

Table 4: Applicable Enforceable Policies for the Coastal Management Programs for North Carolina and South Carolina

CATEGORY	ENFORCEABLE POLICIES: APPLICABLE COASTAL ZONE MANAGEMENT RULES	REASONABLY FORESEEABLE COASTAL EFFECTS (CZMA COASTAL EFFECTS)
<p>Coastal Habitats/ Protected Species</p> <p>Wetlands Management</p>	<p>NC G.S. 143-215.3(a)(1) (NC)</p> <p>15A NCAC 07H .0506 – Coastal Complex Natural Areas (NC)</p> <p>15A NCAC 07H .0505 – Coastal Areas that Sustain Remnant Species (NC)</p> <p>15A NCAC 07H .0205 (NC)</p> <p>15A NCAC 07H .0102 (NC)</p> <p>§48-39-280(C) of the South Carolina Beachfront Management Act (S.C. Code Ann. §48-39-250 et seq.). (SC)</p> <p>Coastal Tidelands and Wetlands Act (S.C. Code Ann. Section 48-39-10 et seq.) (SC)</p>	<p><u>Coastal Habitats</u></p> <p>See Section 4.4.2.4 of the <i>Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina Revised EA</i> (2015 EA) for additional information on potential impacts to coastal habitats. In addition, Section 4.1.7 of the <i>Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina Draft Supplemental Environmental Assessment</i> (draft SEA) analyzed any new information and changed circumstances for land use and coastal infrastructure since the publication of the 2015 EA.</p> <p>For the proposed action, BOEM estimated approximately 1,046 to 1,334 vessel trips from site characterization and assessment activities are projected to occur over a 5-year period if the entire Wilmington East Wind Energy Area (WEA) was leased and the maximum number of site characterization surveys were conducted in the lease area (see Table 2 for vessel traffic calculations). For these calculations BOEM assumed up to two meteorological buoys would be installed for each of the three potential leases within the WEA. While BOEM is now anticipating up to three times the number of meteorological buoys (up to two per lease) in the WEA than were anticipated in the 2015 EA, BOEM no longer foresees the construction of a meteorological tower. The installation and operation of meteorological buoys involves substantially less activity and a much smaller footprint than the construction and operation of a meteorological tower. For example, each installation of a meteorological buoy can be completed in approximately 1 to 2 days, which involves one vessel round trip. Because the decommissioning process would basically be the reverse of installation, it would also take approximately 1 to 2 days for one vessel to decommission a meteorological buoy. These estimates are well below the number of trips required for tower installation, up to approximately 40 round trips, and tower decommissioning, up to approximately 40 round</p>

trips. Additionally, total installation time for one meteorological tower would take 8 days to 10 weeks, and total decommissioning time would be 8 days to 10 weeks; therefore, impacts associated with the installation and decommissioning of the number of projected meteorological buoys would be much lower than for towers. As a result, the reasonably foreseeable site assessment activities now anticipated fall below the range considered with the 2015 EA.

Indirect impacts from routine activities may occur from wake erosion caused by vessel traffic in support of the proposed action. These trips would likely be divided among Wilmington, Morehead City, Port of Georgetown, Charleston, and Southport Marina, slightly increasing traffic in already heavily used waterways. Wake erosion and sedimentation effects would be limited to approach channels and the coastal areas near ports and bays used to conduct activities. Given the existing amount and nature of vessel traffic, there would be a negligible, if any, increase to wake-induced erosion of associated channels based on the relatively small size and number of vessels associated with the proposed action. Moreover, all approach channels to these ports are armored, and speed limits would be enforced, which also helps to prevent most erosion.

Several existing fabrication sites, staging areas, and ports in North Carolina and South Carolina could support site characterization surveys and the installation, operation, and decommissioning of the meteorological buoys. No expansion of these existing onshore areas is anticipated. Existing channels could accommodate the vessels anticipated to be used, and no additional dredging would be required to accommodate different vessel size(s). Moreover, no cables would be installed to shore to support the meteorological buoys.

