

# **Sunrise Wind Construction and Operations Plan Scoping Report**

U.S. Department of the Interior  
Bureau of Ocean Energy Management  
Office of Renewable Energy Programs



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## List of Abbreviations and Acronyms

Abbreviation	Definition
AVERT	Avoided Emissions and gene Ration Tool
BOEM	Bureau of Ocean Energy Management
CAA	Clean Air Act
CFR	Code of Federal Regulations
CMR	Code of Massachusetts Regulations
COA	Corresponding onshore area
COBRA	Consolidated Omnibus Budget Reconciliation Act
COP	Construction and Operations Plan
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
GHGs	greenhouse gases
HAP	hazardous air pollutant
ID	identification
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOA	Nearest onshore area
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NYSDEC	New York State Department of Environmental Conservation
NYSERDA	New York State Energy Research and Development Authority
OCS	Outer continental shelf
RODA	The Responsible Offshore Development Alliance
Sunrise Wind	Sunrise Wind LLC
PDF	portable document format
WEA	Wind Energy Area
WTG	Wind turbine generator

# 1. Draft Scoping Summary Statement for the Sunrise Wind Environmental Impact Statement

## 1.1. Introduction

Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA) under Title 40 of the Code of Federal Regulations (CFR) Section 1501.9(a) require agencies such as the Bureau of Ocean Energy Management (BOEM) to perform certain actions as part of the scoping process, including:

- Determining the scope and the significant issues to be analyzed in depth in the Environmental Impact Statement (EIS); and
- Identifying and eliminating from detailed study the issues that are not significant.

This document, in combination with the Draft EIS, is intended to document BOEM's implementation of 40 CFR 1501.9.

On September 1, 2020, Sunrise Wind, LLC (Sunrise Wind) submitted a Construction and Operations Plan (COP) to BOEM seeking approval to construct and operate up to 122 wind turbine generators (WTGs) with a capacity to generate up to 924 megawatts (herein referred to as the proposed Project or Proposed Action) offshore of Massachusetts, Rhode Island, and New York in federal waters. On August 31, 2021, BOEM issued a Notice of Intent (NOI) to prepare an EIS consistent with NEPA regulations (42 United States Code § 4321 et seq.) to assess the potential impacts of the Proposed Action and alternatives (83 Federal Register 13777).

The NOI commenced a public scoping process for identifying issues and potential alternatives for consideration in the EIS. The formal scoping comment period was from August 31 through October 4, 2021. During this timeframe, federal agencies, state and local governments, and the general public had the opportunity to help BOEM identify potential significant resources and issues, impact-producing factors, reasonable alternatives (e.g., size, geographic, seasonal, or other restrictions on construction and siting of facilities and activities), and potential mitigation measures to analyze in the EIS, as well as provide additional information. BOEM also used the NEPA scoping process to initiate the Section 106 consultation process under the National Historic Preservation Act (54 United States Code § 300101 et seq.), as permitted by 36 CFR § 800.2(d)(3), which requires federal agencies to assess the effects of projects on historic properties. Additionally, BOEM informed its Section 106 consultation by seeking public comment and input through the NOI regarding the identification of historic properties or potential effects on historic properties from activities associated with approval of the Sunrise Wind COP. The NOI requested comments from the public in written form, delivered by hand or by mail, or through the regulations.gov web portal.

This Scoping Report outlines the objectives, methodology, and content of the information provided by interested parties during the scoping period.

## 1.2. Objective

This report reviews and catalogues the information and materials provided to BOEM during the scoping period for the proposed Project. The goal of the exercise was to identify substantive comments for consideration in the development of the EIS and categorize them based on the applicable resource areas or NEPA topics. Section 1.3 describes the methodology used to identify and categorize comments. This categorization scheme allowed subject matter experts to review comments directly related to their areas of expertise and allowed BOEM to generate statistics based on the resource areas or NEPA topics addressed in each of the comments. In addition, the process demonstrates consideration of the materials received while simultaneously contributing to the development of the EIS.

## 1.3. Methodology

### 1.3.1. Terminology

The following terminology is used throughout this Scoping Report:

- **Submission:** The entire content submitted by a single person or group at a single time. For example, a 10-page letter from a citizen, an email with a portable document format (PDF) attachment, or a transcript of an oral comment given at a public scoping meeting was considered to be a submission.
- **Comment:** A specific statement within a submission that expresses a sender's specific point of view, concern, question, or suggestion. One submission may contain many comments.

### 1.3.2. Comment Submittal

BOEM received comment submissions during the scoping process via the following mechanisms:

- Electronic submissions received via Regulations.gov on docket number BOEM-2021-0052
- Electronic submissions received via email to a BOEM representative
- Comments submitted verbally at each of the three public scoping meetings

BOEM did not receive any hard-copy comment submissions by hand or by mail. While the NOI did not include email as a method for submitting a comment, any submissions received via email that were clearly identified as relating to the Project were considered a valid comment submission.

Three virtual public scoping meetings were held on the following dates as outlined in Table 1-1. The number of submissions received via each submission method is provided in Table 2-1.

