



August 3, 2026

Bureau of Ocean Energy Management,
Office of Strategic Policy and
International Affairs
1849 C Street NW,
Washington, DC 20240.

To: Audrey Taylor, BOEM Office of Strategic Policy and International Affairs

This letter is submitted in response to BOEM's July 2026 Request for Information regarding the potential use of submerged lands and existing offshore facilities on the Outer Continental Shelf (OCS) for space launch-related activities, including the siting and operation of offshore space launch platforms and potential identification of re-entry sites on the OCS. This Request for Information (RFI) is intended to inform BOEM's understanding of technical, environmental, operational, legal, regulatory, and interagency considerations associated with such activities.

The South Atlantic Fishery Management Council (Council) is responsible for management of over 64 species of finfish, crustaceans, and corals in federal waters from the North Carolina/Virginia border through Key West, Florida. The Mid-Atlantic Council manages more than 65 marine species in federal waters and is composed of members from the coastal states of New York to North Carolina (including Pennsylvania). The New England Council has primary management jurisdiction over 28 marine fishery species in federal waters and is composed of members from Maine to Connecticut. The Councils understand that the purpose of the request is to inform BOEM's understanding of technical, environmental, operational, legal, regulatory, and interagency considerations associated with such activities.

Upon reviewing the Request for Information provided on your website, the Councils offer the following comments:

A. And B. Offshore Space Launch Concepts and Offshore Re-Entry Locations and Infrastructure

a. Is there industry appetite for the reuse of existing OCS facilities?

If there is a need for new infrastructure to support space launch and re-entry activities, the Councils strongly support repurposing existing structures over the development of new ones. Using existing subsea cable routes and infrastructure can help minimize human impacts on fisheries and the ecosystems they rely on. Decommissioned structures that have become fishing hot spots akin to artificial reefs should be avoided.

B. Location and Site Considerations

- a. What geographic, oceanographic, or operational factors would influence the siting of offshore space launch and reentry facilities?*

The Councils recommend accounting for water and wind currents to minimize impacts to essential fish habitat (EFH) and water quality. Runoff and exposure of surrounding EFH to fuel contaminants and heavy metals (anticipated impacts) should be prevented. Managed areas including but not limited to Habitat Areas of Particular Concern (HAPC), Special Management Zones (SMZs), Spawning Special Management Zones (SSMZs), and Coral Habitat Areas of Particular Concern (CHAPCs) should be avoided. Additionally, areas with substantial commercial or recreational fishery overlap, including areas used for transit should be avoided to help minimize adverse effects on fisheries and damage caused by noise pollution from space launches and reentry. To avoid the transit of large quantities of fuel or oil and the potential for offshore oil spills, any offshore development should rely on renewable energy sources that can be found on site and developed in a way that minimizes environmental impacts.

- b. What distances from shore, water depths, or seabed conditions would typically be required or preferred?*

Launch and reentry sites should, at a minimum, use a spatial buffer of 20 km¹ around the shelf break to mitigate acoustic, hydrodynamic, and sedimentary effects on these important habitats. Precautions are appropriate given that the effects of offshore structures on ocean circulation in this region are not well understood and are the subject of ongoing analyses.

To ensure that the 20 km distance is safe, developers should ensure pollutants generated during launches and re-entry do not enter the water column; we are concerned that contaminants will enter the water column and damage coral and that heavy metals will bioaccumulate in the local flora and fauna. Additionally, any debris related to launches, re-entries or failures should be removed from the ocean floor and water column as soon as possible.

C. Environmental Considerations

- a. What potential environmental impacts or risks may be associated with offshore space launch, re-entry, and recovery activities?*

Space launch, reentry, and recovery activities contribute to degraded water quality, changes in fish movement and behavior, increased greenhouse gas

¹ Jones R, Fisher R, Bessell-Browne P. Sediment deposition and coral smothering. PLoS One. 2019 Jun 19;14(6):e0216248. doi: 10.1371/journal.pone.0216248. PMID: 31216275; PMCID: PMC6584000. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6584000/#pone.0216248.ref023>

emissions, and increased human-made debris on the ocean floor. Reentry and launch activities should not occur within or in proximity to managed and protected areas including, but not limited to, coral, coral reefs, and live/hard bottom habitat at all depths in the EEZ; HAPCs; or other special biological resources essential to commercial and recreational fisheries under the Councils' jurisdiction. Launches and reentries should avoid nursery and spawning sites/seasons and migratory routes/seasons.

Developments should utilize construction practices that avoid and minimize environmental impacts. A specific example would be to use on-site generated electricity to decrease subsea transit cabling impacts on habitat.

Space launch activities can create noise in excess of 200 dB at the source². While ignition and related noise would presumably occur above the surface of the ocean, vibrations and noise would be transmitted subsurface and have the potential to impact marine life³ (Peng et al., 2015). An analysis of the subsurface noise, vibrations, and particle motion resulting from launch activities should be conducted to better characterize acute and chronic impacts to fish, EFH, and other living marine resources, especially those managed by the three regional Councils.

