

FINDING OF NO HISTORIC PROPERTIES AFFECTED SAND SURVEY ACTIVITIES ON THE ATLANTIC AND GULF OF MEXICO OUTER CONTINENTAL SHELF

FINDING

The Bureau of Ocean Energy Management (BOEM) has made a Finding of no historic properties affected for this undertaking, which entails geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS). Through conditions on contracts and/or cooperative agreements, active bureau oversight, and geophysical survey, BOEM will avoid affecting any potential historic properties.

DOCUMENTATION IN SUPPORT OF THE FINDING

1 Description of the Undertaking

1.1 Background

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS) for use in future beach nourishment, coastal restoration, and resiliency projects. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

Identifying additional OCS sand resources for beach nourishment and coastal restoration projects is important because sand resources in state waters may be either diminishing, are of poor quality, or otherwise unavailable. Dredging sand closer to shore in state waters can also lead to more severe environmental effects. Using nearshore sand often occurs within the active coastal system, compromising long-term effectiveness of projects and failing to address the need to supplement a deficit in the coastal sand budget. Using OCS sand resources introduces new sand from outside of the active coastal system to decrease the coastal sand deficit, improving project sustainability and geomorphic function (Hilton and Hesp 1996).

By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Data collected may support programs such as the MMP's National Sand Inventory and Deepwater Horizon Gulf Restoration programs, which include the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act) and Natural Resource Damage Assessment and Restoration (NRDAR).

1.2 Project Location and Description

1.2.1 Location

The proposed study area lies within the Atlantic and Gulf of Mexico coastal waters from shore to the 50 m bathymetric contour. It includes portions of the OCS as well as portions of state waters investigated through State Cooperative Agreements (164 ft; Figure 1). The study area also includes adjacent transit corridors used for vessel mobilization, demobilization, and access to support bases. Sensitive and protected areas, such as Cape Cod Bay, Stellwagen Bank National Marine Sanctuary, and Florida Keys National Marine Sanctuary, are specifically excluded.

Prior to sand survey activities commencing, BOEM would extensively coordinate with coastal states, Federal stakeholders, and relevant regional planning bodies at BOEM Sand Management Working Groups (SMWG) and other facilitated meetings to determine areas with the greatest potential need for OCS sand resources and the greatest data gaps, in order to identify priority survey sites within the overall study area. Actual sand survey activities will not occur across the entire study area simultaneously, but will be comprised of smaller survey sites of limited spatial extent at any one time. Detailed survey and sampling plans would be developed and coordinated as appropriate prior to undertaking any sand survey activities; this plan would define the geographic scope and relative timing of the proposed activities and consultations.

Submerged Land Act Boundary to 50m Bathymetry Contour

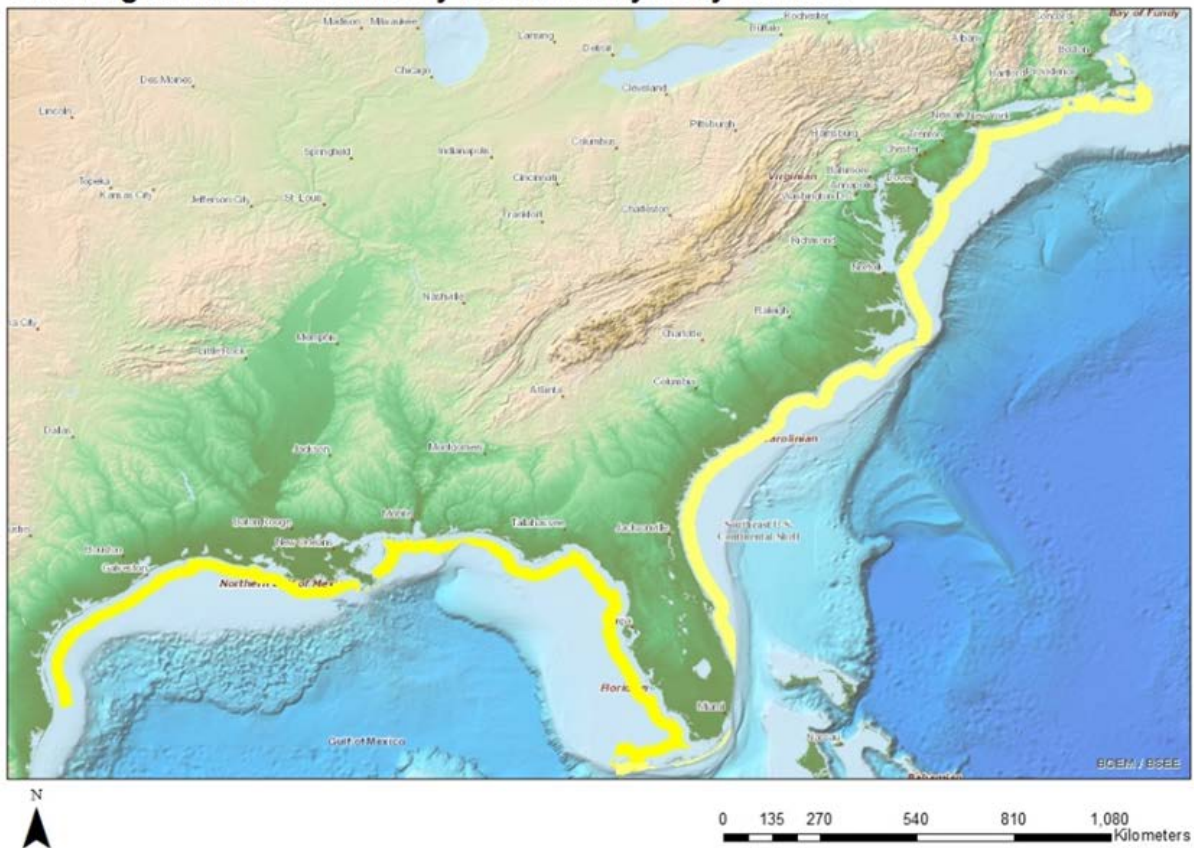


Figure 1. Map depicting extent of the proposed study area in which sand survey activities could occur. Actual activities will be concentrated in discrete areas, comprising a small fraction of the overall project area.

Similar activities could occur in adjacent state waters as an extension of OCS resource area identification and delineation, but unless these activities occur as part of a BOEM cooperative agreement, they are not considered in this analysis. Construction activities, including beach nourishment and wetlands reconstruction, are not considered connected actions and are not included in this analysis. Any such proposals would be considered individually and subjected to separate environmental reviews and consultations.

1.2.2 Description

Sand resources and borrow areas will be identified by conducting two general types of surveys, known collectively as geological and geophysical (G&G) surveys, and relevant laboratory/analytical methods to determine presence and volume of beach-compatible sand based on geological properties such as grain size (Table 1). Geophysical surveys are conducted to obtain information about shallow sediment stratigraphy, shallow hazards (such as presence of munitions of explosive concern or buried cables), archaeological resources, and sensitive benthic habitats. Typical equipment used in these surveys includes subbottom profilers (chirp or boomer), multibeam or interferometric swath bathymetry, side-scan sonar, and magnetometers. ***BOEM has determined that geophysical surveys do not have the potential to affect historic properties.***

Geological surveys involve seafloor-disturbing activities such as sample collection through the use of grab samples or a platform-mounted vibracore, which are conducted to evaluate the quality of mineral resources for their intended use as sand resources. Vibracores are shallow in nature, focusing on characterizing the sand layer, and penetrate to a depth of no more than 20 ft (6 m) or the extent of the sand layer, whichever is less. ***BOEM has determined that the seafloor-disturbing portions of the geological surveys may have the potential to affect historic properties, and that determination is the basis for preparing this Finding.***

Geophysical surveys and geological sampling, whether reconnaissance or site-specific in nature, may be conducted simultaneously, or in sequence, depending upon the information needs, field conditions, and various project management issues or cost factors. Principal goals of the survey design are to decrease the overall number of separate vessel mobilizations and to reduce redundant data collection. The survey design and selection of technologies, deployment modes, and timing should balance data quality needs, potential environmental impacts, and cost factors.

Reconnaissance-level and site-specific surveys will occur either through sequential mobilizations (first to collect geophysical data and then, later, to collect geological or geotechnical information) or through simultaneous (concurrent) mobilization potentially using more than one vessel. Before any geological sampling occurs, the area will be archaeologically cleared by the appropriate means, which could entail advance (sequential) or realtime (concurrent) interpretation of geophysical data, or by divers or video camera.

Sediment sampling could be completed using a grab sampler or a vibracore. In general, grab sampling is conducted when surficial sediment composition needs to be studied as opposed to sediment thickness and stratigraphy. The vibracores are being collected to characterize the sand resource and are not expressly for archaeological interest or identification. The sediment targeted is generally limited to near surface sands, as compared to other geologic facies, such as finer-grained material typical to near-surface or exposed Holocene and Pleistocene back-barrier deposits (where potentially intact relict landforms may be preserved). Those other geological layers are not the target for sampling or subsequent use. Any penetration below the surface sand layer will be incidental and limited in nature.

Table 1. Summary of Geophysical and Geological Techniques

Survey Purpose	Survey Technology	Equipment Used	Studies
<i>Geophysical survey equipment and techniques that will not affect historic properties</i>			
Identify near-bottom geologic stratigraphy and potential relict landscapes	Sub-bottom profiling: Chirp or Boomer Systems	Vessel, chirp profiler, or boomer and hydrophone array (only with boomer source)	Reconnaissance and Site Specific
Map seafloor bathymetry, image the seafloor, identify archaeological resources and benthic habitat potential	Swath bathymetry: multibeam or interferometric systems	Vessel, multibeam or interferometric transducer	Reconnaissance and Site Specific
Image the seafloor, identify archaeological resources, benthic habitat potential and relict landscapes	Side-scan sonar (frequencies greater than 180 kHz), acoustic backscatter using multibeam or interferometric swath bathymetry	Vessel, side scan sonar tow fish	Site-Specific, possibly Reconnaissance
Identify and characterize archaeological resources and hazards potential	Magnetometer	Vessel, magnetometer tow fish	Site-Specific
<i>Geological survey equipment and techniques that may affect historic properties</i>			
Verify geophysical findings, determine sediment attributes and beach compatibility, delineate borrow areas	Sediment samples: Vibracoring or grab samples	Vessel, vibracore coring rig, geologic core barrel (20 feet penetration maximum), limited anchoring if not using dynamic positioning	Reconnaissance and Site Specific

Note: For all geophysical survey techniques, the technology may also be deployed as a sensor on an autonomous underwater vehicle (AUV).