**Table 1-1 Public Scoping Meetings**

<b>Public Scoping Meeting Dates</b>	<b>Time</b>
September 16, 2021	5:30 p.m. EDT
September 20, 2021	1:00 p.m. EDT
September 22, 2021	5:30 p.m. EDT

### 1.3.3. Comment Processing

#### 1.3.3.0. Compilation of Submissions

BOEM's process for analyzing public comments was to use a comment database website. Submissions were provided via Regulations.gov, email, or verbally at the public meetings (as shown in Table 2-1). All submissions were downloaded, processed, and imported into the comment database. The comment database recorded information about each submission, including the submitter's name, submission date, submission method, and whether the submitter was an individual, representative of an organization, or from a government entity or agency.

Before submissions were entered into the comment database they were assigned a submission identification (ID). This ID begins with the Project Docket number, e.g., "BOEM-2021-0052," followed by the submission method, followed by a submission ID number. For the submission method, "DRAFT" or no submission method indicates the submission was received via Regulations.gov; "EMAIL" indicates the submission was received via email; and "TRANS" indicates the submission was received via a transcript from a public scoping meeting. If the submission was received verbally during a scoping meeting, this "TRANS" is also followed by the date of the meeting. These submission IDs can be found in Appendix A, List of Submissions and Individual Comments by Resource or NEPA Topic.

#### 1.3.3.1. Identification of Comments

All submissions and oral testimonies were read to identify individual comments (as defined in Section 1.3.1). A hierarchical outline was developed to include key issues addressed by the commenters or identified in the NOI. This issue outline was used to code each individual comment to a specific resource or NEPA topic. When a comment pertained to more than one resource or NEPA topic, it was not coded to multiple topics but instead coded to the most applicable topic. The resource categories are provided in Table 2-2.

Appendix A, List of Submissions and Individual Comments by Resource or NEPA Topic, provides a listing of all the submissions received as well as all the individual comments that were extracted from each submission, organized by resource or NEPA topic area. The individual comments provided in Appendix A include verbatim comment excerpts as written by the commenters. The purpose of presenting this material in its verbatim form is to preserve the exact words of the commenter as they relate to each issue.

## 2. Scoping Submissions and Comment Summary

### 2.1. Submissions

BOEM received 88 submissions from the public, agencies, and other interested groups and stakeholders. Table 2-1 shows the number of submissions received via each submission method.

**Table 2-1 Distribution of Submissions by Method**

<b>Submission Type</b>	<b>Number of Submissions Received</b>
Regulations.gov submissions	65
Email to BOEM representative	6
Verbal submission at a public meeting	17
<b>Total</b>	<b>88</b>

The totals above included the following submissions by federal, state, local, and tribal government entities:

- Three submissions from federal agencies: U.S. Environmental Protection Agency (EPA) Region 1, National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries), and National Park Service
- One submission from a tribal government: Montaukett Indian Nation
- Three submissions from state agencies or representatives: Massachusetts Office of Coastal Zone Management, Rhode Island Coastal Resources Management Council, New York State Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation
- Three submissions from local governments: Mastic Fire Department, Suffolk County, NY, Town of New Shoreham, RI

In addition to the federal, state, and local government entities identified above, 27 submissions came from non-governmental organizations and the remainder were provided by individuals. Submissions from Regulations.gov included 380 form letters, some of which had additional language that was coded and categorized.

### 2.2. Comments

BOEM identified a total of 769 unique comments. Table 2-2 shows the distribution of comments by resource and NEPA topic. Section 2.3 defines the resource areas to which comments were assigned and summarizes the comments by each topic. The most commonly addressed resource topics included Climate Change, NEPA/Public Involvement Process, Mitigation and Monitoring, Commercial Fisheries and For-Hire Recreational Fishing, and General Support or Opposition.

**Table 2-2 Distribution of Comments by Resource or NEPA Topic**

<b>Resource</b>	<b>Comments</b>
Air Quality	20
Alternatives	
- Cables and landfalls	19
- Other comments on alternatives	35
- Project relocation	2
- Wind turbines	12
Bats	10
Benthic Resources	14
Birds	12
Climate Change	80
Coastal Habitat and Fauna	5
Commercial Fisheries and For-Hire Recreational Fishing	44
Cultural, Historical, and Archaeological Resources	17
Demographics, Employment, and Economics	
- Employment and job creation	38
- Recreation and Tourism	4
Environmental Justice	13
Finfish, Invertebrates, and Essential Fish Habitat	30
Marine Mammals	36
Mitigation and Monitoring	45
Navigation and Vessel Traffic	14
NEPA/Public Involvement Process	49
Planned Activities Scenario/Cumulative Impacts	41
Proposed Action/Project Design Envelope	3
Purpose and Need	3
Scenic and Visual Resources	7
Sea Turtles	5
Water Quality	13
Wetlands and Waters of the U.S.	4
Other Topics Not Listed	
- Coastal Zone Consistency	4
- Electromagnetic Fields (EMF)	2
- General Wildlife	7
- Noise	12
- Other	43
General Support or Opposition	126

## 2.3. Alternatives

Alternative comments included suggesting, questioning, or providing opinion about alternatives to the proposed Project. Topics raised in this category included the following:

- BOEM should evaluate a range of alternatives including the offshore export cable, the inter- array cables, landfall location, and the overall configuration of the wind farm within the lease area. The EIS should consider and evaluate the full range of reasonable alternatives to the proposed action, including those that would minimize damage to the environment.
- The EIS discussion of the alternatives should be grouped into the three corresponding elements of the proposed project: (1) wind farm area; (2) offshore export cable routes and associated corridors; and (3) inshore export cable routes and associated corridors and landfall points.
- The cost-benefit analysis should include all quantitative and qualitative costs and benefits of available alternatives, including the no action alternative.
- The EIS should ensure the needs of affected NYS stakeholders, including its fishermen, maritime industries, recreational businesses, and coastal communities, are met by evaluating a range of Project alternatives and undertaking a robust cumulative impact analysis.
- BOEM should include alternatives specific to each phase of the project (siting, construction, operation, and decommissioning) to ensure the environmental effects of the project are avoided and if not avoided then mitigated or minimized.

### 2.3.1 Cables and Landfall

- The EIS should consider shared export cables and/or common cable corridors that can benefit multiple projects while reducing project impacts and costs and increase efficiency and predictability.
- Consider co-locating a portion of the submarine cable on the proposed replacement of the Smith Point Bridge (BIN 3-30077-0) in the Town of Brookhaven, New York.
- Evaluate a range of burial depths and monitoring techniques to ensure that export cables are buried to sufficient depths to reduce the risk of fishing gear interactions and avoid navigation routes and fairways.
- Evaluate alternative offshore installation methodologies that minimize impacts to water quality and benthic habitat.
- Evaluate a range of sand leveling techniques during cable installation, in addition to the proposed suction hopper dredger and controlled flow excavator, to ensure the least impact to water quality practicable.
- The EIS should describe the characteristics of the cable protection materials which may be used. These materials should mimic natural, nearby habitats where possible.
- As the onshore portion of the cable will be buried underneath Town, County and State-owned roads or rights-of-way, a commenter requested that the project adhere to construction restrictions to minimize disruption to residents and avoid construction in certain roads and parks during the peak summer season.

### 2.3.2 Project Relocation

- Commentors suggested that North Kingston, RI is a superior location for a wind farm operations and maintenance facility.

### 2.3.3 Wind Turbines

- The EIS should analyze multiple distinct alternatives associated with smallest, largest, and one or more intermediary potential scales of the project in terms of the number of turbines which might be installed.
- Consider and assess alternative foundations for WTGs.
- Consider and assess alternative turbine specifications that could influence collision risk to seabirds.
- The alternatives analysis should analyze the difference in overall impacts associated with the deployment of a range of WTG MW generation capacities.

### 2.3.4 Other Comments on Alternatives

- The EIS should consider cooling system designs that do not involve the use of an open loop cooling system for the offshore converter station and consider a reasonable range of alternative methods of reducing or eliminating any adverse effects from water withdrawals for cooling.
- The EIS must be developed to include realistic alternatives to the open loop cooling system design, as these systems have long-term impacts to the environment, particularly spawning and habitat.
- An alternative that evaluates and considers the impacts to resources as a result of both an AC and the proposed DC export option should be included in the EIS.
- Consider an alternative which would minimize impacts to commercial and recreational fisheries.
- The EIS should consider Project configuration alternatives that would minimize fisheries habitat impacts.
- Evaluate establishing fishing transit lanes in a configuration similar to "Proposal for New England wind energy project layout with transit lanes for safe passage of vessels" dated January 3, 2020.
- Include a vessel traffic plan to minimize the effects of all vessels associated with the wind energy project on marine wildlife.
- Consider a "No Action" alternative that avoids known or predicted north Atlantic right whale habitats and all effects of offshore wind development in this area.
- The EIS should include a range of alternatives to prohibit high resolution geophysical surveys during seasons when protected species are known to be present in the project area.

## 2.4. Definition of Resource Areas and Common NEPA Topics Raised

The following sections define each of the resource areas or NEPA topics that the comments were categorized under and summarizes the comments by each of the resource areas or topics listed. Comments have been summarized below, as appropriate, particularly for concerns that were

raised by several commenters. Appendix A presents the individual comments that were extracted from each of the submissions, organized by resource area or NEPA topic. The comment excerpts that only expressed general support or opposition are not included in Appendix A in their verbatim form. Instead, those comments are summarized in Section 2.3.28 below and in Section A-2.27 of Appendix A.