Project related vessels traveling to or from the ports for survey activities, installation, maintenance, and decommissioning of the meteorological buoys could experience spills within a channel or bay that could potentially reach shoreline areas. The impacts on coastal habitats would depend on the type of material spilled, the size and location of the spill, the meteorological conditions at the time, and the speed with which cleanup plans and equipment could be employed. These impacts are expected to be minimal because vessels are expected to comply with USCG regulations at 33 CFR Part 151 relating to the prevention and control of oil spills. Based on the distance from shore where proposed action activities would occur and the rapid evaporation and dissipation of diesel fuel, a spill occurring in the WEA would likely not contact shore. Collisions between vessels and allisions between vessels and the meteorological buoys are unlikely. However, if a vessel

collision or allision was to occur, and in the unlikely event that a spill would result, the most likely pollutant to be discharged into the environment would be diesel fuel. Diesel dissipates very rapidly in the water column, then evaporates and biodegrades within a few days, resulting in negligible, if detectable, impacts on the area of the spill

No dunes, beaches, coastal banks, marshes, or wetlands will be altered as a result of the proposed action. No proposed activities will remove, fill, dredge or alter any barrier beach, wetland area, Coastal Complex Natural Area, or Coastal Areas that Sustain Remnant Species as defined in 15A NCAC 07H .0506 and 15A NCAC 07H .0505.

Marine Mammals

More information on potential impacts to marine mammals can be found in Section 4.4.2.5 of the 2015 EA. In addition, Section 4.1.13 of the draft SEA analyzed any new information and changed circumstances for Threatened and Endangered Species, Marine Mammals, and Sea Turtles since the publication of the 2015 EA.

Impacts on marine mammals from site characterization activities under the proposed action are covered by the analysis of the geophysical and geotechnical activities in the Atlantic Geological and Geophysical Activities Programmatic Environmental Impact Statement (G&G PEIS). These impacts include acoustic sound sources, vessel and equipment noise, vessel traffic, trash and debris release, and accidental fuel spills. Analysis of impacts on marine mammals from G&G survey activities associated with renewable energy surveys concluded that:

- Impacts of active acoustic sound sources are expected to be minor.
- Impacts from vessel and equipment noise are expected to be negligible to minor.
- Impacts from vessel traffic are expected to be negligible.
- Impacts from trash and debris release are expected to be negligible.
- Impacts from accidental fuel spills are expected to negligible to minor

There could be potential effects on marine mammals from loss of water column habitat and prey abundance and distribution effects. It is anticipated that effects from loss of water column habitat and prey abundance and distribution effects would result in short-term behavioral changes, but these effects are anticipated to be negligible.

If BOEM receives a site assessment plan (SAP) that describes activities not covered in the National Marine Fisheries Service (NMFS) G&G Biological Opinion (BO) or 2021 consultation, BOEM will consult with the NMFS (see BOEM letter to NMFS regarding consultation for the proposed action and NMFS concurrence letter in Appendix E of the 2015 EA). The G&G BO and 2021 ESA consultation documents can be found here: <https://www.boem.gov/renewable-energy/nmfs-esa-consultations>

Based on the analysis in the G&G PEIS, 2021 consultation, the 2015 EA and the draft SEA, effects on marine mammals, including those that are federally listed (with the exception of North Atlantic right whales during the migration season from November 1 through April 30), from site characterization survey activities (e.g., surveys) would be negligible to minor. Effects from site assessment activities (e.g., meteorological buoy installation) would be negligible. Effects on North Atlantic right whales due to potential increases in vessel traffic as a result of project-related activities would be minor to moderate. Effects on marine mammals from non-routine events such as vessel fuel spills, even those resulting from storms, would be temporary and limited in size and area of dispersal before fuel evaporated and biodegraded. Therefore, these effects would be negligible to minor.

Standard Operating Conditions (SOCs) designed to reduce or eliminate impacts to protected species (including marine mammals) originally included in the 2015 EA have been updated with the mitigation measures (Project Design Criteria, or PDCs) developed with NMFS during the 2021 consultation (Appendix A of the draft SEA), which covered site assessment and characterization activities associated with data collection in the Atlantic OCS, including the WEA. The PDCs and best management practices (BMPs) outlined in Appendix A of the draft SEA will be required conditions of any leases that may be issued as a result of a lease sale in the WEA. The SOCs are discussed further in Sections 4.1.14 and 5.2.1.2 of the draft SEA.