Vibracoring. A 3- or 4-inch (7.6- 10.1-cm) diameter aluminum core barrel mounted on a platform or support assembly would be used to penetrate sediments in the upper 20 ft (6 m) of the seafloor or to the extent of the sand layer, whichever is less. To penetrate dense sands and gravels, the corer’s barrel is vibrated by pneumatic or electric vibrahead, facilitating penetration into the sediment (Fugro 2003; ISSMGE 2005). Some operations use a single, non-reuseable aluminum core barrel to collect and preserve the core sample, whereas others have a reusable core barrel that is lined with a plastic or Kevlar sleeve that collects and preserves the sample. A typical vibracore survey can obtain approximately 15 cores extending approximately 20 ft (6 m) deep in an area measuring 1 square mile (640 acres or 259 hectares). The vibracores are collected along the geophysical track lines in a manner to validate the thickness of the geologic unit and accurately the variability of the sand characteristics. The cores are not collected on a pre-determined regular spaced arbitrary grid; instead they are based on an interpretation of the geophysical data. A vertical sediment sample of 5 to 20 ft (1.5 to 6 m) would be required to determine sediment characteristics and sand resource thickness.

Grab Samplers. Grab samplers are one of the most common methods of retrieving sediment samples from the surface of the seabed. A grab sampler is a device that collects a sample of the topmost layers of the seabed by bringing two steel clamshells together. The grab is lowered to the seabed and activated either automatically or by remote control. The sample is recovered to the ship for examination. Typical sampling rates are between three and four grabs per hour. Grab sampling penetrates from a few inches to a few feet below the seafloor.

Depending on the type of equipment being deployed, a vessel with an A-frame, boom, or davit may be required to manage heavy equipment. Typically, survey equipment will be deployed from a single vessel

ranging from 28 to 120 ft (9 to 37 m) in length, depending on the survey activity to be conducted/equipment needs, and will travel at speeds between 3 and 5 knots (5.6 to 9.3 kilometers per hour (km/hr)) during survey operations. Vessels will be equipped with an integrated navigational system with layback ranging instrumentation to track the position and depth of towed survey equipment. Because acoustic technologies will be used, vessels that generate little acoustic noise (e.g., bow wake, prop wash) are usually deployed. To the maximum extent possible, vessels will use dynamic positioning or live boating in order to avoid anchoring.

Vessels with a vibracoring rig could be larger to support the rig and associated equipment. Vibracore rig configurations vary greatly but typically consist of a tripod or quadrapod consisting of a 20-ft (6 m) long core barrel with a hydraulic, pneumatic, or electric vibrator at the top of the unit. Some rigs use floats instead of a structural tripod or quadrapod to keep the core barrel and vibrator upright so that the only seafloor disturbance occurs locally at the footprint of the 3- to 4-inch diameter core barrel. The vessel must remain in a stationary position during sampling, most often by using dynamic positioning; however, in some cases, anchors are used. Because anchor positioning requires additional time and skill, dynamic positioning is usually the preferred method of choice.

Information from geological surveys (i.e., sediment sampling) will be used in tandem with geophysical survey data to determine the location, volume, and quality of offshore sand resources. Sediment sampling will occur on selected points along the survey track lines where geophysical data has been collected and analyzed for the presence of potential archaeological sites for the purposes of avoidance. Some samples will be taken at sites on the flanks of the sand resource areas to determine the footprint and other geologic characteristics, and other samples will be taken in the center of the sand resource areas to obtain data regarding the thickness of the sand resource.

Of the unknown number of sediment samples anticipated to be collected, most of the samples would be vibracores and only a small portion would be surface grab samples. All samples would primarily be collected for ground-truthing geophysical data and interpretations. The time that the coring equipment is on the sea bottom would be less than 15 minutes for each individual core. Due to the small size of the vibracores and associated platforms, the area of seabed to be disturbed during individual sampling events is estimated to range from 1 to 9 square ft (0.3 to 2.7 square m). The total area of seafloor disturbed by bottom sampling and shallow coring activities would be a very small portion of the total project area.

It is important to note that, typically, vibracoring and other similar subsurface sampling activities are essential to the identification of archaeological sites, in addition to providing basic groundtruthing of geophysical survey data. In essence, these activities are similar to unit testing in onshore, terrestrial environments. However, it is not the goal of this project to intentionally sample into sites. Therefore, before any geological sampling occurs, the geophysical survey data will be analyzed by personnel experienced in the interpretation of these data for the purposes of identifying historic properties that may be impacted by the sampling activities. Should divers, video camera technicians, or geophysicists identify seafloor evidence of potential historic properties that may be impacted (e.g., artifacts on the seafloor surface), the target area coring location will be rejected and a new location will be selected for investigation.

1.3 Area of Potential Effects

As defined at 36 CFR 800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

Specific to the undertaking under discussion in this Finding (geological survey activities) BOEM considers the APE to be the depth and breadth of the seabed that could potentially be impacted by any proposed seafloor/bottom-disturbing activities. The geological survey activities will include the collection of sand core samples through the use of a vibrocore or grab samples through a clamshell, and, under certain conditions, may also include vessel anchoring that, if present, could directly impact historic properties on or under the seafloor. BOEM will require, except in limited circumstances (as discussed above), the use of dynamically-positioned vessels to avoid affects associated with anchoring. The footprint of the potential impacts from the vibrocore or grab sample is estimated to range from 1 to 9 square ft (0.3 to 2.7 square m). Where anchoring is utilized, BOEM considers the bottom disturbance related to those anchors as part of the APE. The area of proposed sampling and associated vessel anchoring will be surveyed prior to seafloor disturbing activities, thereby minimizing the potential for impacting historic properties.

1.4 Consultation and Public Participation

1.4.1 Consultation

BOEM has strived to develop a consistent approach to Section 106 consultation when considering undertakings that may affect historic properties on the OCS. BOEM has previously consulted with State Historic Preservation Offices (SHPOs), federally-recognized Tribes, state-recognized tribes, and the Advisory Council on Historic Preservation (ACHP) for lease issuance and site characterization activities related to wind energy development from Florida to Massachusetts. These consultations cover the Mid-Atlantic, South Atlantic, and Rhode Island and Massachusetts (Information related to these consultations can be viewed at: <http://www.boem.gov/Renewable-Energy/Historic-Preservation-Activities/>). The G&G activities considered in those consultations are similar to the ones discussed in this Finding with the following exception: whereas, during geologic survey activities in this undertaking are utilized to characterize sand deposits on the OCS with a maximum penetration of 20 ft (6 m); those conducted for wind energy development may include borings and could penetrate much deeper into the seafloor to characterize the subsea geology to ensure that it can support wind energy structures. The APE, identification efforts, and avoidance measures discussed in this Finding take into consideration the information obtained during those consultations, and are consistent with those implemented for site characterization activities related to wind energy development in the Atlantic OCS.

Additionally, BOEM consulted with Atlantic coastal state SHPOs, federally-recognized tribes, state-recognized tribes, and the ACHP prior to conducting G&G activities identical to the ones discussed in this Finding, but for the purposes of identifying potential sand resources for beach nourishment and coastal restoration projects directly related to Hurricane Sandy recovery.

As this Finding discusses a separate undertaking from those described above, and in order to initiate the Section 106 consultation process as early in the planning process as possible, BOEM sent letters to the following federally-recognized Tribes, SHPOs, and federal agencies and requesting concurrence with this Finding.

Federally-Recognized Tribes (in Alphabetic Order): Absentee Shawnee Tribe of Oklahoma; Alabama-Coushatta Tribe of Texas; Aroostook Band of Micmacs; Caddo Nation of Oklahoma; Catawba Indian Nation; Cayuga Nation; Cherokee Nation; Chitimacha Tribe of Louisiana; Coushatta Tribe of Louisiana; Choctaw Nation of Oklahoma; The Delaware Nation - Anadarko; The Delaware Nation - Bartlesville; The Delaware Nation - Emporia; Eastern Band of Cherokee Indians; The Eastern Shawnee Tribe of Oklahoma; Houlton Band of Maliseet Indians; Jena Band of Choctaw Indians; Mashantucket Pequot Tribe of Connecticut; Mashpee Wampanoag Tribe; Miccosukee Tribe; Mississippi Tribe of Choctaw Indians; Mohegan Indian Tribe of Connecticut; Muscogee (Creek) Nation; Narragansett Indian Tribe; The

Oneida Indian Nation; Onondaga Nation; Passamaquoddy Tribe - Indian Township; Passamaquoddy Tribe - Pleasant Point; Penobscot Nation; Poarch Band of Creek Indians; Saint Regis Mohawk Tribe; Seminole Nation of Oklahoma; Seminole Tribe of Florida; Seneca Nation of New York; Shinnecock Indian Nation; Stockbridge-Munsee Community of Mohican Indians; Tonawanda Band of Seneca Indians; Tunica-Biloxi Tribe of Louisiana; Tuscarora Nation; United Keetoowah Band of Cherokee Indians in Oklahoma; and Wampanoag Tribe of Gay Head (Aquinnah).

State Historic Preservation Offices: Alabama; Connecticut; Delaware; Florida; Georgia; Louisiana; Maine; Maryland; Massachusetts; Mississippi; New Hampshire; New Jersey; New York; North Carolina; Rhode Island; South Carolina; Texas; and Virginia.