### **2.4.1. Air Quality**

Air quality comments included evaluating emissions from proposed Project construction, operations, maintenance, and decommissioning. Climate change concerns related to air quality noted that offshore wind offers the potential to generate clean, renewable energy and contribute to regional decarbonization of the environment. Topics raised in this category included the following:

- Transitioning to offshore wind will significantly curb air pollution and provide quantifiable health benefits for New Yorkers.
- Sunrise Wind must acquire the appropriate air quality permits before Project construction can begin, including submission of an air permit application to EPA within 18 months from the NOI.
- The EIS should include measures to monitor and mitigate for NAAQS pollutants.
- The EIS should discuss potential emission reductions associated with the proposed project and alternatives under consideration and highlight the air quality benefits of avoided emissions, particularly in areas where there may be issues regarding attainment of the NAAQS.
- BOEM should describe compliance with the General Conformity requirements for nonattainment areas, conduct a full analysis, and make a determination of General Conformity as applicable, and include it in the EIS.
- Consider how the project will contribute to regional decarbonization, and clean energy goals, and the consequences of the no-action alternative.
- The EIS should consider the air quality impacts anticipated during construction, operation, and decommissioning, including the beneficial impacts. Include quantification of all Clean Air Act criteria pollutants, greenhouse gases (including upstream emissions), and any hazardous air pollutant or other air pollutants emitted by the Project.
- Provide ambient air quality data, complete National Ambient Air Quality Standards (NAAQS), and accurate NAAQS attainment area designations.

### **2.4.2. Bats**

Bat comments included several references noting which species are potentially present in the Lease Area and stated the need to evaluate and consider turbine risks to bats. Topics raised in this category included the following:

- BOEM must remain in cooperation with the US Fish and Wildlife Service to evaluate any impact on bats as well as birds.

- The bat species potentially present in the Lease Area already face multiple stressors on land which can potentially alter their behavior and migratory paths, thus increasing their use of the offshore environment.
- Better understanding of bat presence and behavior in the Lease Area is needed, as well as impacts to bats from offshore wind.
- The EIS must consider impacts to all bat species with a presence in this region. BOEM should account for bats' potential attraction to, and increased risk of collision with, offshore wind turbines and should not rely on bat avoidance to minimize impacts.
- Consider impacts from aviation lighting, as well as potential impacts to northern long-eared bats onshore, including due to tree clearing during construction activities.

### 2.4.3. Benthic Resources

Commenters stressed the importance of benthic data as a key element in identifying impacts to both aquatic habitat and fisheries and included references to data that should be gathered and utilized. Topics raised in this category included the following:

- Cable routes should be directed away from complex benthic habitats and evaluate how scour protection and/or cable mattresses can provide benthic/fishery habitat mitigation.
- BOEM should assess impacts to complex habitats from the Sunrise Wind Farm and whether micro-siting in areas where complex habitats are predominant would adequately avoid, minimize, and mitigate impacts to complex habitats.
- The EIS and COP should provide maps of benthic features early in the process, as these data are needed to conduct essential fish habitat consultations.
- Along with potential impacts, benthic habitat requirements need to be noted in the EIS.
- Alternatives that avoid and minimize impacts to these habitats should be evaluated and given full consideration. Compensatory mitigation should be provided for unavoidable adverse effects. BOEM should require robust monitoring of impacts to essential fish habitat and benthic resources in the area of the Sunrise Wind.
- The EIS should provide more clarity on the determination of turbine micro siting, as well as how export cables will be sited, to avoid and minimize impacts to sensitive habitats.
- The EIS should acknowledge that although the artificial reefs at turbine foundations will be beneficial for some species, it will not be universally beneficial for all species and habitats and that cascading effects should be evaluated.
- The EIS should acknowledge that the addition of new complex habitat due to cable armoring will replace existing habitat types and the impacts of such a change should be analyzed.
- The EIS should assess impacts from seafloor leveling techniques.

#### 2.4.4. Birds

Commenters discussed the importance of considering avian airflows and the potential impacts to birds and their migratory patterns. Topics raised in this category included the following:

- The EIS should include collision and displacement risk assessments for the project and acknowledge limitations of these assessments. It should also provide clear parameters for monitoring impacts from the project before, during, and after construction and during operation.
- BOEM must remain in cooperation with the US Fish and Wildlife Service.
- To address the Migratory Bird Treaty Act, GIS analysis should be provided with data overlay to show that the project will not interfere with migratory patterns.
- Risks to birds must be considered, but this should not deter advancing and using windmill technologies.
- Discuss behavior and physiological impacts from aviation lighting. Evaluate and consider the Block Island Wind Farm post-construction acoustic surveys, and vessel-based surveys on the Fugro Enterprise that were completed in 2017.
- The project area is within the Atlantic Flyway avian migratory corridor which serves a broad group of species, including several listed and at-risk avian species. The EIS consider impacts from project construction, operation, maintenance, repowering, and decommissioning to all species of concern.
- The EIS must include accurate estimates of avian populations and population-level impacts. It should also address population-level, cumulative impacts to avian populations from developing Sunrise Wind Farm and other areas in the Atlantic outer continental shelf (OCS).

#### 2.4.5. Climate Change

Comments discussed the impacts that climate change is having on the planet and shared their support of the development of the renewable energy industries due to their vital role in combating climate change. Topics raised in this category included the following:

- Commentors noted the Project would be a major step in reaching greenhouse emission reduction goals and would help establish the infrastructure for future offshore wind projects.
- Commentors suggested reclaiming residential land within one mile of the coastline could avoid the taxpayer payouts from the impacts of climate change.
- Commentors noted their concern about the impacts that climate change is having on the planet and that action needs to be taken immediately.
- Commentors shared that they continue to occupy the front lines in the battle against climate change as it affects local properties and jobs.