Sea Turtles

More information on potential impacts to sea turtles can be found in Section 4.4.2.6 of the 2015 EA. In addition, Section 4.1.13 of the draft SEA analyzed any new information and changed circumstances for Threatened and Endangered Species, Marine Mammals, and Sea Turtles since the publication of the 2015 EA.

	<p>The G&G PEIS identifies five species of sea turtles that occur in the Mid-Atlantic and South Atlantic Planning areas, including offshore North Carolina. These include the loggerhead turtle (<i>Caretta caretta</i>), green turtle (<i>Chelonia mydas</i>), hawksbill turtle (<i>Eretmochelys imbricata</i>), Kemp’s ridley turtle (<i>Lepidochelys kempii</i>), and leatherback turtle (<i>Dermochelys coriacea</i>). All five of these species are federally listed as threatened or endangered under the Endangered Species Act (ESA).</p> <p>The impacts analyzed in the G&G PEIS include acoustic sound sources, vessel and equipment noise, vessel traffic, trash and debris release, and accidental fuel spills. Activities associated with the proposed action analyzed in the 2015 EA that may affect federally listed sea turtles include, loss of habitat (water column habitat and benthic habitat), and prey abundance and distribution effects during meteorological buoy installation, operation, and decommissioning. NMFS’s G&G BO determined that sea turtles would not be jeopardized by these activities, concluding BOEM’s ESA Section 7(a)(2) consultation obligations. The 2013 biological opinion in effect at the time of the 2015 EA expired in 2020. On October 24, 2018, BOEM requested reinitiation of consultation on offshore wind data collection activities in the Atlantic OCS, including the activities considered in the draft SEA. The new consultation concluded with a Letter of Concurrence (LoC) from NMFS on June 29, 2021. NMFS conclude that with implementation of the PDCs and BMPs (Appendix A of the draft SEA), data collection activities covered in the consultation may affect, but are not likely to adversely affect, listed species or designated critical habitat.</p> <p>Potential increases in recreational fishing vessels in the area around buoys could result in fuel spills. Additionally, storms may cause allisions and collisions that could result in a fuel spill; however, the storm conditions would cause the spill and its effects to dissipate faster. Overall impacts on sea turtles from diesel spills resulting from collisions and allisions, should they occur, are expected to be minimal and temporary, and would therefore be considered negligible.</p> <p>Reasonably foreseeable activities resulting from lease issuance would be limited to site characterization surveys (e.g., geophysical and geotechnical surveys) and the installation of meteorological and oceanographic buoys. These activities are included within the activities for which BOEM has a completed an ESA Section 7 consultation (NMFS G&G BO). Survey plans from a lease(s) in the WEA would be reviewed to ensure that they are wholly consistent with the programmatic consultation.</p>
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<p>Energy and Offshore Wind Energy Facilities</p>	<p>NC G.S. 113A-103 (NC)</p> <p>15A NCAC 07H .0106 (NC)</p> <p>15A NCAC 07H .0208 (NC)</p> <p>15A NCAC 07H .0309 (NC)</p> <p>15A NCAC 07M .0401 (NC)</p> <p>Chapter 160A and Chapter 153A of the General Statutes (NC)</p> <p>SC SECTION 48-39-80 Chapter IV(B) The South Carolina Coastal Management Act (Act 123 of the 1977 South Carolina General</p>	<p>The proposed action does not include the consideration or approval of any commercial wind energy facility. The purpose of the proposed action is to assess the wind resources in the lease area and characterize the environmental and socioeconomic resources and conditions so that a lessee can determine whether the site is suitable for future commercial development and, if so, submit a Construction and Operations Plan (COP) for BOEM review. No entity is currently in a position to submit a COP (as no entity has yet been awarded a lease or acquired the necessary leasehold information to formulate such a plan). Since the specific information contained in such a plan would be determined by the reasonably foreseeable environmental consequences associated with the development of a lease, no coastally dependent energy facilities are anticipated to be constructed as a result of the proposed action; and no wind power generation facilities will be part of the proposed activities.</p>