Federal Agencies: Advisory Council on Historic Preservation.

BOEM received concurrence from thirteen (13) SHPOs and five (5) tribal governments. The Alabama SHPO requested additional consultation prior to seabed disturbance (i.e., vibracoring and grab sampling) in Alabama state waters. During a telephone call on August 1, 2018, and in an email of the same date, BOEM committed to additional consultation with the Alabama SHPO prior to any seabed disturbance in Alabama state waters. The Alabama SHPO agreed that BOEM may move forward with all other presently proposed activities. Additionally, as discussed throughout this Finding, any actual dredging projects (whether occurring on the Outer Continental Shelf or in state waters) would get their own, separate Section 106 review(s). BOEM received no response from the remaining SHPOs and tribal governments. Appendix A presents correspondence received from consulting parties to this Finding.

1.4.2 Public Participation

To satisfy the public participation component of the Section 106 process, 36 CFR 800.2(d)(2), BOEM published a Federal Register notice inviting public input on the identification of historic properties or potential effects to historic properties. BOEM received no public comments on this Federal Register notice. BOEM has made this Finding available to the public through its website.

2 Description of the Steps Taken to Identify Historic Properties

2.1 Existing and Available Information

BOEM has reviewed existing and available information regarding historic properties that may be present within and near the proposed study area. Sources of this information include consultations with appropriate parties, SHPOs, and Indian Tribes on similar proposed G&G activities on the Atlantic and Gulf of Mexico OCS, remote-sensing data collected during oil-and-gas industry geophysical surveys in the Gulf of Mexico, and accessing information gathered by BOEM for studies of archaeological resource potential on the Gulf and Atlantic OCS (CEI 1977; Pearson et al. 2003; TRC 2012). Pearson et al. (2003) and TRC (2012) compiled information on historic shipwrecks in the Gulf of Mexico and Atlantic, respectively, and resulted in BOEM's (Gulf of Mexico) Archaeological Resource Database (ARD) and Atlantic Shipwreck Database (ASD). Additionally, CEI (1977) TRC (2012) model the potential for pre-European contact sites based on reconstruction of past landscapes, human settlement patterns, and site formation and preservation conditions. These reports are publically available (without their associated databases) and can be found on BOEM's website at: <https://marinecadastre.gov/espis/#/>.

The Gulf of Mexico ARD and Atlantic SD contain information on both known and reported shipwrecks on the OCS, and they are informed by a variety of sources including industry-conducted surveys (when available), archaeological field investigations, archival research, published materials, and other existing

governmental databases. The accuracy of location information in the ARD and ASD is quantified by a ranking between “1” and “4.” Shipwrecks that have been positively located through recent survey are given a location reliability of “1.” Those shipwrecks with specific locations provided by informants, reported in literature, or marked on a map are considered a “2.” A location reliability of “3” indicates that the location is given generally rather than specifically by an informant, in the literature, or on a map. Those locations that are unreliable or vague, such as “off the coast of North Carolina” or “at sea” are ranked at “4.”

2.1.1 Historic Shipwrecks and Obstructions on the Atlantic and Gulf of Mexico OCS

Offshore archaeological resources that may exist within the proposed study area include the wrecksites of historic period shipwrecks and aircraft. For the entire OCS, based on the historically available information compiled in the ARD (Pearson et al. 2003) and ASD (TRC 2012), there are 12,563 records related to wrecksites within the Atlantic OCS and 3,230 related to wrecksites in the Gulf of Mexico OCS. These are presented as a table of distributions by state (Table 2) and by locational reliability (Table 3). The information contained in the ARD and ASD clearly shows that there is a high potential for the presence of historic period shipwrecks and aircraft throughout the OCS, including within and near the proposed study area.

Table 2. Distribution of Shipwrecks in BOEM’s Gulf of Mexico Archaeological Resource Database and Atlantic Shipwreck Database by State

Nearest State	Number of Wrecks Offshore State	Miles of Shoreline in State*	Sites Per Linear Mile Offshore State
Alabama	172	53	3.25
Connecticut	13	96	0.14
Delaware	296	28	10.57
Florida (Atlantic Coast)	1050	1350	1.28
Florida (Gulf Coast)	681		
Georgia	159	100	1.59
Louisiana	1459	397	3.68
Maine	135	228	0.59
Maryland	618	31	19.93
Massachusetts	750	192	3.90
Mississippi	68	44	1.54
New Hampshire	10	13	0.77
New Jersey	1732	130	13.32
New York	362	127	2.85
North Carolina	1512	301	5.02
Rhode Island	139	40	3.48
South Carolina	427	187	2.28
Texas	728	367	1.98
Virginia	1676	112	14.96
TOTAL	11987**	3796	3.16

* "U.S. International Borders: Brief Facts", Congressional Research Service, November 9, 2006. Available at: <http://congressionalresearch.com/RS21729/document.php?study=U.S.+International+Borders+Brief+Facts>

**Note: There are additional records in the Gulf of Mexico ARD and in the Atlantic SD that do not have nearest state identified.

Table 3. Number of Previously-Identified or Reported Shipwrecks in BOEM’s Gulf of Mexico Archaeological Resource Database and Atlantic Shipwreck Database by Locational Reliability

Planning Area	Locational Reliability	Number of Wrecks by Locational Reliability	Total Wrecks
Atlantic	1	858	12563
	2	3707	
	3	359	
	4 or blank	7639	
Gulf of Mexico	1	716	3230
	2	934	
	3	567	
	4	1013	
TOTAL			15793

2.1.2 Submerged Pre-contact Archaeological Resources on the Atlantic and Gulf of Mexico OCS

Based on a geo-spatial query on the ARD and ASD, approximately 4,234 historic period shipwrecks may potentially be found in the overall proposed study area (Figures 2 and 3 and Table 4). This includes 2,854 historic period shipwrecks within the Atlantic OCS portion of the study area and 1,380 within the Gulf of Mexico OCS portion of the study area.

Relevant data from the ARD and ASD will be made available to the appropriate contractor or cooperative agreement partner agency during the survey design and planning process to ensure that these potential wrecksites will be considered and avoided during the planning phases of G&G surveys. The geophysical surveys conducted prior to bottom-disturbance (see below) will serve to identify and avoid historic properties that may be present in sand characterization areas selected for geological survey activities.

Based on available information regarding paleoshoreline positions, relative sea level rise, and regional geology, the proposed project area is also considered to have moderate potential to contain relict landforms that may contain pre-contact period archaeological sites. If they survived the coastal processes associated with sea level rise, these sites may exist in an undisturbed form below the sand layers in particular geological facies dating to the Holocene and Pleistocene epochs. Since the purpose of the proposed project is to characterize sand resources on the OCS, it is highly unlikely that these underlying Holocene and Pleistocene layers will be disturbed during geological sampling. Indeed, it is a goal of the project to *not* disturb any layers beneath these modern, reworked sediments.

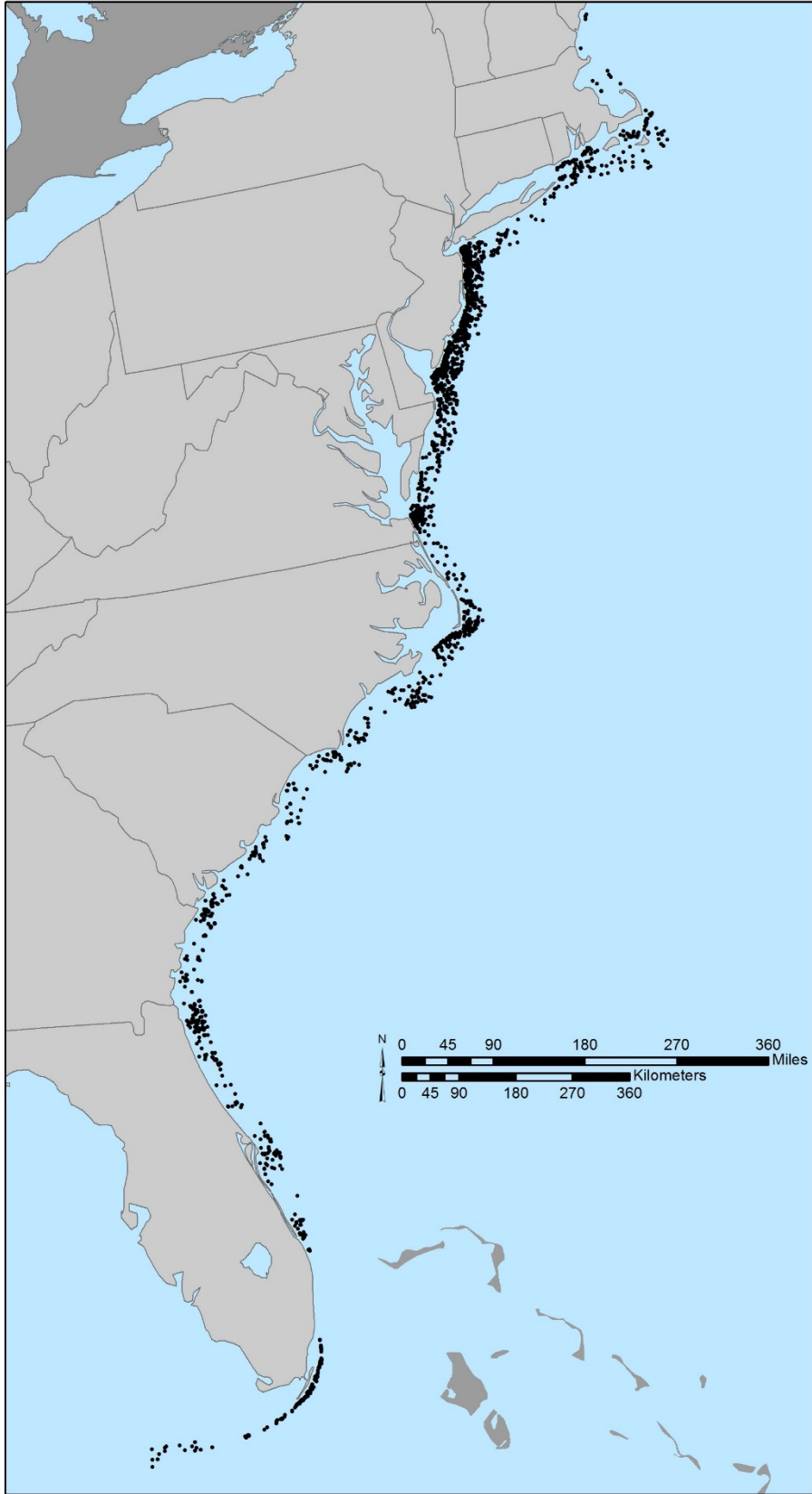


Figure 2. Map depicting the locations of records in BOEM's Atlantic Shipwreck Database that are located within the proposed study area.

