

*Office of the Governor
State of North Carolina*

*Roy Cooper
Governor*



*20301 Mail Service Center
Raleigh, N.C. 27699-0301*

August 17, 2017

Ms. Kelly Hammerle
National Program Manager
U.S. Bureau of Ocean Energy Management
45600 Woodland Road
Mailstop VAM-LD
Sterling, VA 20166

Dear Ms. Hammerle:

Thank you for your letter dated June 29, 2017, notifying me that the U.S. Bureau of Ocean Energy Management (BOEM) intends to develop a new National Outer Continental Shelf Oil and Gas Leasing Program (OCS Leasing Plan) for the years 2019-2024. In response to BOEM's recent Request for Information and Comments on the preparation of the OCS Leasing Plan, I write to convey North Carolina's opposition to oil and gas leasing off North Carolina's coast.

As explained in the attached comments prepared by the North Carolina Department of Environmental Quality, offshore drilling threatens our coastal economy and environment, yet offers little economic benefit to North Carolina. Coastal tourism generates \$3 billion annually in North Carolina and supports more than 30,000 jobs in the eastern part of the state. Commercial fishing brings in hundreds of millions of additional dollars each year. In addition, North Carolina has over 300 miles of coastline, 2.3 million acres of estuarine waters, and over 10,000 miles of estuarine shoreline. We cannot afford to endanger our ecologically sensitive coastlines or the natural resources that are the foundation of our state's tourism industry and coastal economy.

Because offshore drilling threatens North Carolina's critical coastal industries and unique coastal environment with limited benefits for our citizens, it is a bad deal for North Carolina.

Accordingly, I ask that you respect the wishes of our state and maintain in the new OCS Leasing Plan the current prohibition of oil and gas drilling off North Carolina's coast.

With kind regards, I am

Very truly yours,

A handwritten signature in black ink that reads "Roy Cooper".

Roy Cooper



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

August 17, 2017

Kelly Hammerle
National Program Manager
U.S. Bureau of Ocean Energy Management
45600 Woodland Road
Mailstop VAM-LD
Sterling, Virginia 20166

Dear Ms. Hammerle:

On behalf of the State of North Carolina and in accordance with Section 18 of the Outer Continental Shelf Lands Act, I write to request that the area off the shore of North Carolina be excluded from the 2019-2024 National Outer Continental Shelf Oil and Gas Leasing Program (OCS Leasing Program). The risk of environmental damage and adverse impact on North Carolina's coastal zone far outweighs any potential benefit from discovery of oil and gas. In support of this request and in response to the U.S. Bureau of Ocean Energy Management's (BOEM) July 3, 2017 Request for Information on the preparation of the 2019-2024 OCS Leasing Program, I submit information that shows North Carolina is not a suitable place for leasing during the 2019-2024 time period.

North Carolina remains firmly committed to protecting the environmental and economic values of our coastal ocean, as well as the public trust and futures of our residents. North Carolina has been consistent in identifying critical issues for consideration in the development of previous OCS Leasing Programs. To identify issues important to our coastal communities, the N.C. Department of Environmental Quality hosted three public hearings in coastal communities this month. Speakers at the public hearings overwhelmingly opposed offshore oil and gas development. In Manteo, a community along the northeastern coast with a large commercial fishing focus, 115 people attended and 35 of them spoke, all in opposition to offshore oil and gas development. In Morehead City, a central coastal community and deep port city, and Wilmington, a port city along the southeastern coast, the vast majority of speakers also opposed offshore drilling. The 376 comments submitted outside of the public hearings told a similar story, as all but a dozen opposed offshore drilling, citing negative impacts on tourism, desire to invest in renewables rather than fossil fuel-based resources, negative impacts on the state's economy, negative impacts on natural resources and the environment, specific opposition to seismic testing and marine mammal impacts, and concerns about climate change.

Below is a summary of North Carolina's unique geographical and marine environment, as well as the socio-economic, legal, and policy frameworks that must be considered in an evaluation of

including the waters off our coast in a new OCS Leasing Program.