	Assembly) Updated July 1995 (SC)	
Fisheries Management	<p>Article 7 Coastal Zone Management Act § 113A-113. (9) (NC)</p> <p>Wildlife and Fisheries Management III-43 The South Carolina Coastal Management Act (Act 123 of the 1977 South Carolina General Assembly) Updated July 1995 (SC)</p>	<p>See Section 4.4.4.5 of the 2015 EA for more information on potential impacts to commercial and recreational fisheries. In addition, Section 4.1.3 of the draft SEA analyzed any new information and changed circumstances for commercial and recreational fisheries since the publication of the 2015 EA.</p> <p>See Section 4.4.2.7 of the 2015 EA for more information on potential impacts to finfish and essential fish habitat. In addition, Section 4.1.2 of the draft SEA analyzed any new information and changed circumstances for finfish and essential fish habitat since the publication of the 2015 EA.</p> <p>Employment in commercial fisheries in North Carolina is relatively low compared to other states: employment in commercial fisheries is approximately 0.15% of the employment level in commercial fisheries nationwide. Fishing communities in North Carolina tend to be small rural ports. The majority of landings occur inside the Outer Banks and barrier islands. Important commercial species in North Carolina include white shrimp, southern flounder, summer flounder, brown shrimp, Atlantic croaker, and quahog clam.</p> <p>In 2014, commercial fishing landings in North Carolina totaled approximately \$94 million, 26% of which originated in areas greater than 3 miles from shore.</p> <p>In 2014, North Carolina ranked second nationally for total harvest in the recreational fishing sector and had almost 5 million angler trips (a measure of recreational fishing effort). This ranked third among U.S. states, behind only Florida and California.</p> <p>As discussed in the G&G PEIS, site characterization surveys associated with renewable energy have the potential to affect commercial and recreational fisheries through active acoustic sound sources, vessel traffic, seafloor disturbance, trash and debris, and accidental fuel spills. There would be an increased potential for a localized and temporary decrease in catchability of one or more commercial fish species. Overall, impacts associated with active acoustic sound generated from G&G activities are not expected to adversely affect aggregate commercial fishery landings. Impacts on commercial fisheries from active acoustic sound sources would be minor.</p>

		<p>Site assessment activities would also add vessel traffic to that analyzed in the G&G Final PEIS. The level of additional traffic is low relative to current traffic levels in the affected area (see Section 4.4.3.3 of the 2015 EA).</p> <p>Based on the relative importance of the analyzed WEA for local fisheries, the low levels of vessel traffic expected to be associated with site characterization surveys and site assessment activities, and the potential impact drivers from these activities, BOEM concludes that the impacts would be negligible to minor for both North Carolina and South Carolina.</p>
<p>Public Access</p>	<p>NC G.S. 113A-134.3 (NC)</p> <p>15A NCAC 07H .0301 (NC)</p> <p>IV-41 Section 48-39-150 (Section 15(A) (5) South Carolina Coastal Management Act (Act 123 of the 1977 South Carolina General Assembly) Updated July 1995) (SC)</p>	<p>No direct impacts on wetlands or other coastal habitats would occur from routine activities in the WEA due to the distance (approximately 15 nm) of the WEA from shore. Additionally, existing ports or industrial areas in North Carolina and South Carolina are expected to be used in support of the proposed project. No expansion of existing facilities is expected to occur as a result of the proposed action. Indirect impacts from routine activities may occur from wake erosion and associated added sediment caused by increased traffic in support of the proposed action. Given the volume and nature of existing vessel traffic in the area, a negligible increase of wake-induced erosion may occur. Should an incidental diesel fuel spill occur as a result of the proposed action, the impacts on coastal habitats are expected to be negligible. The proposed action is not anticipated to restrict public use and general enjoyment of the water's edge. See Section 4.4.2.4 of the 2015 EA for additional information on Coastal Habitats. In addition, Section 4.1.7 of the draft SEA analyzed any new information and changed circumstances for land use and coastal infrastructure since the publication of the 2015 EA.</p> <p>BOEM does not anticipate impacts to public recreation areas in North Carolina and South Carolina as a result of the proposed action. No new onshore coastal structures would be built if the proposed action is implemented, and the amount of associated vessel traffic is expected to be small, thereby limiting the number of potential spills. Additionally, because the WEA is proposed to be located approximately 15 nm offshore, and no meteorological towers are anticipated to be constructed as a result of the proposed action, there would be no visual impacts on recreational resources. Impacts may occur as a result of the proposed action from marine trash and debris. However, it is unlikely that this debris would be differentiated from other sources of trash in the area. See Section 4.4.4.4 of the 2015 EA for additional information on potential impacts to public recreation areas. In addition,</p>