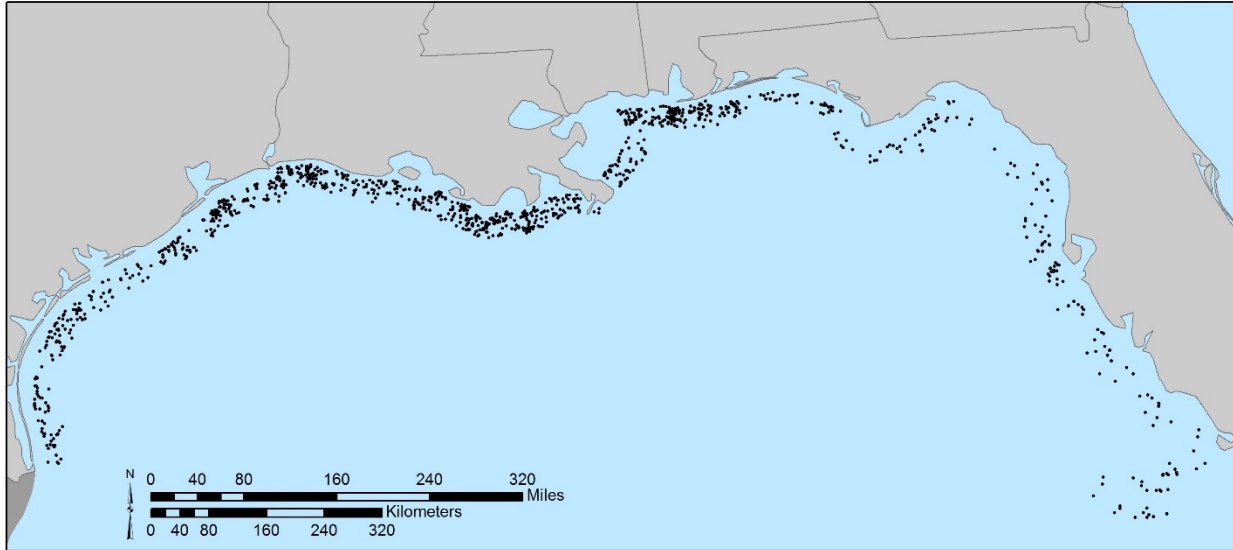


Figure 3. Map depicting the locations of records in the BOEM's Gulf of Mexico Archaeological Resource Database that are located within the proposed study area.

Table 4. Number of Previously-Identified or Reported Shipwrecks in BOEM's Gulf of Mexico Archaeological Resource Database and Atlantic Shipwreck Database within the Proposed Study Area, by Locational Reliability

Planning Area	Locational Reliability	Number of Wrecks by Locational Reliability	Total Wrecks
Atlantic	1	670	2854
	2	2040	
	3	15	
	4 or blank	129	
Gulf of Mexico	1	276	1380
	2	404	
	3	220	
	4	480	
TOTAL			4,234

2.2 Required Identification Efforts to be specified in the Data Collection Contract

Survey vessels conducting the geophysical surveys would follow predetermined track lines so that the desired coverage of the seafloor is achieved. The length and orientation of the lines are determined by the feature to be mapped. In general, lines are oriented longitudinally and transverse to the feature, and would extend beyond the feature itself to define the footprint and further understand the surrounding geology. Although a grid pattern would be used, line spacing could be expanded in some areas and contracted in other areas that require greater detail. The grid pattern for each survey should cover the maximum area of potential effect for all anticipated physical disturbances. Specific grid requirements are as follows:

- Line spacing for any geophysical data for shallow hazards assessments (subbottom profilers and side-scan sonar) should not exceed 492 ft (150 m) throughout the area.
- Line spacing for all chirp seismic and magnetometer data for archaeological resources assessments should not exceed 98 ft (30 m) throughout the area.

- Line spacing for multibeam, or interferometric swath bathymetry or side-scan sonar should be suitable for the water depths encountered and provide full coverage of the seabed plus suitable overlap and resolution of small discrete targets of 1.5 to 3 ft (0.5 to 1.0 m) in diameter at the relevant slant range.
- When conducting simultaneous studies, the instrument that needs the narrowest line spacing would determine the survey coverage and line spacing.
- All track lines should run generally parallel to each other. Tie-lines running perpendicular to the track lines should not exceed a line spacing of 492 ft (150 m) throughout the survey area.
- All data would be collected to the highest standard at a maximum line spacing of 98 ft (30 m). This standard requirement may be adjusted by BOEM in consultation with state stakeholders if different or narrower line spacing is determined to be necessary.

BOEM will require that all of the data collected during the geophysical surveys will be integrated together utilizing a state of the art GPS positioning system with real-time kinematic corrections capable of sub-meter accuracy.

3 Description of Proposed Avoidance Measures

BOEM will adopt an avoidance strategy to avoid potential effects to sensitive cultural resources and historic properties, such as historic shipwrecks and pre-contact archaeological resources. For example, with advance or real-time mapping of the seafloor or geological framework where geological sampling and other bottom-disturbing activities are proposed, activities can be conducted in such a way as to avoid or move to another area if sensitive resources are present.

3.1 Proposed Archaeological Mitigation Measures

For this undertaking, BOEM will limit vibracore and grab sampling to near-surface sand deposits and within a maximum bottom disturbance footprint of 9 square ft (~2.7 square m) for each sample. The sampling duration for a 20 ft (6 m), 3-4 inch diameter vibracore typically is less than 15 minutes in place. The cores are being collected to characterize the sand resource and are not expressly for archaeological interest or identification. The sediment targeted is generally limited to near surface sands, as compared to other geologic facies, such as finer-grained material typical to near-surface or exposed Holocene and Pleistocene back-barrier deposits (where potentially intact landforms may be preserved). Those other geological layers are not the target for sampling or subsequent use. Any penetration below the surface sand layer will be incidental and limited in nature. Any geologic or other information of archaeological interest will be documented, and any indicator of potentially intact landforms (e.g., color change in the core indicating organic deposits) will be noted and photographed. This information will be made available for use in the design of any future borrow areas to ensure that proposed activities also include the necessary avoidance protections.

BOEM will require to the maximum extent possible the use of a dynamically positioned vessel platform during vibracore and grab sampling operations to avoid unnecessary anchoring and bottom disturbance. No spudding or clump weight anchoring will be allowed. Although BOEM plans to minimize anchoring to the extent possible, there may be instances where anchoring cannot be avoided due to emergency situations or field situations/conditions. In these instances, a minimum sized anchor/anchor array will be used and advance or real-time clearance, through remote sensing, diver observation, or other means within the footprint of anchoring, will be required.

Before bottom-sampling is conducted, the contractor or cooperative agreement partner agency will submit a geological sampling plan to BOEM, which BOEM will share with relevant and interested stakeholders

as appropriate. While sub-contractors may be utilized to fulfill work requirements, external or third-party participation in field work cannot be accommodated because of cost and logistic implications, which include complex scheduling and the potential for changing vessel size requirements. Upon request, BOEM will make available pertinent geological data, including core logs, photographs, and related textural data, in an electronic format. Prior to distribution, BOEM will review this information and determine if any of the data contains sensitive cultural information.

BOEM will require advance (sequential) or real-time (concurrent) site specific geophysical survey information, from sub-bottom, side scan sonar or multibeam/swath backscatter of equivalent resolution, and magnetometer data and/or direct observation, to determine the presence of potential archaeological resources prior to undertaking any seafloor-disturbing activities. BOEM or its contractors, with the assistance of a qualified marine archaeologist, would use this information to ensure that physical impacts to archaeological resources do not take place. All sampling must occur within the effective coverage of geophysical data. In the instances of sequential geophysical and geological data, the contractor or cooperative agreement partner agency must provide to BOEM a determination by a qualified marine archaeologist as to whether any potential archaeological resources are present in the area and can be effectively avoided. In instances where sequential data collection is not possible, concurrent geophysical surveys and geological sampling may occur real-time provided a qualified marine archaeologist participates in the field effort or has concurrent access to review data quality, interpret said data, and provide assurance that the immediate area is clear before vibracoring, grab sampling, and/or associated anchoring may begin. The contractor or cooperative agreement partner agency will report to BOEM all potential historic properties discovered during the geophysical survey and implement a buffer distance around the extent of the potential resource (not to be less than 164 ft (50 m)) based on the qualified marine archaeologist's interpretation of the geophysical survey data. BOEM will ensure that the qualified marine archaeologist has sufficient authority to require the minimum buffer, or a greater buffer when warranted. BOEM will work closely with the contractor or cooperative agreement partner agency and qualified marine archaeologist to ensure historic properties are not affected by the undertaking and that reporting of potential historic properties and implementation of avoidance measures is timely and complete. BOEM will ensure the "qualified marine archaeologist" meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (48 FR 44738- 44739) and has demonstrable, professional experience in interpretation of marine geophysical data. With sufficient coordination and notice, BOEM archaeologists may participate in data review and interpretation.