- The EIS should weigh the environmental benefits and economic impacts of advancing offshore wind farms to reduce climate impacts against any potential impacts associated with construction and maintenance of offshore wind farms. This should include the benefits of avoided costs that result from climate mitigation.
- The EIS should consider how the project will contribute to regional decarbonization, and clean energy goals, and the consequences of the no-action alternative.
- The EIS, should measure the visual impacts, community impacts, and impacts on birds, fish, and marine species against the comparable fossil fuel infrastructure.
- The EIS should analyze the amount of GHG that would be offset by these projects, as well as what additional emissions may be produced.
- Commentors noted it is important to keep in mind that the greatest threat to species, oceans, fishing, and coastal communities is climate change.

#### **2.4.6. Coastal Habitat and Fauna**

Commenters discussed the importance of coastal habitats and when considering environmental impacts, noting that providing protection and ongoing monitoring of sensitive areas is critical, particularly along cable landings, cable crossings, and turbine installations and foundations, as well as temporary docks and piers and at the Operations and Maintenance Facility. Topics raised in this category included the following:

- Montauk water bodies are a fragile ecosystem, and construction at Montauk Lake will cause extensive environmental damage due to the transfer of oils and grease.
- There needs to be commitment to habitat restoration via an environmental mitigation and restoration fund, to return the area to pre-built ecological function.
- There should be no encroachment across the Wilderness boundary and no diminishment of Wilderness characteristics.
- A commenter encouraged a connection from Smith Point trails and habitats to Mastic Beach trails and habitats currently in development.

#### **2.4.7. Coastal Zone Consistency**

Commenters recommended that the release of the Draft EIS (DEIS) be commensurate with initiation of the Coastal Zone Management Act (CZMA) federal consistency review period. Topics raised in this category included the following:

- The Federal consistency review for offshore wind projects should begin with BOEM's publication of the DEIS and issuance of the Notice of Availability for offshore wind projects under Subpart E of 15 C.F.R. 930.
- A DEIS commensurate with initiation of the CZMA federal consistency review period would lead to a more informed and science-driven decision-making process in consideration of the proposed project alternatives. Such review alignment would provide

for a timelier state decision in offshore wind matters and provide predictability for developers.

- BOEM should work with other federal agencies, in particular NOAA, to properly align the CZMA federal consistency review process with the COP review process so that the DEIS is available to guide and inform the state's CZMA federal consistency decision.
- The filing of the consistency certification with the state agency should be delayed until the DEIS is made public so that the state CZMA federal consistency review can commence once all the pertinent information is available. Several project alternatives are part of the DEIS and must be considered under a state agencies CZMA review.

#### **2.4.8. Commercial Fisheries and For-Hire Recreational Fishing**

Comments discussed the importance of continued collaboration with local governments and fishing industries and the desire for BOEM to consider alternatives that reduce impacts to fisheries habitats. Topics raised in this category included the following:

- Commentors requested that developers continue to cooperate with heritage fishing industries in the project area and minimize impacts to the marine environment and fishing interests.
- Commentors asked that the project team continue to clearly communicate with local fishing interests about monitoring installations.
- BOEM should collaborate with the Rhode Island Coastal Resources Management and the Fisherman's Advisory Board on any proposed fisheries mitigation plans.
- The Project Team should compare the potential economic risk to fishing industries to the economic costs of climate change.
- Commentors requested more research on potential impacts from wind farms on commercially important species including plankton.
- The EIS should characterize the extent and value of commercial, for-hire, and charter fishing within the project footprint including the breakdown of the economic exposure of the proposed project by state, Massachusetts port, gear type and species.
- Commentors noted the importance of marine fisheries though out New England and the Mid-Atlantic to the Northeast United States.
- The EIS should consider an alternative which would minimize impacts to commercial and recreations fisheries such as reducing the number of turbines installed and excluding locations that have greater overlaps with fishing activity.
- Commentors recommended time of year construction restrictions as mitigation measures to reduce impacts to fishery species.
- Commercial and recreational fishermen may not be able to take full advantage of any increased availability of target species due to concerns about safely maneuvering, drifting, or anchoring near turbines

- Commentors noted they believe some fishermen may not choose to fish within the wind energy area for navigation safety reasons and may not be able to recoup the loss of landings and revenue by shifting effort elsewhere.
- The EIS should include detailed reporting on where boulders that are relocated for cable laying are placed as a mitigation strategy.
- The EIS should address indirect effects, such as impacts on a fishery which does not occur in the area but relies on bait harvested from the area.
- The EIS should include a thorough description of how EMF may or may not impact marine species, acknowledge the limitations of the current scientific knowledge in this area, and provide justification, including supporting scientific studies.
- The EIS should consider aquaculture separately from commercial and recreational fishing.
- The EIS should evaluate conflicts with cable protection measures and the potential impacts of uncovering of buried cables over time or following storm events.
- Commentors request that cables are removed during decommissioning to avoid posing a safety risk to fisheries that use bottom-tending gear.
- The EIS should assess landings, revenue, and effort; fishery participants, including vessels, gear types, and dependency upon fishing within the project area; potential impacts beyond the vessel owner level and coastal communities dependent on fishing.
- The EIS should evaluate potential gear loss and impacts from increased steam time (i.e., increased travel time/fuel costs to navigate around the Project and access fishing grounds).
- The EIS should evaluate the cumulative impacts of multiple projects on fishing operations, such as changes to time and area fished, gear type used, fisheries targeted, and landing ports.
- An ecological mitigation fund should be developed to guarantee successful mitigation of economic impact to commercial fisheries.