		<p>Section 4.1.9 of the draft SEA analyzed any new information and changed circumstances for public recreation areas since the publication of the 2015 EA.</p>
<p>Water Quality</p>	<p>15A NCAC 07M .0801 (NC) NC G.S. 113A-102(b) (NC) 15A NCAC 07H .0602 (NC) S.C. Regulation 61-68 Stormwater Management and Sediment Reduction Act (72- 300), Sections 401 and 402 of the Federal Water Pollution Control Act Amendments (Public Law 92-500) (SC)</p>	<p>The routine activities associated with the proposed action that would impact coastal and marine water quality include vessel discharges (including bilge and ballast water and sanitary waste), drilling, coring, bottom sampling, and meteorological buoy installation and removal. Additional information on water quality and impacts to coastal and marine water quality can be found in Section 4.4.1.2 of the 2015 EA. In addition, Section 4.1.6 of the draft SEA analyzed any new information and changed circumstances for public recreation areas since the publication of the 2015 EA.</p> <p>The potential water quality impacts that could occur as a result of site characterization G&G activities were previously analyzed and found to be negligible in the G&G PEIS. Bilge and ballast water, which could contain petroleum products and metals from oily bilge residues, are regulated by USCG Ballast Water Discharge Standards emanating from the requirements for the management of ballast water (33 CFR part 151 subpart D). Survey vessels would likely have holding tanks for sanitary waste, and would not discharge untreated sanitary waste within federal or state waters.</p> <p>Meteorological and oceanographic data collection buoys are described in Section 3.2.2 of the 2015 EA. The installation of such equipment would disturb the seabed via anchoring. Because the equipment is compact, only small, local changes in water quality (such as increased turbidity) in the vicinity of the structures would occur. These small changes would most likely occur over approximately 30 to 40 square feet (3 to 4 square meters) in the vicinity of the equipment, assuming the area of influence is approximately 3 feet (1 meter) above the equipment, with a radius of about twice the height of the equipment. These impacts would be limited to installation of the buoys and would cease during their operation. Additional discussion on increased sediment concentration (as a proxy for turbidity) in the water column is found in Section 4.4.2 of the 2015 EA. Installation of the meteorological buoys would be covered by the U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) 5. NWP 5 covers the placement of scientific measurement devices such as staff gauges, tide gauges, water recording devices, water quality testing and improvement devices, meteorological stations, and similar structures.</p>

The water quality effects of non-routine events such as storms, allisions/collisions, and spills are described in Section 3.3 of the 2015 EA. Storms would be the primary non-routine event that could affect the water quality of the proposed action area. Waves and currents associated with seasonal storm events, particularly hurricanes, have the potential to cause seabed mobility in the proposed action area that can result in erosion, transport, or re-suspension and deposition of sediments. Impacts on water quality from accidental spills of oils, lubricants, and/or releases of solid debris or trash could also occur during proposed action installation or decommissioning of the meteorological buoys. Most equipment on the meteorological buoys would be powered by batteries charged by small wind turbines and solar panels. A diesel spill could occur as a result of allisions, collisions, accidents, or natural events. If a vessel collision occurs and if the collision leads to major hull damage, a diesel spill could occur. The amount of diesel fuel that could be released by a marine vessel involved in a collision would depend on the type of vessel and severity of the collision; typically, smaller spills may occur—the average spill volume between 2000 and 2009 was 88 gallons. However, these small, localized impacts would be reduced significantly during operation of the buoys because vessels would be needed only for periodic maintenance. These releases would cause minimal environmental consequences to water quality and would be spatially and temporally limited to the vicinity of the point of release.