BOEM will ensure that all geological sampling must avoid potential archaeological resources (e.g., known or suspected shipwrecks) by a minimum of 164 ft (50 m). The avoidance distance will be calculated from the maximum discernible extent of the archaeological resource. During vibracoring, vibracore penetration rates will be monitored to help ensure minimum sampling in geology units that are not indicative of surface sands.

3.2 Post-Review Discoveries Clause

BOEM will require that a post-review discoveries clause be included in the contract. This clause describes the actions that the contractor or cooperative agreement partner agency is required to take in the event of a post-review archaeological discovery during geological survey activities associated with this undertaking. In this event, BOEM will follow the post-review discoveries process outlined at 36 CFR 800.13(b)(3).

In addition to the reporting requirements during the geophysical surveys, BOEM will require the contractor or cooperative agreement partner agency to report and avoid any previously undiscovered suspected archaeological resource, and take precautions to protect the resource from activities. Undiscovered archaeological resources may include shipwrecks (e.g., a sonar image or visual

confirmation of an iron, steel, or wooden hull, wooden timbers, anchors, concentrations of historic objects, piles of ballast rock), pre-contact artifacts, etc. within the project area.

If the contractor or cooperative agreement partner agency discovers any archaeological resource while conducting geological survey operations, BOEM will require the contractor or cooperative agreement partner agency to: immediately halt seafloor/bottom-disturbing activities operations that may continue to affect the discovery; notify the BOEM Federal Preservation Officer within 24 hours of its discovery; and keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until BOEM has made an evaluation and instructs the contractor or cooperative agreement partner agency how to proceed. In the event that bottom disturbing activities impact potential historic properties, BOEM will require that the contractor or cooperative agreement partner agency and the qualified marine archaeologist working during the time of the impact provide a statement documenting the extent of these impacts to BOEM within 24 hours.

4 The Basis for the Determination of No Historic Properties Affected

This Finding (see 36 CFR Part 800.4(d) of the Advisory Council on Historic Preservation's regulations implementing Section 106 of the National Historic Preservation Act) is based on the review conducted by BOEM of existing and available information, the proposed identification efforts and avoidance measures that will be included in the contract or cooperative agreement, the minimally invasive nature of the geological sampling itself, and the conclusions drawn from this information. The mandatory avoidance measures that will be included in the contract will ensure that the proposed undertaking will not affect historic properties.

5 References

- Coastal Environments, Inc. (CEI) 1977. Cultural Resources Evaluation of the Northern Gulf of Mexico Continental Shelf. Prepared for Interagency Archaeological Services Office of Archaeology and Historical Preservation, National Park Service, US Department of the Interior, Baton Rouge, LA.
- Fugro. 2003. Geophysical and geological techniques for the investigation of near-seabed soils and rocks. A handbook for non-specialists. U.S. Rev. 02-23/03. 55 pp. Available online at: <http://www.fugro.com/downloads/corporate/other/GP-GT-TECHNIQUES-handbook.pdf>. Accessed September 24, 2013.
- Hilton, Michael J. and Patrick Hesp. 1996. Determining the Limits of Beach-Nearshore Sand Systems and the Impact of Offshore Coastal Sand Mining. *Journal of Coastal Research*. Vol. 12, No. 2 (Spring 1996), pp. 496-519.
- International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE). 2005. Geotechnical & Geophysical Investigations for Offshore and Nearshore Developments. Compiled by Technical Committee 1, International Society for Soil Mechanics and Geotechnical Engineering, September 2005. 94 pp. Available online: <http://www.geonet.nl/upload/documents/dossiers/Investigations%20for%20developments.pdf>. Accessed September 24, 2013.
- 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. Volume I: Executive Summary. U.S. Dept. of the Interior, Minerals

Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2003-060, 13 pp., 3 volumes.

TRC Environmental Corporation. 2012. Inventory and analysis of archaeological site occurrence on the Atlantic outer continental shelf. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2012-008. 324 pp.

APPENDIX A

As described in Section 1.4.1, documentation of SHPO and tribal correspondence is included as Appendix A. Correspondence is listed in order of SHPO correspondence first, arranged by alphabetical order of state abbreviation, followed by tribal correspondence. Thus, correspondence from the SHPO of MD (Maryland) is included ahead of correspondence from the SHPO of ME (Maine).



ALABAMA HISTORICAL COMMISSION

468 South Perry Street
P.O. Box 300900
Montgomery, Alabama 36130-0900
334-242-3184 / Fax: 334-240-3477

Lisa D. Jones
Executive Director
State Historic Preservation Officer

July 25, 2018

Ms. Brandi Carrier
Deputy Federal Historic Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Re: AHC 2018-1044
Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf
Statewide

Dear Ms. Carrier:

Upon review of the material submitted to our office for the above referenced project, we find that your submission did not contain sufficient information for our office to make a determination regarding the project's effect on cultural resources that may be eligible for the National Register of Historic Places (NRHP).

Although there will be no consultation necessary for the remote sensing portions of the project, further consultation will be necessary regarding the specific areas in Alabama State waters identified for grab sampling and vibracore. We look forward to working with you on this project.

We appreciate your commitment to helping us preserve Alabama's historic archaeological and architectural resources. Should you have any questions, please contact Stacye Hathorn at 334.230.2649 or Stacye.Hathorn@ahc.alabama.gov. Have the AHC tracking number referenced above available and include it with any future correspondence.

Sincerely,

A handwritten signature in blue ink that reads "Lee Anne Wofford".

Lee Anne Wofford
Deputy State Historic Preservation Officer

LAW/SGH/sgh



Carrier, Brandi <brandi.carrier@boem.gov>

[EXTERNAL] Sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf


2 messages

Woods, Nicole <Nicole.Woods@ahc.alabama.gov>
To: "brandi.carrier@boem.gov" <brandi.carrier@boem.gov>

Mon, Jul 30, 2018 at 6:34 AM

Nicole J. Woods,
Administrative Support Assistant III
Historic Preservation Division
Alabama Historical Commission
468 S. Perry Street
Montgomery, AL
36130-0900 (US Post)
36104 (Courier)
Phone: (334) 230-2673
Nicole.Woods@ahc.alabama.gov
<http://ahc.alabama.gov/>



 **18-1044.pdf**
332K

Carrier, Brandi <brandi.carrier@boem.gov>
To: Stacye.Hathorn@ahc.alabama.gov

Wed, Aug 1, 2018 at 8:02 AM

Good morning Ms. Hathorn,

I'm writing to follow up on the letter from Deputy State Historic Preservation Officer Lee Anne Wofford, and our phone discussion today regarding our proposed geophysical and geological surveying activities offshore.

BOEM wanted to prepare one programmatic EA to allow the geophys and vibracoring/grab sampling work to move forward if, in future, states wanted to do that in state waters. As discussed, any ground disturbing activities that are proposed to occur within state waters would be contemplated under a Cooperative Agreement between the state and the Federal government, in which case the state would be heavily involved / drive the process and additional consultation with your office would occur at that time.

As we agreed, BOEM will move forward with all presently proposed activities *except* ground disturbance in Alabama state waters. Ground disturbance (i.e., vibracoring and grab sampling) proposed for Alabama state waters would require additional consultations with your office. Additionally, any actual dredging projects (whether occurring on the Outer Continental Shelf or in state waters) would get their own, separate Section 106 review(s).


Thank you again for taking the time to chat this morning. Please let me know if you have any further questions or concerns.

Best Wishes,
Brandi

Brandi M. Carrier, MA, RPA
Archaeologist | Deputy Federal Preservation Officer
US Department of the Interior, Bureau of Ocean Energy Management
Office of Environmental Programs, Division of Environmental Assessment

760 Paseo Camarillo, Suite 102 (CM-102) | Camarillo, CA 93010
Phone: 703.787.1623
Mobile: 571.393.4358

[Quoted text hidden]

 **18-1044.pdf**
332K

July 26, 2018

Review Code: 2018.06.22.01

Ms. Brandi Carrier
Deputy Federal Preservation Officer
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, VA 20166

**Project: Section 106 Consultation
B.O.E.M Sand Survey Activities on the Atlantic and Gulf of Mexico Outer Shelf**

Dear Ms. Carrier:

The staff of the State Historic Preservation Office has reviewed the materials submitted regarding the above cited project. The Area of Potential Effect has not been surveyed for archaeological properties, hence, we have little record of the possible sites involved. However, the nature of the methods employed for the survey, combined with the safeguards you have proposed, will ensure that no archaeological resources will be disturbed. Based on this review, we have made the determination that this undertaking will not affect historic properties, eligible for or listed in the National Register of Historic Places.

If you have any questions, please contact me through craig.lukezic@state.de.us, or (302) 736-7407.

Sincerely,



Craig Lukezic
Archaeologist and Cultural Resource Specialist

cc: Gwen Davis, Deputy SHPO, Division of Historical and Cultural Affairs



FLORIDA DEPARTMENT *of* STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

Brandi Carrier
Deputy Federal Historic Preservation Officer
Department of Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, Virginia 20166

July 3, 2018

RE: DHR Project File No.: 2018-3184, Received by DHR: June 27, 2018
Project: *Geologic Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf*
County: Statewide

Ms. Carrier:

The Florida State Historic Preservation Officer reviewed the referenced project for possible effects on historic properties listed, or eligible for listing, in the *National Register of Historic Places*. The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended, and its implementing regulations in *36 CFR Part 800: Protection of Historic Properties*.

This office concurs with the Bureau of Ocean Energy Management's determination that the proposed project will have no effect on historic properties listed, or eligible for listing, in the *National Register of Historic Places*.

If you have any questions, please contact Corey Lentz, Historic Sites Specialist, by email at Corey.Lentz@dos.myflorida.com, or by telephone at 850.245.6339 or 800.847.7278.

Sincerely,

A handwritten signature in blue ink that reads "Jason Aldridge". Below the signature, the word "For" is written in a smaller, lighter blue font.