North Carolina's Geology is Less Conducive to Development than Other Areas

The location and narrow shape of conceptual geologic plays present off the North Carolina coast do not provide large overlapping of plays in the geological strata that is desired in oil and gas development. First, about half of the Atlantic OCS conceptual geologic plays do not extend to the offshore area of North Carolina. Of the plays that do extend to North Carolina, their locations prevent overlap. Two plays off the N.C. coast begin at Cape Hatteras and extend north into Virginia's area and beyond. Another two begin at Cape Hatteras and extend south in the opposite direction without overlap with the first two. There are two more plays that extend along the length of the state's offshore area, and each has limitations. One is very thin in water depths of 3,500 feet. The other, while wider, is located in water depths of 8,500 feet or deeper. Overall, the geological plays are narrower than other plays along the nation's coast and rarely overlap, limiting the best opportunity for oil and gas development.

The one point where the geological plays have the most overlap is right off of Cape Hatteras and right in the middle of the Gulf Stream. Besides being an incredibly productive fisheries area, this area also creates a heightened hazard for accidental releases. Any release of product will pollute the United States coastline and international fishing waters.

There are known underwater landslides off the shore of North Carolina that could impact underwater wellheads and precipitate disastrous results in each of the six geological plays off our coast. The U.S. Geological Survey (USGS) has identified three major slides: the Currituck Slide extending out from the northern border of the state, the Cape Lookout Slide extending off the Outer Banks and overlapping with the Cape Fear Slide that extends out from the southern border of the state. If oil and gas activities destabilize these slides, a tsunami could result similar to the tsunami hazard from slope failure assessed in a 2014 peer-review article in "Marine Geology" by a team of USGS personnel at Woods Hole. A destabilization could also undermine the wellhead where the blowout preventers are located resulting in a disaster similar to Deepwater Horizon.

North Carolina's Unique Ecology is Ill-Suited for Oil and Gas Extraction

North Carolina's unique ecology is incompatible with oil and gas extraction. North Carolina has approximately 326 miles of ocean beaches and 614,400 acres of submerged land and oceanic waters within the three-mile Territorial Sea. Twenty-two barrier islands and two coastal peninsulas are separated by 19 dynamic inlets and frame the state's 2.3 million acres of estuarine waters and over 10,000 miles of estuarine shoreline.

North Carolina's coastline is unique compared to those of other states on the Atlantic Ocean because of its distinctive offshore ecosystem that supports an exceptionally productive fishery. The southward flowing cold water Labrador Current and the northward flowing warm water Gulf Stream, combined with the Western Boundary Undercurrent, converge off the coast of North Carolina. This convergence of currents results in an upwelling of nutrient-rich waters that, when combined with unique bathymetric features, creates an area of exceptional oceanic productivity. For example, North Carolina's coastal and ocean waters sustain a particularly diverse and significant mix of fish (including both endangered and threatened species) exhibited in all phases of their life cycles. In addition, North Carolina has a higher diversity of marine mammals than

anywhere along the east coast of the United States or the Gulf of Mexico.¹ North Carolina's offshore waters support six species of baleen whales, including the endangered Northern Right Whale, and twenty-four species of toothed whales, four of which are beaked whales.

The impacts of an offshore oil release will affect not only North Carolina's OCS and coastline, but also the state's estuarine system. The Albemarle-Pamlico estuary was named an estuary of significance by the United States Congress in 1987 and is the second-largest estuarine complex in the lower 48 states. It is particularly susceptible to long-term pollution impacts from even small leaks and spills because of the system's slow rate of water exchange. The State's agencies, in cooperation with local governments, implement several environmental protection programs to protect the integrity of the Albemarle-Pamlico estuary. It is imperative to prohibit offshore exploration and drilling activities off North Carolina's coast, which would negate these state and local efforts and imperil this unique national resource.

North Carolina's Fisheries are Vital to its Economy and Jeopardized by Oil and Gas Development

North Carolina's OCS lands and waters provide vital support to our state's commercial and recreational fishing industries and would be jeopardized by offshore oil and gas development. In 2016, there were approximately 2,973 active commercial fishermen and 575 seafood dealers. The commercial fishing industry supported an estimated 7,410 jobs, \$166 million in income, and \$388 million in business sales to the state economy. In the same year, approximately 1.4 million recreational anglers embarked on approximately 5.4 million trips in North Carolina's coastal waters. Coastal recreational fishing activity supported an estimated 15,069 jobs, \$621 million in income, and \$1.57 billion in business sales to the state economy. Combined, commercial and recreational fishing activities support an estimated 22,500 jobs, \$787 million in income, and \$1.96 billion in business sales annually. This economic activity occurs in counties that have limited sources of employment and revenue. It is vitally important to protect and sustain the natural resources on our coast in order to support the state's fishing industry and associated cultural heritage.