#### **2.4.9. Cultural, Historical, and Archaeological Resources**

Comments discussed concerns about impacts of the project on potentially significant archeological sites and National Historic Landmarks and requested that BOEM further comply with Section 106 and 110(f) of the National Historic Preservation Act. Topics raised in this category included the following:

- Commentors stated that the project will have adverse visual impacts on numerous historical and cultural resources including the Block Island Southeast Lighthouse, Ocean Drive Historic District, Bellevue Avenue Historic District, Marble House, The Breakers, Battle of Rhode Island Historic District, Montauk Point Lighthouse, Nantucket Island National Historic Landmark District including the Maria Mitchell Loines Observatory and Vestal, and Street Observatory within the District.

- Commentors requested that in order to comply with section 106 and 110(f) of the National Historic Preservation Act BOEM must consult with the appropriate preservation offices and tribes and identify no-anchorage areas to avoid documented resources such as shipwrecks and paleo landforms.
- Commentors suggested that the Project should perform a geophysical, geological, and archaeological investigation of the archeological sensitivity of the submerged Paleo cultural landscape prior to the laying of the export and onshore transmission cables near the Unkechaug Nation territory.
- Commentors requested that National Historic Landmark identification be verified through consultation with the State Historic Preservation Offices of the surrounding states as well as federally recognized tribes and Tribal Historic Preservation Officers.
- Historic properties that may be affected extend beyond historic structures to also include archeological resources, cultural landscapes and ethnographic resources.

## **2.4.10. Demographics, Employment and Economics**

### **2.4.10.0. Employment and Job Creation**

Comments discussed the benefits that the Project could provide to local job markets. Topics raised in this category included the following:

- Commenter noted that Sunrise and other wind projects could be a boon to the economy and job market.
- Commentors noted that the Sunrise Wind Project is forecasted to generate substantial well-paying union job opportunities in the surrounding communities.
- Commentors noted that the offshore wind industry will contribute a variety of economic benefits to the U.S. economy, including jobs, supply chain, direct and secondary economic benefits and output, and investment in critical coastal infrastructure.
- Commentors noted that offshore wind has the potential to be a significant part of the economic recovery from COVID-19 by stimulating coastal economies up and down the east coast.
- BOEM should prioritize high-road labor practices in offshore wind projects.
- The EIS should evaluate the programs necessary for training and expanding the domestic workforce with an emphasis on ensuring opportunities for displaced energy workers, as well as fostering equitable access to career pathways in the industry.
- Commentors noted hundreds of millions of dollars will be invested directly into New York as a part of Sunrise Wind and more than 800 jobs will be created, including family sustaining union jobs.

#### **2.4.10.1. Recreation and Tourism**

Comments discussed the existing facilities that provide recreation and tourism opportunities, noted that they could risk economic harm, and requested that BOEM identify opportunities to maintain public access. Topics raised in this category included the following:

- Commenter noted that various communities and historic facilities on Block Island rely on tourism for funding, and that impacts to any of these facilities could risk economic harm.
- BOEM should identify opportunities to maintain public access and avoid interference with public use and enjoyment of resources such as Smith Point County Park and Fire Island National Seashore.

#### **2.4.11. Electromagnetic Fields**

Comments noted the potential impacts of electromagnetic fields on fish and marine mammals, noting that research is ongoing. Topics raised in this category included the following:

- All relevant impact producing factors affecting marine resources should be evaluated, including, but not limited to, elevated noise levels, increased vessel traffic, turbidity and sedimentation, electromagnetic fields, habitat alteration, presence of structures, and localized changes in currents.
- Potential impacts of electromagnetic fields (EMF) on fishery species are a concern to the fishing community. The extent to which EMF may or may not impact marine species should be thoroughly described in the EIS, and the EIS should acknowledge the limitations of the current scientific knowledge in this area and should provide justification, including supporting scientific studies, for all conclusions regarding EMF.

#### **2.4.12. Environmental Justice**

Comments discussed the effect of conventional fossil fuel energy production on environmental justice communities and requested that the EIS consider how the construction of Sunrise Wind will affect environmental justice issues. Topics raised in this category included the following:

- Commentors noted that numerous studies support the findings of racial and socio-economic disparities in impacts from fossil burning power plants.
- The EIS should consider how the construction of the Project will affect environmental justice issues and how a rapid but considerate shift to the best available renewable energy technologies will accelerate the cessation of conventional energy plants, returning to minorities and communities their right to clean air and a healthy environment.
- Commentors noted that Long Island's economically disadvantaged communities will have opportunities to work in the emerging offshore wind industries by gaining the advantages of apprenticeship training.
- The NEPA document should address effects of the project specific to fishing communities with minority and low-income populations.