Timothy A Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer



United States Department of the Interior RECEIVED

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

JUN 23 2018

JUN 14 2018 ARCHAEOLOGY

Ms. Kristen Sanders
SHPO
Office of Cultural Development
PO BOX 44247
Baton Rouge, Louisiana 70804

Dear Ms. Sanders:

The Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, seeks your concurrence and comments on its Finding of No Historic Properties Affected (Finding) for geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS).

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico OCS for use in future beach nourishment, coastal restoration, and resiliency projects. By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

BOEM has determined that the proposed project, which comprises both geophysical and geological (G&G) survey activities, is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800 *et seq.*). BOEM initiates this Section 106 consultation with you pursuant to 36 CFR 800.2(c)(2)(ii) to consider a wide range of views and information and specifically to ensure that through the archaeological identification efforts and avoidance measures implemented, no historic properties are affected during seafloor disturbance.

BOEM's Finding, made pursuant to the Secretary of the Interior's Professional Qualifications Standards, is based on BOEM's review of existing and available information, previous consultations, the conclusions drawn from this information, the proposed identification efforts and avoidance measures that will be included in the research, and the minimally invasive nature of the geologic activity.

The enclosed documentation of this Finding explains the undertaking in more detail and how the surveys will be conducted; provides BOEM's rationale for choosing the area of potential effects; and details the archaeological identification efforts that will be conducted prior to any bottom disturbance and the avoidance measures that will be in place to ensure that historic properties are not affected during bottom-disturbing activities.

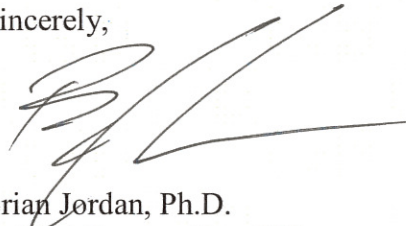
BOEM requests that you review the Finding, and, if you agree, provide your concurrence. Additionally, BOEM invites your comments and any information or concerns that you may have regarding historic properties potentially affected by the proposed undertaking. In accordance with 36 CFR 800.3(c)(4), we look forward to receiving your concurrence or comments within 30 days of your receipt of this submittal.

Please submit your concurrence, comments, or questions about this undertaking to Ms. Brandi Carrier, Deputy Federal Historic Preservation Officer, at (703) 787-1623 or brandi.carrier@boem.gov, or to the following address:

Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Thank you in advance for your timely response.

Sincerely,



Brian Jordan, Ph.D.
Federal Preservation Officer

Enclosure:

Finding of No I

No known historic properties will be affected by this undertaking. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention.



Kristin P. Sanders
State Historic Preservation Officer
Date

RECEIVED

JUN 25 2018

MASS. HIST. COMM

RC.04698



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT

WASHINGTON, DC 20240-0001

JUN 14 2018

Ms. Brona Simon
SHPO & Director
Massachusetts Historic Commission
220 Morrissey Boulevard
Boston, Massachusetts 02125

CONCURRENCE
7/16/18

Brona Simon
BRONA SIMON
STATE HISTORIC
PRESERVATION OFFICER
MASSACHUSETTS
HISTORICAL COMMISSION

Dear Ms. Simon:

The Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, seeks your concurrence and comments on its Finding of No Historic Properties Affected (Finding) for geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS).

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico OCS for use in future beach nourishment, coastal restoration, and resiliency projects. By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

BOEM has determined that the proposed project, which comprises both geophysical and geological (G&G) survey activities, is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800 *et seq.*). BOEM initiates this Section 106 consultation with you pursuant to 36 CFR 800.2(c)(2)(ii) to consider a wide range of views and information and specifically to ensure that through the archaeological identification efforts and avoidance measures implemented, no historic properties are affected during seafloor disturbance.

BOEM's Finding, made pursuant to the Secretary of the Interior's Professional Qualifications Standards, is based on BOEM's review of existing and available information, previous consultations, the conclusions drawn from this information, the proposed identification efforts and avoidance measures that will be included in the research, and the minimally invasive nature of the geologic activity.

The enclosed documentation of this Finding explains the undertaking in more detail and how the surveys will be conducted; provides BOEM's rationale for choosing the area of potential effects; and details the archaeological identification efforts that will be conducted prior to any bottom disturbance and the avoidance measures that will be in place to ensure that historic properties are not affected during bottom-disturbing activities.

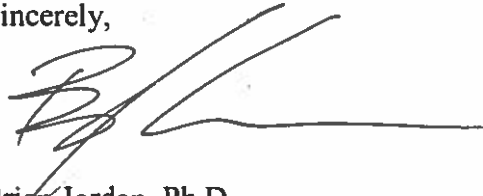
BOEM requests that you review the Finding, and, if you agree, provide your concurrence. Additionally, BOEM invites your comments and any information or concerns that you may have regarding historic properties potentially affected by the proposed undertaking. In accordance with 36 CFR 800.3(c)(4), we look forward to receiving your concurrence or comments within 30 days of your receipt of this submittal.

Please submit your concurrence, comments, or questions about this undertaking to Ms. Brandi Carrier, Deputy Federal Historic Preservation Officer, at (703) 787-1623 or brandi.carrier@boem.gov, or to the following address:

Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Thank you in advance for your timely response.

Sincerely,



Brian Jordan, Ph.D.
Federal Preservation Officer

Enclosure:

Finding of No Historic Properties Affected

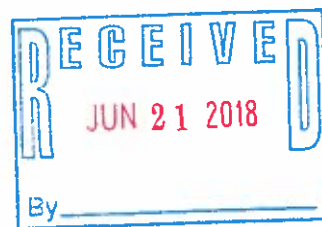
201803159

F
BOEM
TJN



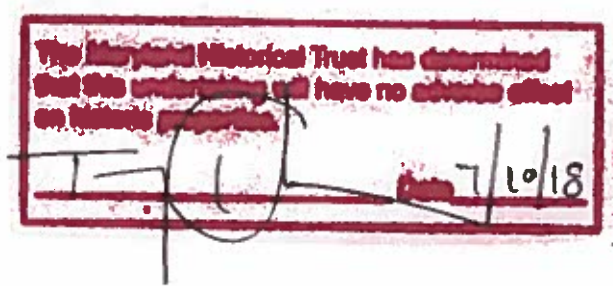
United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001



JUN 14 2018

Ms. Elizabeth Hughes
SHPO
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, Maryland 21032-2023



Dear Ms. Hughes:

The Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, seeks your concurrence and comments on its Finding of No Historic Properties Affected (Finding) for geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS).

MD

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico OCS for use in future beach nourishment, coastal restoration, and resiliency projects. By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

BOEM has determined that the proposed project, which comprises both geophysical and geological (G&G) survey activities, is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800 *et seq.*). BOEM initiates this Section 106 consultation with you pursuant to 36 CFR 800.2(c)(2)(ii) to consider a wide range of views and information and specifically to ensure that through the archaeological identification efforts and avoidance measures implemented, no historic properties are affected during seafloor disturbance.

BOEM's Finding, made pursuant to the Secretary of the Interior's Professional Qualifications Standards, is based on BOEM's review of existing and available information, previous consultations, the conclusions drawn from this information, the proposed identification efforts and avoidance measures that will be included in the research, and the minimally invasive nature of the geologic activity.

TJN LN 200 7/10/18

The enclosed documentation of this Finding explains the undertaking in more detail and how the surveys will be conducted; provides BOEM's rationale for choosing the area of potential effects; and details the archaeological identification efforts that will be conducted prior to any bottom disturbance and the avoidance measures that will be in place to ensure that historic properties are not affected during bottom-disturbing activities.

BOEM requests that you review the Finding, and, if you agree, provide your concurrence. Additionally, BOEM invites your comments and any information or concerns that you may have regarding historic properties potentially affected by the proposed undertaking. In accordance with 36 CFR 800.3(c)(4), we look forward to receiving your concurrence or comments within 30 days of your receipt of this submittal.

Please submit your concurrence, comments, or questions about this undertaking to Ms. Brandi Carrier, Deputy Federal Historic Preservation Officer, at (703) 787-1623 or brandi.carrier@boem.gov, or to the following address:

Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Thank you in advance for your timely response.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Jordan', written over a horizontal line.

Brian Jordan, Ph.D.
Federal Preservation Officer

Enclosure:

Finding of No Historic Properties Affected

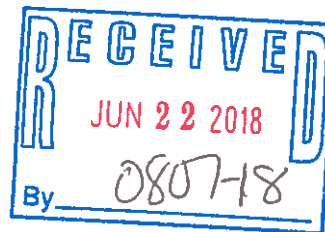


United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

JUN 14 2018

Mr. Kirk F. Mohney
Director
Maine Historic Preservation Commission
55 Capitol Street, Station 65
Augusta, Maine 04333



Dear Mr. Mohney:

The Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, seeks your concurrence and comments on its Finding of No Historic Properties Affected (Finding) for geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS).

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico OCS for use in future beach nourishment, coastal restoration, and resiliency projects. By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

BOEM has determined that the proposed project, which comprises both geophysical and geological (G&G) survey activities, is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800 *et seq.*). BOEM initiates this Section 106 consultation with you pursuant to 36 CFR 800.2(c)(2)(ii) to consider a wide range of views and information and specifically to ensure that through the archaeological identification efforts and avoidance measures implemented, no historic properties are affected during seafloor disturbance.

BOEM's Finding, made pursuant to the Secretary of the Interior's Professional Qualifications Standards, is based on BOEM's review of existing and available information, previous consultations, the conclusions drawn from this information, the proposed identification efforts and avoidance measures that will be included in the research, and the minimally invasive nature of the geologic activity.

The enclosed documentation of this Finding explains the undertaking in more detail and how the surveys will be conducted; provides BOEM's rationale for choosing the area of potential effects; and details the archaeological identification efforts that will be conducted prior to any bottom disturbance and the avoidance measures that will be in place to ensure that historic properties are not affected during bottom-disturbing activities.