North Carolina's "Graveyard of the Atlantic," a world-class SCUBA diving destination, is the resting place of hundreds of shipwrecks of noted historic and cultural value. Offshore natural habitats and artificial reefs are the most heavily utilized areas for both recreational and commercial activities. Much of the recreational SCUBA diving and fishing activities off North Carolina's coast take place more than three miles offshore, in OCS waters, primarily located from north of Oregon Inlet south to the South Carolina state line.

The area off Cape Hatteras known as "The Point" is used year-round for commercial fishing activities and recreational fishing charters and tournaments. The North Carolina Division of

¹ Byrd, B., A. Hohn, G. Lovewell, K. Altman, S. Barco, C. Harms, W. McLellan, K. T. Moore, P. Rosel, and V. Thayer. 2014. Strandings as indicators of marine biodiversity and human interaction in North Carolina. *Fisheries Bulletin* 112: 1-23. doi. 10.7755/FB.112.1.1

Roberts, J. J., B.D. Best, L. Mannocci, E. Fujioka, P. N. Halpin, D. L. Palka, L. P. Garrison, K.D. Mullin, T. V. N. Cole, C. B. Khan, W. A. McLellan, D. A. Pabst, and G. G. Lockhart. 2016. Habitat-based cetacean density models for the U.S. Atlantic and Gulf of Mexico. *Scientific Reports*, 6, 22615. Doi:10.1038/srep22615.

Marine Fisheries identifies as many as 43 annual saltwater fishing tournaments in any given calendar year.

The majority of fisheries in North Carolina's offshore waters are managed by the National Oceanic and Atmospheric Association's National Marine Fisheries Service (NMFS) and the South Atlantic and Mid-Atlantic Fishery Management Councils, under fishery management plans adopted for commercially-important species. The South Atlantic Fishery Management Council, acting through NMFS, designated several areas offshore of North Carolina as Essential Fish Habitat and a subset of these areas as Habitat Areas of Particular Concern. Habitat Areas of Particular Concern are designated where they are considered particularly important for managed species or species complexes due to the importance of the ecological functions they provide, and where they are at risk due to their rarity or sensitivity to human degradation. These designated areas include The Point, Ten Fathom Ledge, Big Rock and the shoals of Cape Hatteras, Cape Lookout and Cape Fear. Essential Fish Habitat is important to migratory species such as king and Spanish mackerel, dolphin, tuna, and cobia, as well as the snapper-grouper complex. Estuarine-dependent species, such as flounder, shrimp, black sea bass and grouper, also migrate from estuarine nursery areas in state waters to both offshore habitats and Essential Fish Habitat in federal OCS waters during their life cycle. Due to the importance of these species to the state's economy, it is vital that Essential Fish Habitats are protected from direct, indirect, and cumulative impacts associated with oil and gas exploration and development in the OCS waters off North Carolina.

North Carolina's Military Operations Along and Off the North Carolina Coast

The Request for Information (RFI) indicates that BOEM will work closely with the Department of Defense (DOD) to understand and identify any potential military conflicts with offshore drilling, and we ask that BOEM consider any conflicts that DOD identifies. North Carolina has a long and dedicated relationship with DOD. As a State, we have committed to closely partnering with the commanders of the six major military installations that call North Carolina home and their superiors in Washington, D.C. We are committed to ensuring they can accomplish their respective missions in training, equipping and preparing their soldiers, sailors, Marines and airmen to protect and defend our nation.

North Carolina is home to Marine Corps Air Station Cherry Point, Marine Corps Air Station New River, and Camp Lejeune, among other installations. Camp Lejeune is the largest amphibious training base in the United States and is home of the II Marine Expeditionary Force along with U.S. Marine Corps Special Operations Command. Through our Military Advisory Commission and our unique and arguably first-in-the-nation N.C. Commanders' Council, we continue to actively support the military with valuable resources. These two bodies ensure the military is able train by managing encroachment and compatible resource use; coordinating land, sea, and air management issues; and developing a combined mission footprint for DOD and the state. They also address critical environmental and transportation challenges.

North Carolina's Oil and Gas Potential is Less than Other Areas

The estimated oil and gas resources in North Carolina's OCS lands are minimal compared to estimated resources in other OCS planning areas across the country. According to the 2016 BOEM Report *Inventory of Technically and Economically Recoverable Hydrocarbon Resources*

of the Atlantic Outer Continental Shelf as of January 1, 2014,² the average estimated amount of Undiscovered Technically Recoverable Resources (UTRR), in the Atlantic OCS is significantly smaller than that estimated in each of the three other planning areas under consideration in this RFI.