The instrumentation used for site characterization is self-contained, so there would be no discharges to affect the water quality in the WEA. Operational discharges in federal and state waters are strictly regulated. Although there would be operational discharges from vessels during site characterization surveys, oceanic circulation would disperse, dilute, and biodegrade vessel discharges, so impacts on water quality would be minor. The disturbance to the seabed during installation, as well as decommissioning, of the buoys would cause small, localized impacts on the water quality in the vicinity of the structures. However, these small, localized impacts would cease during operation (and after removal activities) of the buoys. Because collisions and allisions occur infrequently and rarely result in a spill, the risk of a spill would be small. In the unlikely event of a fuel spill, minimal impacts would result, because the spill would very likely be small and the fuel spillage would biodegrade within a short time. As a result, the potential impacts on water quality are not expected to be significant. Therefore, impacts on harbors, ports, coastal areas, and the WEA from point source and nonpoint source pollution including vessel discharges, seabed disturbance, and potential spills associated with the proposed action would be minor.

<p>Air Quality</p>	<p>S.C. Regulation 61-62.5 - Air Pollution Control Standards National Clean Air Act, as amended (P.L. 91-604) (SC)</p>	<p>Air quality impacts that could result from site characterization activities under the proposed action were evaluated in the G&G PEIS and impacts on air quality were found to be negligible. Section 4.4.1.1 of the 2015 EA includes a more area-specific evaluation of air quality impacts associated with G&G activities, along with an evaluation of air quality impacts associated with site assessment activities. In addition, Section 4.1.5 of the draft SEA analyzed any new information and changed circumstances for Air Quality since the publication of the 2015 EA.</p> <p>Increased vessel traffic associated with site characterization surveys would add to current vessel traffic levels associated with the ports used by the vessel operators. The level of additional vessel activity associated with the proposed action is anticipated to be relatively low when compared with existing and future vessel traffic levels in the area. Impacts from pollutant emissions associated with these vessels would likely be localized within the WEA and in the vicinity of vessel activity. Table 2 provides further information on the anticipated numbers of project-related vessel trips.</p> <p>Increased vessel traffic associated with installation, operation and maintenance, and decommissioning of buoys would add to current vessel traffic levels associated with the ports used by the vessel operators. The level of additional vessel activity associated with the proposed action is anticipated to be relatively low when compared with existing and future vessel traffic levels in the area (see Section 4.4.3.3 of the 2015 EA for existing traffic levels). Impacts from pollutant emissions associated with these vessels would most likely be localized within the WEA and in the vicinity of vessel activity. Table 2 provides further information on the anticipated numbers of project-related vessel trips.</p> <p>The nearest onshore areas to the WEA are in NAAQS attainment. Emissions associated with a buoy are anticipated to be low as the installation and decommissioning of a meteorological buoy can be completed in approximately 1 to 2 days, respectively, which involves one round trip.</p> <p>The most likely impact on air quality within the WEA or along the cable route from nonroutine events would be caused by vapors from fuel spills resulting from vessel collisions. If a vessel spill occurred, the estimated spill size would be approximately 88 gallons. If such a spill were to occur, it would be expected to dissipate rapidly and then evaporate and biodegrade within a few days. A diesel spill occurring in the WEA would not</p>
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		<p>be expected to have impacts on onshore air quality because of the estimated size of the spill, prevailing atmospheric conditions over the WEA, and distance from shore.</p> <p>Although unlikely, a spill could occur in the event of vessel collision while in route to and from the WEA or during surveys. Spills occurring in these areas, including harbor and coastal areas, are not anticipated to have significant impacts on onshore air quality due to the small estimated size and short duration of the spill.</p> <p>Results from this analysis indicate negligible impacts on air quality. Air pollutant concentrations due to emissions from the project would not be expected to lead to any violation of the NAAQS. Class I air quality areas are too distant to be affected by emissions from project activities.</p>
<p>Historical Properties</p>	<p>G.S. 113A-113(b)(4) (NC)</p> <p>15A NCAC 07H .0509 – Significant Coastal Archaeological Resources (NC)</p> <p>15A NCAC 07H .0510 – Significant Coastal Historic Architectural Resources (NC)</p> <p>Section 48-39-150(A)(6) (SC)</p>	<p>The potential impact of the proposed action on cultural and historic resources has been evaluated in accordance with the National Historic Preservation Act (NHPA) and Antiquities Act. See Section 4.4.4.1 of the 2015 EA for additional information on cultural, historical, and archeological resources. Section 4.1.11 of the draft SEA analyzed any new information and changed circumstances for cultural, historical, and archeological resources since the publication of the 2015 EA. Additional information on visual resources is located in Section 4.4.4.6 of the 2015 EA. In addition, Section 4.1.12 of the draft SEA analyzed any new information and changed circumstances for visual resources since the publication of the 2015 EA.</p> <p>Geophysical surveys do not affect the bottom and, therefore, have no ability to affect historic properties. Geotechnical and sediment sampling techniques do affect the seafloor; therefore, these activities have the ability to affect offshore historic properties through physical destruction or damage to all or part of the property. However, if the lessee conducts HRG surveys (which serve, in part, to identify offshore historic properties) prior to conducting geotechnical/sediment sampling, the lessee may avoid impacts on offshore historic properties by relocating the sampling activities away from potential historic properties. Therefore, BOEM would require a lessee to conduct HRG surveys consistent with the BOEM Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 CFR Part 585, prior to conducting geotechnical/sediment sampling and whenever a potential offshore historic property is identified, the lessee would be required to</p>