BOEM requests that you review the Finding, and, if you agree, provide your concurrence. Additionally, BOEM invites your comments and any information or concerns that you may have regarding historic properties potentially affected by the proposed undertaking. In accordance with 36 CFR 800.3(c)(4), we look forward to receiving your concurrence or comments within 30 days of your receipt of this submittal.

Please submit your concurrence, comments, or questions about this undertaking to Ms. Brandi Carrier, Deputy Federal Historic Preservation Officer, at (703) 787-1623 or brandi.carrier@boem.gov, or to the following address:

Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Thank you in advance for your timely response.

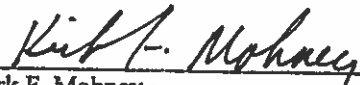
Sincerely,



Brian Jordan, Ph.D.
Federal Preservation Officer

Enclosure:

Finding of No Historic Properties Affected

CONCUR	
	6/27/18
Kirk F. Mohney, State Historic Preservation Officer	Date

MHPC # 0807-18



HISTORIC PRESERVATION DIVISION
P. O. BOX 571
Jackson, MS 39205-0571
Phone 601-576-6940 Fax 601-576-6955
Website: mdah.ms.gov

July 13, 2018

Ms. Brandi Carrier
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, Virginia 20166

RE: Proposed geological sampling activities for sand survey activities on the Atlantic and Gulf of Mexico Outer Continental Shelf, (BOEM) MDAH Project Log #06-135-18, Report # TBA, Hancock, Harrison and Jackson Counties

Dear Ms. Carrier:

We have reviewed the scope-of-work, received on June 25, 2018, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After review, we accept the proposal.

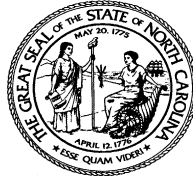
We look forward to reviewing the report, when finalized. If you need more information, please let me know. We would appreciate if we could be provided location information for the resources off the coast of Mississippi that are depicted on the map in Figure 3 of the submission. Please let us know if this is possible.

Sincerely,

A handwritten signature in black ink that reads "Hal Bell". The signature is written in a cursive, flowing style.

Hal Bell
Review and Compliance Officer

FOR: Katie Blount
State Historic Preservation Officer



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

July 3, 2018

Brandi Carrier
Department of the Interior
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, VA 20166

Re: Geological Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf,
Multi County, ER 18-1387

Dear Ms. Carrier:

Thank you for your letter of June 14, 2018, concerning the above project.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

A handwritten signature in blue ink that reads "Renee Gledhill-Earley".

for Ramona M. Bartos



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Cultural Resources
19 Pillsbury Street, Concord, NH 03301-3570
TDD Access: Relay NH 1-800-735-2964
www.nh.gov/nhdhr

603-271-3483
603-271-3558
FAX 603-271-3433
preservation@dcr.nh.gov

July 2, 2018

Ms. Brandi Carrier
Deputy Historic Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

RE: Section 106 Project Review for Bureau of Ocean Energy Management Geological Sampling
Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf **RPR 9837**

Dear Ms. Carrier:

In accordance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470), and with federal Advisory Council on Historic Preservation regulations, *Protection of Historic Properties* (36 CFR Part 800), the New Hampshire Division of Historical Resources/State Historic Preservation Office has reviewed the undertaking referenced above, with respect to potential effects on properties listed, or potentially eligible for listing, in the National Register of Historic Places.

Based on the information provided for review it has been determined that the undertaking, as proposed for geological sampling activities will have no effect on historic properties. The Division of Historical Resources concurs with your finding of "no historic properties affected."

If any other historical or archaeological resources should be discovered or affected as a result of project planning or implementation, the Division of Historical Resources is to be consulted on the need for appropriate evaluative studies, determinations of National Register eligibility, and mitigative measures (redesign, resource protection, or data recovery, as required by federal law and regulations). For the purpose of compliance with the ACHP procedures, the NH Division of Historical Resources concurs with the proposed finding of "*No Historic Properties Affected*".

This fulfills the Bureau of Ocean Energy Management's responsibilities for "Section 106" historic preservation review for the State of New Hampshire.

Sincerely,


Richard Boisvert, State Archaeologist
Deputy State Historic Preservation Officer

RAB:dwt





United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

18-1445-1QWR

HPO-G2018-202

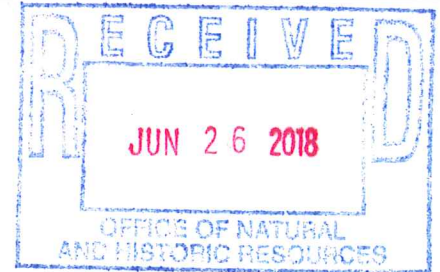
RCVD

28 JUN 18

HISTORIC PRESERVATION OFC

JUN 14 2018

Mr. Bob Martin
SHPO
Department of Environmental Protection
P.O. BOX 402
Trenton, New Jersey 08625



Dear Mr. Martin:

The Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, seeks your concurrence and comments on its Finding of No Historic Properties Affected (Finding) for geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS).

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico OCS for use in future beach nourishment, coastal restoration, and resiliency projects. By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

BOEM has determined that the proposed project, which comprises both geophysical and geological (G&G) survey activities, is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800 *et seq.*). BOEM initiates this Section 106 consultation with you pursuant to 36 CFR 800.2(c)(2)(ii) to consider a wide range of views and information and specifically to ensure that through the archaeological identification efforts and avoidance measures implemented, no historic properties are affected during seafloor disturbance.

BOEM's Finding, made pursuant to the Secretary of the Interior's Professional Qualifications Standards, is based on BOEM's review of existing and available information, previous consultations, the conclusions drawn from this information, the proposed identification efforts and avoidance measures that will be included in the research, and the minimally invasive nature of the geologic activity.

The enclosed documentation of this Finding explains the undertaking in more detail and how the surveys will be conducted; provides BOEM's rationale for choosing the area of potential effects; and details the archaeological identification efforts that will be conducted prior to any bottom disturbance and the avoidance measures that will be in place to ensure that historic properties are not affected during bottom-disturbing activities.

BOEM requests that you review the Finding, and, if you agree, provide your concurrence. Additionally, BOEM invites your comments and any information or concerns that you may have regarding historic properties potentially affected by the proposed undertaking. In accordance with 36 CFR 800.3(c)(4), we look forward to receiving your concurrence or comments within 30 days of your receipt of this submittal.

Please submit your concurrence, comments, or questions about this undertaking to Ms. Brandi Carrier, Deputy Federal Historic Preservation Officer, at (703) 787-1623 or brandi.carrier@boem.gov, or to the following address:

Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Thank you in advance for your timely response.

Sincerely,

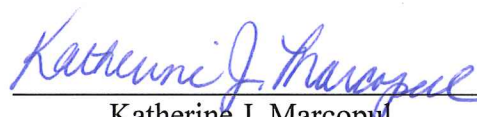


Brian Jordan, Ph.D.
Federal Preservation Officer

Enclosure:

Finding of No Historic Properties Affected

I concur with your finding that there are **no historic properties affected** within the project's area of potential effects. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.



Katherine J. Marcopul

Deputy State Historic Preservation Officer



Date

NP



July 30, 2018

Ms. Brandi Carrier
Deputy Federal Historic Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Re: Geological Sampling Activities on the Atlantic and Gulf of Mexico Outer
Continental Shelf (OCS)
Finding of No Historic Properties Affected
South Carolina
SHPO Project No. 18-KL0189

Dear Ms. Brandi Carrier:

Thank you for your letter of June 14, 2018, which we received on June 21, 2018, regarding the above-referenced proposed undertaking. We also received the *Finding of No Historic Properties Affected* as supporting documentation for this undertaking. The State Historic Preservation Office (SHPO) is providing comments to the Bureau of Ocean Energy Management (BOEM) pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800. Consultation with the SHPO is not a substitution for consultation with Tribal Historic Preservation Offices, other Native American tribes, local governments, or the public.

Our office defers to the expertise of the Office of the State Underwater Archaeologist for undertakings that may include submerged resources. The following is their recommendation:

We concur with the protocols put forth concerning the proposed identification efforts and avoidance measures of submerged cultural resources.

Based on the description of the Area of Potential Effect (APE) and the identification of historic properties within the APE, our office concurs with the assessment that no properties listed in or eligible for listing in the National Register of Historic Places will be affected by this project.

If archaeological materials are encountered during construction, the procedures codified at 36 CFR 800.13(b) will apply. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials. The federal agency or the applicant receiving federal assistance should contact our office immediately.

Please refer to SHPO Project Number 18-KL0189 in any future correspondence regarding this project. If you have any questions, please contact me at (803) 896-6181 or KLewis@scdah.sc.gov.

Sincerely,



Keely Lewis
Archaeologist
State Historic Preservation Office

cc: Ryan Bradley, SCIAA
Jim Spirek, SCIAA

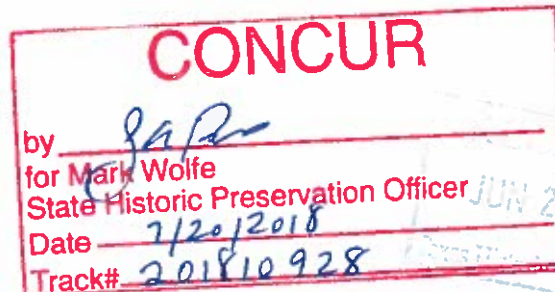


United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

JUN 14 2018

Mr. Mark S. Wolfe
SHPO
Texas Historical Commission
PO BOX 12276
Austin, Texas 78711-2276



Dear Mr. Wolfe:

The Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, seeks your concurrence and comments on its Finding of No Historic Properties Affected (Finding) for geological sampling activities on the Atlantic and Gulf of Mexico Outer Continental Shelf (OCS).