Cumulative long-term effects must be incorporated into the environmental impacts analysis, and any conclusion should not rely on atmospheric or water mixing to dismiss the long-term effects launches and reentries will have on the surrounding marine ecology. Long-term monitoring of environmental impacts on any offshore development and associated debris fields should be integrated into any construction, repurposing, or utilization plans from the beginning.

b. How might these impacts be mitigated?

Compensatory mitigation should not be considered until avoidance and minimization measures have been duly demonstrated. Uncertainty and risk of inadequately offsetting negative impacts should be analyzed and considered.

Mitigation throughout all phases of the project should be local, “up-front,” and “in-kind,” and include long-term monitoring to assess and ensure the efficacy of the mitigation program selected. This should include restoration of affected areas where damage was unavoidable and minimization of negative environmental impacts.

²<https://svantek.com/academy/noise-at-the-international-space-station/>

³ <https://pmc.ncbi.nlm.nih.gov/articles/PMC4626970/>

A compensatory mitigation plan should be established prior to development. It will be necessary to offset losses of commercial and recreational fishing revenue, including losses for shore-side support businesses and EFH, as well as losses associated with temporary impacts.

c. What data gaps or research needs should be addressed to better assess environmental effects?

Since space program development is relatively new, the Councils have not developed a policy on this topic. As such, the following documents are the most applicable set of standards for offshore development.

Please refer to the best practices for monitoring and advancement of research and exploration starting on page 13 of the SAFMC's [Policy For The Protection And Restoration Of Essential Fish Habitats From Energy Exploration And Development](#) and to the Habitat and Ecosystem Research and Monitoring priorities listed starting page 50 in the [SAFMC's Research and Monitoring Plan](#).

Also refer to the recommendations in the [New England](#) and [Mid-Atlantic Council's policies on Non-Fishing Activities that Impact Fish Habitat](#).

Some key takeaways include:

- Developers should accurately map and characterize all benthic habitat types throughout the entire project area (including cable corridors, especially complex habitat and deep-sea coral habitats that are sensitive to impacts, in accordance with NOAA Fisheries Recommendations for Mapping Fish Habitat. These maps are essential for EFH consultations and to support other management and science needs.
- Habitat characterization and benthic monitoring should occur over the life cycle of the project to track changes over time.
- The Councils endorse developing and analyzing alternatives in the EIS that are explicitly designed to avoid, minimize, and mitigate habitat and fisheries impacts.
- Energy exploration, development, operational activities, site decommissioning activities and structure removal should not disrupt or impede known migratory patterns of endangered and threatened species, nor shall they disrupt or impede the spawning, breeding or nesting seasons of endangered and threatened species.
- Because individual projects do not occur in isolation from one another, or from other types of development, it is very important to consider the potential for cumulative effects to Council-managed species and their habitats, when siting and designing projects. This applies across multiple projects within a single lease area as well as across multiple projects across the region.
- All facilities associated with project life cycles should be designed to avoid or minimize to the maximum extent practicable impacts on

coastal ecosystems and sand sharing systems. This includes cable corridors.

- Appropriate buffers should be designated around sensitive marine habitats.
- Adequate spill containment and clean-up equipment should be maintained for all development facilities, support vessels and platforms. Equipment shall be available on-site or located so as to be on-site within the landing time trajectory. Fuel spill response plans should address 1) identification of sensitive marine habitats; 2) methods to track the movement of spills; 3) adequate response equipment should be immediately available, and 4) researchers should have timely access to impacted areas, as needed.
- A contingency plan should be required to address catastrophic blowouts or more chronic material losses from offshore facilities, including trajectory and other impact analyses and remediation measures and responsibilities.

The impacts of space launch and re-entry on the marine environment have so far been limited in scope and have been more prevalent in some areas than others. If these activities notably expand in scope, and especially if they expand into new areas, there will be much uncertainty in their potential impacts to the marine environment and human communities, with a limited ability to extrapolate lessons learned from prior activities, as many impacts will be site-specific. Therefore, there are major data gaps and uncertainties surrounding the impacts of these activities on the marine environment. This must be addressed before any activities proceed.

D. Legal considerations

- a. What other legal issues should BOEM consider in relation to authorizing offshore space launch and re-entry activities?*

Launches and reentries will have an associated hazard zone for safety. BOEM should consider how the hazard zones will be enforced and publicized to ensure the safety and health of mariners, including commercial and recreational fishery participants, as well as what the impacts will be on maritime transit.

E. Guidelines, Standards, and Practices

- a. What existing domestic guidelines, standards, or best practices, including offshore engineering, maritime, aerospace, environmental, and safety standards—are relevant to the siting, design, construction, operation, or decommissioning of offshore commercial space launch or re-entry facilities?*

Please refer to:

- [Policy For The Protection And Restoration Of Essential Fish Habitats From Energy Exploration And Development](#)
- [Policies For The Protection And Restoration Of Essential Fish Habitats From Beach Renourishment And Associated Large-Scale Coastal Engineering](#)

- [Environmental impacts of the deep-water oil and gas industry: a review to guide management strategies](#)
- [Mid-Atlantic Council's policies on Non-Fishing Activities that Impact Fish Habitat.](#)
- [NEFMC Habitat Policies for Offshore Energy, Aquaculture, Submarine Cables](#)

Furthermore, safe standard thresholds should be established for the following before decommissioned oil rigs and other facilities in the OCSs are repurposed:

- Sound pollution
- Socioeconomic impacts on affected coastal cities
- Impacts on existing utilities and infrastructure
- Visual effects (especially with night launches/reentries)
- Impacts on nonendangered species as well as endangered species
- Thresholds for coastal resources
- Impacts on climate
- Significance thresholds for hazardous materials, solid waste, or pollution prevention
- Impacts on natural resources and energy supplies
- Transportation-related effects
- Health and safety-related effects.