- Commentors expressed their hope that social justice can be quantified in the EIS to account for the Project's ability to alleviate the need for fossil fuel power plants, which lead to cleaner air and existing host communities Suffolk County.
- Commentors requested that plans to support a domestic supply chain should be required and evaluated both to maximize US employment and to avoid and minimize and mitigate impacts to environmental justice and BIPOC communities who have historically faced the worst impacts from industrialization and energy production.
- BOEM should use the results of the Environmental Justice screening to identify issues for analysis in the EIS and to help focus outreach to affected communities.

#### **2.4.13. Finfish, Invertebrates, and Essential Fish Habitat**

Commenters stressed the importance of assessing the potential impacts to adult finfish, zooplankton, fish eggs, and early life stages of fish and invertebrates. Topics raised in this category included the following:

- The EIS must include a detailed assessment of the effects of the project on habitats that support spawning, breeding, feeding, and growth to maturity, including EFH and a range of alternatives to conserve these habitats and minimize the effects of the project on EFH and other marine habitats.
- The evaluation of impacts from project construction and operation should evaluate the potential for recovery and the anticipated recovery times based on the habitat type and components that would be impacted. The analysis should fully consider the potential impacts of proposed action to complex habitats in the lease area and cable corridor.
- BOEM should require Sunrise Wind to avoid siting WTGs and the SRWEC in complex, hard bottom areas, to the greatest extent possible, due to the importance of complex, hard bottom habitats to Atlantic cod and other species.
- The EIS evaluate potential impacts of project construction and operation on Atlantic cod, including potential impacts to early life stages (e.g. habitats that support early stage juveniles after they settle to the bottom) and spawning activity from pile driving and ground disturbing activities, as well as the cumulative population level effects that may occur as a result of construction timing over multiple seasons.
- The EIS should consider the impacts on juvenile and spawning cod (noise, potential for increase in removals if cod aggregate around artificial reefs).
- Cod spawning clusters and squid spawning and egg development must be protected, particularly when determining turbine siting. Consider time of year restrictions as well.
- Cascading effects of artificial reef effects should be evaluated to determine potential fish habitat alterations through the introduction of predators and re-distribution of juveniles.
- Monkfish is one of the most impacted fisheries but is not listed and should be noted, along with special consideration to and potential stock rebuilding of Atlantic herring and cod, given their overfished status. Also need to monitor impacts to the ocean quahogs harvested in the area.

- Noise and vibration impacts to finfish such as bluefish, flounders, and others that migrate along the coast must be considered.
- The most up-to-date Habitat Areas of Particular Concern (HAPC) should be used when evaluating impacts. These areas should receive particular attention.
- Mitigate the effects of jet plowing during cable installation, particularly noise, sediment plumes, and potential entrainment of finfish and invertebrates.
- The EIS should consider the open loop cooling system intake velocity for cooling water is of concern because of the uncertainty of whether important foraging species, ichthyoplankton, eggs, juvenile organisms, copepods, and larvae can escape the proposed intake flow.
- The EIS should estimate the numbers of eggs, larvae, and zooplankton that may be entrained annually due to the conversion station, and detail plans to prevent the entrainment of these creatures.

#### **2.4.14. Marine Mammals**

Comments discussed the concern about impacts to marine mammals and recommended further analysis be completed. Topics raised in this category included the following:

- Commentors recommend that the analysis of impacts on marine mammals and corresponding significance determinations be separated by species group (i.e., mysticetes, odontocetes, and pinnipeds).
- Commentors expressed concern that there has been very minimal concern for marine mammals and other protected species including North Atlantic right whales (NARW).
- The EIS should describe what techniques will be used to mitigate sound impacts to marine mammals.
- The EIS should include a range of alternatives to prohibit HRG surveys during seasons when protected species are known to be present in the project area.
- Commentors anticipate the request for an Incidental Take Authorization due to the potential harassment of marine mammals.
- The EIS should discuss seasonal distribution, abundance, and migration routes, and incorporate recent research such as aerial and acoustic monitoring.
- The EIS must include alternatives to schedule and complete construction activities to minimize interactions with migratory species, spawning, feeding aggregations and breeding activity and specific seasonal and reactive restrictions on construction activity during times when NARWs and other protected species may be present.
- The EIS should consider requiring the development of minimization and monitoring measures that minimize the risk of exposure to potentially harassing or injurious levels of noise to marine mammals, sea turtles, and Atlantic sturgeon. Mitigation measures should be required during pile driving that will act to reduce the intensity and extent of

underwater noise and avoid exposure of listed species to noise that could result in injury or behavioral disturbance.

