under the "nominated to or eligible for" conditions of the NRHP. In Hawai'i, though, native language archives are an important option, and Honua Consulting employed Hawaiian language resources in order to reveal significant akua and ali`i viewsheds and complete the enhanced database of terrestrial properties appropriate to the project objectives. The effort is replicable and transferable to other indigenous or tribal communities looking to integrate their traditional heritage and sites of significance into evolving resource management efforts.

Vol. 3: The process outlined in the guidance document provides a method for valuesbased planning that has broad utility, demonstrating how the Native Hawaiian cultural landscape approach can be feasibly implemented under existing federal policy. The NHCL approach can assist indigenous communities and agencies in sharing information about areas of mutual interest to ensure that both parties have meaningful interactions concerning places and resources. Additionally, it can allow indigenous groups and agencies to identify and work toward more appropriate management of these places and resources.

## STUDY PRODUCT(S):

- BOEM study report (Vol. 1): Van Tilburg, Hans K. and James P. Delgado. 2017. The Unseen Landscape: Inventory and Assessment of Submerged Cultural Resources in Hawai`i. US Department of the Interior, Bureau of Ocean Energy Management, Pacific OCS Region, Camarillo, CA. OCS Study BOEM 2017-021. 240 pages, with appendices.
- BOEM study report (Vol. 2): 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. US Department of the Interior, Bureau of Ocean Energy Management, Pacific OCS Region, Camarillo, CA. OCS Study BOEM 2017-022. 137 pages, with appendices.
- BOEM study report (Vol. 3): Van Tilburg H, Watson TK, Faria K, Hoomanawanui K, Ho-Lastiama I, Ritte W, Maly K, Nahoopii M, Horcajo K, Kaupiko K, Ball D. 2017. A Guidance Document for Characterizing Native Hawaiian Cultural Landscapes. U.S. Department of the Interior, Bureau of Ocean Energy Management, Pacific OCS Region, Camarillo, CA. OCS Study BOEM 2017-023. 208 pages, with appendices.
- 4. Access database of 2,120 submerged properties, including comprehensive historical/archaeological data existing photos that may be publicly available.
- 5. Microsoft Access database of terrestrial properties, including a standardized profile for each location and any existing photos that may be publicly available.
- 6. Interactive geo-referenced maps (GIS) with the locations of submerged and terrestrial cultural resource sites allowing for information about each site to be accessed from a relational database.
- 7. Workshop plan and subsequent workshop report (47 pages) summarizing notes for meetings between BOEM, NOAA; Honua Consulting (project facilitator), and community stakeholders across the eight main Hawaiian Islands.
- 8. Web page for the BOEM study report (database/GIS not accessible).

\* The affiliation of the Principle Investigator(s) may be different than that listed for Project Manager(s).



Figure 1: Map of study area (within Exclusive Economic Zone of main Hawaiian Islands).