- b. *Are there industry consensus standards, voluntary best practices, emerging technical standards, research initiatives, or guidance documents that should be considered when evaluating offshore commercial space launch or re-entry facilities?*

Please refer to the previous answer for the list of information that needs consensus standards.

F. Consultations and Environmental Review

- a. *What approaches to consultations and environmental review, including those applied under the National Environmental Policy Act, Outer Continental Shelf Lands Act, Endangered Species Act, Marine Mammal Protection Act, Essential Fish Habitat, National Historic Preservation Act, Coastal Zone Management Act, Government to Government, Clean Water and Air Acts, and other applicable laws, may be appropriate for offshore space launch or re-entry activities involving OCS facilities?*

Similar to other federal activities that are proposed in the OCS, the Councils anticipate that a similar detailed EFH consultation will be done for this type of project. The Councils recommend that an area-based plan integrates local input into any offshore development.

- b. *What considerations should BOEM evaluate when determining the timing, sequencing, and scope of environmental review for potential actions related to offshore commercial space launch or reentry facilities?*

BOEM should consider spawning seasons, fishing seasons, migratory seasons, and local council and government legislative schedules to allow for appropriate comment periods and local government input.

G. International Context

- a. Are there international agreements, conventions, or multilateral frameworks that may be relevant to offshore commercial space launch or re-entry activities?*
 - [Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space](#)
 - [United Nations Convention on the Law of the Sea of 10 December 1982](#)
 - [Intergovernmental Conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction \(General Assembly resolution 72/249\)](#)

H. Stakeholder Engagement

- a. With which stakeholder groups should BOEM engage with as it evaluates this potential use of the OCS?*

Offshore development and its associated space activities represent a new use of marine waters and should be compatible with other ocean co-uses, including commercial, recreational, and tribal fishing while maintaining biodiversity. Fishing community impacts as defined by NOAA Fisheries should be considered and evaluated. BOEM and project developers should engage early and often with the fishing community, including individual fishermen, fishing businesses, and recreational and commercial fishing organizations. BOEM should also engage with the Regional Fishery Management Councils, NOAA Fisheries, state marine resource and coastal zone management agencies, National Marine Sanctuaries, the Southeast Area Monitoring and Assessment Program (SEAMAP), regional science entities (e.g., the Responsible Offshore Science Alliance and the Regional Wildlife Collaborative), regional ocean observing systems (MARACOOS, NERACOOS, and SECOORA), other NGOs, universities with relevant programs and research, the U.S. Department of Defense, and any other interested stakeholders.

- b. How can BOEM best engage with stakeholder groups during its next steps/evaluation?*

Engagement should happen early and often and focus on collaboration, shared problem identification, option generation, problem solving, and should move beyond only information sharing and communication as its primary purpose and intent.

Furthermore, BOEM should hold public meetings both in person and online to relay important project information to stakeholders, including to the relevant fishery management councils and advisory panels. Over the past several years, the Councils have received presentations during their Council meetings and their advisory groups (committees, advisory panels, and technical bodies) on offshore-related activities from offshore wind to aquaculture to marine carbon dioxide removal. We recommend similar types of presentations to promote opportunities

for Council engagement and feedback. BOEM should engage with the relevant Council(s) based on any project development schedule to ensure adequate time for public input and response.

The Councils request that BOEM require ongoing environmental monitoring of all affected marine species, including non-endangered species, set safety threshold standards for water quality, and use construction methods that minimize environmental impacts. Avoidance, minimization, and then mitigation of impacts to commercial and recreational fisheries should be evaluated before moving forward with any offshore development or repurposing of existing offshore structures. This will ensure America's space program is sound and will help preserve the economy and environment. Thank you for considering our comments.

If there are any questions, please reach out to Kathleen Howington (Kathleen.Howington@safmc.net).

Sincerely,

A handwritten signature in black ink, appearing to read "John Carmichael".

Mr. John Carmichael
Executive Director, South Atlantic Fishery Management Council

A handwritten signature in black ink, appearing to read "Christopher M. Moore".

Dr. Christopher M. Moore
Executive Director, Mid-Atlantic Fishery Management Council

A handwritten signature in blue ink, appearing to read "Cate O'Keefe".

Dr. Cate O'Keefe
Executive Director, New England Fishery Management Council

Cc: SAFMC Council Members
SAFMC Habitat and Ecosystem Advisory Panel

John Carmichael, Chip Collier, Myra Brouwer
Rick DeVictor, Shep Grimes, Heather Blough

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