Planning Area	Oil	Gas	Barrel Oil Equivalent
	(billions of stock tank barrels)	(trillions of standard ft ³)	(oil and gas combined)
Atlantic OCS	4.59	38.17	11.39
Gulf of Mexico OCS	48.46	141.76	73.69
Alaska OCS	26.61	131.45	50
Pacific OCS	10.2	16.1	13.07
Total	89.86	327.48	148.15
% estimated in Atlantic	5%	12%	8%

The above-listed values are average estimates. North Carolina is part of the Mid-Atlantic region of the Atlantic OCS and shares this designation with the OCS lands off the coast of Virginia, Maryland, and Delaware. The above estimates include the offshore OCS lands from these four states. Taken together, it stands to reason that the estimated UTRR in North Carolina's portion of OCS lands is even less than that estimated for the Mid-Atlantic as a whole.

The Distance to Existing Refineries Means North Carolina will Bear the Burdens of Environmental Risk Without Receiving Development Benefits

Negative impacts to the fisheries, coastal area, and uses of the waters off North Carolina's coast will occur if offshore oil exploration and extraction proceeds. However, the monetary gains that are often cited as the benefit of oil operations, mainly through construction and oil refinery jobs, are unlikely to occur in North Carolina. Based on information collected by the U.S. Energy Information Administration, there is not a refinery of any size located in North Carolina while there is a cluster of high capacity oil refineries in the northeast United States. The distance between North Carolina and this cluster along with the coastal geography provides obstacles to a pipeline capital project linking the two when the same distance could be easily traversed by ship. If a foreign corporation obtains the lease, then shipping away from domestic refinement would remove benefits from the United States while leaving the risks intact. Without construction or refinery jobs, the benefits to North Carolina are diminished to nothing while the environmental risks remain high. This creates an inequity that OCS Lands Act seeks to avoid. The remedy would be to exclude the waters off North Carolina from leasing.

² <https://www.boem.gov/BOEM-OCS-Report-2016-071/>

North Carolina's Diverse Domestic Energy Production Provides Supply at Relative Low Cost without the Need for Offshore Oil and Gas Development

Section 18 of the OCS Lands Act requires an analysis of the needs of both national and regional energy markets. The United States currently has ample oil and gas supplies, making it unnecessary to risk development of the small plays off N.C.'s coast.

Similarly, regional energy needs do not require exploration and production of offshore oil and gas off the coast of North Carolina. Our residents already enjoy relatively low per capita energy costs, access to a diverse supply of energy resources, and an established energy infrastructure with ample development proposals on the near horizon. According to U.S. Energy Information Administration 2014 data, North Carolina has a total annual energy consumption per capita ranked in the bottom one-third of the United States. North Carolina's power is supplied by a diverse resource portfolio including solar, hydropower, biogas, nuclear, natural gas, coal, and wind.

In 2007, North Carolina enacted the Southeast's first Renewable Energy Portfolio Standard and now has one of the most robust clean energy and diverse portfolios in the nation. More than 6% of the state's electric supply is met by renewables, and North Carolina is well positioned to increase the supply to 10% within the next two years. North Carolina currently ranks 2nd for installed solar capacity in the United States. In the western region of the state, approximately 2,000MW of hydropower is operational. The North Carolina Sustainable Energy Association has identified North Carolina as the 3rd best state in the nation for biomass energy development with high resource potential in the eastern region of the state. In addition, power generation at five nuclear facilities comprises nearly 33% of the state's power generation portfolio.

North Carolina also generates energy through wind developments. Eastern North Carolina hosts the 200 MW Amazon Wind Farm and other projects currently seeking approvals will supplement this supply. Beyond mainland wind, the Bureau of Ocean and Energy Management recently auctioned a lease for 122,405 acres off the shore of North Carolina in the same area proposed for oil and gas exploration and development. Co-locating two separate large scale energy projects will increase the potential for user conflicts, environmental impacts and accidental releases. To avoid these negative consequences, the waters off the coast of North Carolina should be removed from the 2019-2024 leasing plan for oil and gas development.