		<p>avoid it. Inclusion of the following conditions in the lease will ensure avoidance of offshore historic properties.</p> <p>To ensure avoidance of offshore historic properties, the following conditions would be included in a commercial lease issued within the WEA:</p> <ul style="list-style-type: none"> • The lessee may only conduct geotechnical exploration activities, including geotechnical sampling or other direct sampling or investigation techniques, which are performed in support of plan (i.e., SAP and/or COP) submittal, in areas of the leasehold in which an archaeological analysis of the results of geophysical surveys has been completed. • The analysis must be completed by a qualified marine archaeologist who both meets the Secretary of the Interior’s Professional Qualifications Standards (48 FR 44738–44739) and has experience analyzing marine geophysical data. • This analysis must include a determination of whether any potential archaeological resources are present in the area, and the geotechnical (sub-bottom) sampling activities must avoid potential archaeological resources by a minimum of 164 feet (50 meters). The avoidance distance must be calculated from the maximum discernible extent of the archaeological resource. • A Qualified Marine Archaeologist must certify in the lessee’s archaeological reports included with a SAP or COP that geotechnical exploration activities did not affect potential historic properties identified as a result of the HRG surveys. • In no case may the lessee’s actions affect a potential archaeological resource without BOEM’s prior approval. <p>Additionally, during all ground-disturbing activities, including geotechnical exploration, BOEM will require that the lessee observe the unanticipated finds requirements stipulated in 30 4-87 CFR 585.802. The following conditions would be included in a commercial lease issued within the WEA:</p> <ul style="list-style-type: none"> • If the lessee, while conducting site characterization activities in support of plan (i.e., SAP and/or COP) submittal, discovers a potential archaeological resource such as the presence of a shipwreck (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), prehistoric artifacts, and/or relict landforms, within the project area, the lessee must: <ul style="list-style-type: none"> o Immediately halt seafloor/bottom-disturbing activities within the area of discovery; o Notify the lessor within 24 hours of discovery; o Notify the lessor in writing by report within 72 hours of its discovery; and
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o Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the lessor has made an evaluation and instructs the applicant on how to proceed; and o Conduct any additional investigations as directed by the lessor to determine if the resource is eligible for listing in the NRHP (30 CFR 585.802(b)). The lessor will direct the lessee to conduct such investigations if: (1) the site has been affected by the lessee's project activities; or (2) impacts on the site or on the area of potential effect cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the NRHP, the lessor will tell the lessee how to protect the resource or how to mitigate adverse effects on the site. If the lessor incurs costs in protecting the resource, under Section 110(g) of the NHPA, the lessor may charge the lessee reasonable costs for carrying out preservation responsibilities under the OCS Lands Act (30 CFR 585.802(c-d)).