The purpose of the undertaking is to identify and characterize sand resources and potential borrow areas on the Atlantic and Gulf of Mexico OCS for use in future beach nourishment, coastal restoration, and resiliency projects. By collecting and analyzing sand survey data prior to an immediate or emergency need, BOEM can help proactively identify sand resources for enhancing coastal resiliency, better manage resources within its jurisdiction, and develop a more comprehensive understanding of available resources. Once beach quality sand resource areas have been identified, these sand resources could be available to local, state, and Federal agencies to provide protection of infrastructure, create coastal habitat, and reduce damage caused by storms, currents, and waves. Those future proposed actions are not connected actions and would undergo a separate Section 106 consultation process if they are determined to be an undertaking under 36 CFR 800.

BOEM has determined that the proposed project, which comprises both geophysical and geological (G&G) survey activities, is an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800 *et seq.*). BOEM initiates this Section 106 consultation with you pursuant to 36 CFR 800.2(c)(2)(ii) to consider a wide range of views and information and specifically to ensure that through the archaeological identification efforts and avoidance measures implemented, no historic properties are affected during seafloor disturbance.

BOEM's Finding, made pursuant to the Secretary of the Interior's Professional Qualifications Standards, is based on BOEM's review of existing and available information, previous consultations, the conclusions drawn from this information, the proposed identification efforts and avoidance measures that will be included in the research, and the minimally invasive nature of the geologic activity.

The enclosed documentation of this Finding explains the undertaking in more detail and how the surveys will be conducted; provides BOEM's rationale for choosing the area of potential effects; and details the archaeological identification efforts that will be conducted prior to any bottom disturbance and the avoidance measures that will be in place to ensure that historic properties are not affected during bottom-disturbing activities.

BOEM requests that you review the Finding, and, if you agree, provide your concurrence. Additionally, BOEM invites your comments and any information or concerns that you may have regarding historic properties potentially affected by the proposed undertaking. In accordance with 36 CFR 800.3(c)(4), we look forward to receiving your concurrence or comments within 30 days of your receipt of this submittal.

Please submit your concurrence, comments, or questions about this undertaking to Ms. Brandi Carrier, Deputy Federal Historic Preservation Officer, at (703) 787-1623 or brandi.carrier@boem.gov, or to the following address:

Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Thank you in advance for your timely response.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Jordan', written over a horizontal line.

Brian Jordan, Ph.D.
Federal Preservation Officer

Enclosure:

Finding of No Historic Properties Affected



COMMONWEALTH of VIRGINIA

Matt Strickler
Secretary of Natural Resources

Department of Historic Resources
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

August 8, 2018

Ms. Brandi M. Carrier, M.A., RPA
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Drive
Sterling, VA 20166

Re: Sand Survey Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf
DHR File No. 2018-0490

Dear Ms. Carrier:

Thank you for seeking the concurrence of the Virginia State Historic Preservation Office (SHPO) with BOEM's effect determination for the referenced undertaking. Based on the information provided, we concur that this undertaking will result in *no historic properties affected*. We understand that any activities associated with the removal of identified sand deposits as part of future beach nourishment, coastal restoration, or resiliency projects are not covered under this determination and will be coordinated separately should they be subject to Section 106.

We appreciate BOEM's consideration of historic properties in the planning of this project. If we may be of further assistance at this time, please do not hesitate to contact me at roger.kirchen@dhr.virginia.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Roger W. Kirchen".

Roger W. Kirchen, Director
Review and Compliance Division

Western Region Office
962 Kime Lane
Salem, VA 24153
Tel: (540) 387-5443
Fax: (540) 387-5446

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

Eastern Region Office
2801 Kensington Avenue
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391



ᏊᏍᏉ ᏃᏆᏆ
CHEROKEE NATION[®]
P.O. Box 948 • Tahlequah, OK 74465-0948 • 918-453-5000 • cherokee.org

Office of the Chief

Bill John Baker
Principal Chief
ᏅᏆ ᏊᏍᏉ ᏃᏆᏆ
ᏅᏆᏅᏆᏅᏆ

S. Joe Crittenden
Deputy Principal Chief
ᏅᏆ ᏊᏍᏉ ᏃᏆᏆ
ᏅᏆᏅᏆᏅᏆ

July 9, 2018

Brandi Carrier
Deputy Federal Historic Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, VA 20166

Re: Geological Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf

Mr. Brandi Carrier:

The Cherokee Nation (Nation) is in receipt of your correspondence about **Geological Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf**, and appreciates the opportunity to provide comment upon this project.

The Nation maintains databases and records of cultural, historic, and pre-historic resources in this area. Our Historic Preservation Office reviewed this project, cross referenced the project's legal description against our information, and found no instances where this project intersects or adjoins such resources. Thus, the Nation does not foresee this project imparting impacts to Cherokee cultural resources at this time.

However, the Nation requests that the Department of the Interior halt all project activities immediately and re-contact our Offices for further consultation if items of cultural significance are discovered during the course of this project.

Additionally, the Nation requests that the Department of the Interior conduct appropriate inquiries with other pertinent Tribal and Historic Preservation Offices regarding historic and prehistoric resources not included in the Nation's databases or records.

If you require additional information or have any questions, please contact me at your convenience. Thank you for your time and attention to this matter.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer
Cherokee Nation Tribal Historic Preservation Office
elizabeth-toombs@cherokee.org
918.453.5389



TRIBAL HISTORIC PRESERVATION
P.O. BOX 167
CONCHO, OKLAHOMA 73022

1-800-247-4612 Toll Free
405-422-7484 Telephone

July 6, 2018
THPO ID #: 900

Bureau of Ocean Energy Management
Division of Environment Assessment
45600 Woodland Road
Sterling, VA 20166

RE: Geological Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf

Dear Consultant:

On behalf of the Cheyenne and Arapaho Tribes, thank you for the notice of the Geological Sampling Activities. At this time, we **Concur** with your finding of effect and offer our best regards.

Please contact me with the THPO ID number at (405) 422-7416 or mdemery@c-a-tribes.org, if you have any questions or concerns. Thank you again for your notification!

Best Regards,

A handwritten signature in black ink, appearing to read "Micah Looper".

Micah Looper
Research Analyst
Tribal Historic Preservation

CC:
Max Bear,
Tribal Historic Preservation Officer

COMANCHE NATION



The bureau of Ocean Energy Management (BOEM)
Attn: Ms. Brandi Carrier
45600 Woodland Road
Virginia 20166

August 15, 2018

Re: Finding of No Historic Properties Affected
**Sand Survey Activities on the
Atlantic and Gulf of Mexico Outer Continental Shelf**

Dear Ms. Carrier:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of "**No Properties**" have been identified. (IAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 595-9960/9618) if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office
Theodore E. Villicana , Technician
#6 SW "D" Avenue, Suite C
Lawton, OK. 73502

Pawnee Nation of Oklahoma

Thursday, July 19, 2018

Brandi Carrier
Deputy Federal Historic Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling, Virginia 20166

RE: Section 106 Consultation and Review on *Geological Sampling Activities on the Atlantic and Gulf of Mexico Outer Continental Shelf.*

The Pawnee Nation Office of Historic Preservation has received the information and materials requested for our Section 106 Review and Consultation. Consultation with the Pawnee Nation is required by Section 106 of the National Historic Preservation Act of 1966 (NHPA), and 36 CFR Part 800.

Given the information provided, you are hereby notified that the proposal project location should have no potential to adversely affect any known Archaeological, Historical, or Sacred Pawnee sites. Therefore, in accordance with 36 CFR 800.4(d) (1), you may proceed with your proposed project. **However, please be advised undiscovered properties may be encountered and must be immediately reported to us under both the NHPA and NAGPRA regulations.**

This information is provided to assist you in complying with 36 CFR Part 800 for Section 106 Consultation procedures. Please retain this correspondence to show compliance. Should you have questions, please do not hesitate to contact me at jreed@pawneenation.org. Thank you for your time and consideration.

Sincerely,

Matt Reed
Historic Preservation Officer
Pawnee Nation of Oklahoma

Historic Preservation Office
Matt Reed
Phone: 918.762.2180 Fax: 918.762.3662
E-mail: jreed@pawneenation.org
P.O. Box 470
Pawnee, Oklahoma 74058



POARCH BAND OF CREEK INDIANS

5811 Jack Springs Road • Atmore, Alabama 36502
Tribal Offices: (251) 368-9136 • Administrative Fax: (251) 368-4502
www.poarchcreekindians-nsn.gov

July 17, 2018

Brian Jordan, Ph.D.
Federal Preservation Officer
Department of the Interior
Bureau of Ocean Energy Management
Division of Environmental Assessment
45600 Woodland Road
Sterling VA 20166
Brandi.carrier@boem.gov

RE: PBCI 2018-06-044
Geological Sampling Activities, Atlantic and Gulf of Mexico Outer Continental Shelf (OCS)

Dear Dr. Jordan:

The Poarch Band of Creek Indians (PBCI) is in receipt of your correspondence regarding **Geological Sampling Activities, Atlantic and Gulf of Mexico Outer Continental Shelf (OCS)**. We appreciate the opportunity to provide tribal consultation for this project.

Based on the information that you have provided, we concur with your "Finding of No Historic Properties Affected." The PBCI has a vital interest in protecting its historic and cultural resources. Although I am currently unaware of any religious or culturally significant sites in the survey area, this area is within the aboriginal homelands of the PBCI. If items of cultural significance are discovered while developing this project, the PBCI requests that activities halt immediately and our office be contacted for further consultation.

Thank you for notifying us of this proposed project. We look forward to working with you as this project progresses. I may be contacted at the THPO Office at (251)368-9136 Ext. 2532 or by email at cwhite@pci-nsn.gov.

Sincerely,

Carolyn M. White, MSW, LICSW
Regulatory Affairs Division Director
Acting Tribal Historic Preservation Officer

ccf/cmw

cc: Stephanie A. Bryan, Tribal Chair