Oil and Gas Development off North Carolina Could Interfere with Navigation Lanes and Port Facilities

North Carolina's two publicly-owned port facilities – the Port of Wilmington and the Port of Morehead City – contribute to \$707 million in state and local tax revenues and more than 76,000 jobs.³ A proven robust economic driver for the state, these ports and associated navigation lanes could be impacted by oil and gas drilling if ancillary infrastructure is co-located and product releases occur.

North Carolina Laws Will Apply to Oil and Gas Development

The coastal resources of North Carolina are managed under the State's federally-approved coastal management program. North Carolina has participated in the Coastal Zone Management

³ <http://ncports.com/wp-content/uploads/2016/07/economic-contribution-north-carolina-ports.pdf>

Act program since 1974. North Carolina's coastal zone management program consists of, but is not limited to, the Coastal Area Management Act, N.C.G.S. 113A Article 7, the State's Dredge and Fill Law, N.C.G.S. 113-229 Chapter 7 of Title 15A of North Carolina's Administrative Code, and the land use plans of coastal counties and municipalities. It is the objective of the North Carolina Division of Coastal Management to manage the State's coastal resources to ensure that proposed federal activities are compatible with safeguarding and perpetuating the biological, social, economic, and aesthetic values of the State's coastal waters.

The North Carolina Coastal Resources Commission first adopted coastal energy policies in 1979 and has amended them over time to keep pace with industry advancements. In 2010, the North Carolina General Assembly amended the Coastal Area Management Act to incorporate elements of these policies into law. On September 6, 2016, the National Oceanic and Atmospheric Administration Office for Coastal Management approved these coastal energy policies as enforceable policies under the State's Coastal Management Program, allowing these rules to be applied to Federal Consistency determinations for offshore energy activities. These coastal energy policies list the types of near-shore and offshore sensitive areas to be avoided, require mitigation where impacts to coastal resources cannot be avoided, and restoration of sites when facilities are abandoned.

Energy exploration and development also will be subject to the North Carolina Oil Pollution and Hazardous Substance Control Act (143-215-75), which promotes the health, safety, and welfare of the residents of North Carolina by protecting the land and the waters over which the State has jurisdiction from pollution by oil, oil products, oil by-products, and other hazardous substances. Further, offshore oil and gas activities will be subject to the North Carolina Environmental Policy Act (Chapter 113A, Article 1 of the General Statutes) and Mining Act of 1971 (Chapter 74, Article 7 of the General Statutes). There also may be permits required to protect air quality (Chapter 143 of the General Statutes). The North Carolina General Statutes guide the roles of the North Carolina Utilities Commission (Chapter 62) and the North Carolina Energy Policy Council (Chapter 113B) in state energy policy.

North Carolina's Socio-Economic Policies Require Protection of the Coastal Economy and Jobs

Tourism along North Carolina's coast generates billions in economic activity and supports over 30,000 jobs, thereby making our state's beaches and waterways a vital component of the state's economy. The waterways provide economic livelihood to our fishermen and provide recreational benefits to millions of tourists. Our beaches attract tourists from across the United States and around the world. North Carolina is one of the most visited states in the nation. In 2015, visitors to North Carolina spent over \$3 billion while on the North Carolina coast. This visitor spending resulted in \$650 million in wages and tips, \$160 million in state tax receipts, and \$160 million in local tax receipts.

Conclusion

The potential environmental damage and adverse impact on the coastal zone far outweigh the potential for discovery of oil and gas. The estimates for oil and gas off North Carolina's coast are small when compared to other areas off the United States coast. The geology of the offshore waters includes narrow geological plays and unstable slides. The distance to existing oil infrastructure negates many of the typical benefits of oil development. And, the need for energy

supply is already met with a diverse domestic production within North Carolina and across the nation. North Carolina's ecology is unique and susceptible to oil and gas development damage, including damage to fisheries in federally recognized areas of significant productivity and damage to endangered species. The state's economy, natural heritage and culture rely heavily on the natural resources of the coastal zone. Those resources are at direct risk of harm from oil and gas development. Consequently, it is imperative for the protection of these natural resources to exclude the area off the shore of North Carolina from a 2019-2024 OCS Leasing Program.

Thank you for your attention. Please contact the North Carolina Department of Environmental Quality through Mary Penny Kelley, Senior Advisor, Policy and Innovation, (919) 707-8626, Mary.Kelley@ncdenr.gov, if you need any additional information or wish to discuss this matter further.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael S. Regan". The signature is fluid and cursive, with a large initial "M" and "R".

Michael S. Regan
Secretary