Finally, onshore historic properties may at times be within the viewshed of vessel traffic associated with HRG survey activities. These activities could introduce visual elements that diminish the characteristics of the property that contribute to its eligibility for listing in the NRHP. However, the increased ocean vessel traffic from these survey activities would be indistinguishable from existing ocean vessel traffic, and these impacts would be temporary and minimal. Therefore, impacts from site characterization activities on both offshore and onshore historic properties are expected to be negligible.

In order to guide its consultation under Section 106 of the NHPA for renewable energy activities offshore North Carolina, BOEM executed a programmatic agreement (PA) with the State Historic Preservation Officer of North Carolina and The Advisory Council on Historic Preservation. The PA provides for consultation to continue throughout BOEM's commercial leasing process and the decision-making process regarding the approval, approval with modification, or disapproval of a lessee's SAP, COP, or other plan. In addition, the PA allows for phased identification and evaluation of historic properties. The PA can be found in Appendix E of the 2015 EA and here: <http://www.boem.gov/South-Atlantic-Renewable-Energy-Activities/>.

Although the installation of the meteorological buoys affects the seafloor, the lessee's SAP must be submitted to and approved by BOEM prior to installation. To assist BOEM in complying with the NHPA (see Section 5.3.4 of the 2015 EA) and other relevant laws (30 CFR 585.611(a), (b)(6)), the SAP must contain a description of the historic properties that

		<p>could be affected by the activities proposed in the plan. Under its PA, BOEM will consult with the SHPO prior to the approval of a SAP to ensure potential effects on historic properties are avoided, minimized, or mitigated under Section 106 of the NHPA.</p> <p>The impacts associated with the installation of the meteorological buoys would occur from disturbance of the seafloor caused by anchoring of support vessels, placement of mooring anchors, and anchor chain drag. Impacts on offshore archaeological resources within these areas of disturbance could result in direct destruction of all or part of the property and also removal of archaeological materials from their primary context. Although this would be unlikely given that site characterization surveys (including archaeological surveys) described above would be conducted prior to the installation of any structure (see e.g., 30 CFR 585.610 and 585.611), should contact between the activities associated with the proposed action and a historic or pre-contact archaeological site occur, there may be damage to or loss of archaeological resources.</p> <p>Should the archaeological surveys reveal the possible presence of an archaeological site in an area that may be affected by activities proposed in a SAP, BOEM would likely require the applicant to avoid the potential site or to demonstrate through additional investigations that an archaeological resource either does not exist or would not be adversely affected by the seafloor/bottom-disturbing activities. If avoidance of the historic property is not possible, BOEM will continue Section 106 consultation under the PA to resolve adverse effects. Although site assessment activities have the potential to affect cultural resources either on or below the seabed, existing regulatory measures, coupled with the information generated for a lessee's initial site characterization activities and presented in the lessee's SAP, make the potential for bottom-disturbing activities to damage historic properties low. Therefore, impacts on offshore historic properties from site assessment activities are expected to be negligible.</p> <p>Because of the distance of the WEA from shore, it is anticipated that meteorological buoys will not be visible from coastal areas and would have no impact on onshore historic or heritage properties. In addition, existing ports and other onshore infrastructure are capable of supporting site assessment activities with no expansion. Therefore, impacts from site assessment activities on onshore historic properties are expected to be negligible.</p>
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		would be conducted prior to the installation of meteorological buoys. If archaeological resources are identified within the area of potential effects (APE) for the proposed activities during site characterization surveys, additional investigations and avoidance of the resource would occur. If avoidance is not feasible, BOEM will initiate NHPA Section 106 consultations to resolve adverse effects.
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