#### **2.4.15. Mitigation and Monitoring**

Comments discussed the need for considering impacts resulting from the construction, operation and maintenance, and decommissioning of the proposed facility, and planning for mitigation for historic sites, effected industry, and sensitive species. Topics raised in this category included the following:

- BOEM should account for potential technological changes within the preparation, construction, operation, and decommission time frame through plans on how monitoring and data collection will be conducted, analyzed, disclosed, and distributed, and who will be involved.
- BOEM should describe specific actions on how management practices and operation plans will be modified as more insights and comprehension emerge.
- Commentors stated that the Project is going to negatively alter the Project area forever and devastate many year classes of fish and that there are barely any compensation or mitigation plans in place.
- Commentors noted that a sustained monitoring and research effort that informs necessary course-corrections to the operation of the project and environmental mitigation efforts is essential, and these plans should be made publicly available for stakeholder review.
- The EIS should evaluate the establishment of an ecological mitigation fund for commercial fisheries, alternative approaches for decommissioning the project, a commitment to habitat restoration, and a requirement for funding, and plans for a cumulative impact analysis that considers the impacts of the project in conjunction with pending and anticipated projects in other offshore lease areas.
- Commentors requested that monitoring studies should not be considered environmental protection measures as monitoring is not equivalent to mitigation.
- The EIS should include availability of mitigation funds for all affected vessels and ocean users who rely on the Project area for revenue.
- The EIS should clearly identify which mitigation measures are included as part of the proposed action and which measures are proposed as required or optional and could be implemented by the developer to potentially reduce impacts.
- BOEM should require applicants to provide detailed plans and commitment to pre- and post-construction monitoring of vulnerable marine and avian life.
- The project scope should maintain a level of flexibility that allows for subsequent local input to be factored into plans for avoiding, minimizing and/or mitigating potential impacts to natural resources stemming from cable landing and nearshore/onshore activities within state and local jurisdictions.

- Commentors urged that BOEM ensures that environmental monitoring is made public and provided to the community and stakeholder meetings and on websites during both the 3-year period before construction and the 3-year period after construction to update residents and stakeholders on the ongoing efforts to mitigate wildlife impacts.
- The EIS should be clear on which measures to avoid, minimize, or mitigate negative impacts will be required as opposed to discretionary. Only required measures should influence the impacts conclusions in the EIS.

#### **2.4.16. Navigation and Vessel Traffic**

Comments expressed concerns about size and scope of operation and how it would affect vessel navigation and potentially increase vessel traffic, requested transit lanes, and expressed concerns about possible injuries to aquatic wildlife from vessel strikes. Topics raised in this category include the following:

- Vessels of all sizes should be required to reduce speeds to 10 knots or less in all Seasonal Management Areas and Slow Zones, including Slow Zones triggered by acoustic detections of North Atlantic right whales. These mitigation measures should also be considered for Atlantic sturgeon and sea turtles.
- The EIS must include alternatives for a vessel traffic plan to minimize the effects of all vessels associated with the wind energy project on marine wildlife. These alternatives should include requirements for all vessels associated with the project, regardless of function, ownership, or operator.
- Vessels should be required to always carry and use protected species observers when under way. Additionally, the EIS should include alternatives to require service vessels to complement observer coverage with additional monitoring technologies such as, infrared detection devices for whales and other protected species when visibility is low.
- The EIS should include requirements that all vessels must always maintain a separation distance of at least 500m from NARWs with clear requirements to safely move away from NARWs that are detected within this range.
- The EIS should include alternatives requiring all vessels to be equipped with and using a Class A Automatic Identification System device at all times while on the water. This should apply to all vessels, regardless of size, associated with the offshore wind siting, development, and operations of the project.
- Commentors noted that the EIS must include an alternative for reasonable transit lanes for fisheries operators and expressed that 1x1 nautical mile (nm) spacing between turbines is too narrowly spaced for most fishing operations.

#### **2.4.17. NEPA/Public Involvement Process**

Comments requested that BOEM follow all requirements laid out by the NEPA process and suggested that additional information be included in the EIS and made available to the public. Topics raised in this category included the following:

- BOEM should continue to work closely with federal agencies and tribes with relevant air, water and natural resource responsibilities and interests during the development of the EIS.
- Fire Island National Seashore should be identified on all the project maps that show the study area including other National Historic Landmarks.
- Commenter noted that high amounts of EIS submissions require certain agencies to take a more limited role in the NEPA process. BOEM should review and incorporate comments made on previous BOEM documents including Vineyard Wind and South Fork NEPA documents to ensure a robust and sufficient analysis resources.
- Commentors requested that if the COP is updated or changed at any time during the regulatory process, BOEM notify the agencies immediately and make the most updated COP available to the agencies and the public.
- Commentors requested confirmation that outreach focus is not predicated on just the township where the landing is coming into or the municipalities involved, but that all the villages, local organizations, civic associations, other environmental justice groups, labor, environmentalists, fishermen, mariners, and residents are made aware and given an opportunity to be involved.

#### **2.4.18. Noise**

Comments discussed the affects that construction noise may have on North Atlantic right whales and other species in the project area. Topics raised in this category included the following:

- Commentors raised concern about construction noise interfering with North Atlantic right whale communications, migratory routes and feeding grounds.
- The EIS should describe what techniques will be used to mitigate sound impacts to marine mammals and fishes, including Atlantic cod or squid and sea turtles, during the installation of the wind turbine bases and monopiles.
- Commentors suggested the use of protected species observers to establish and monitor clearance zones prior to pile driving in addition to real-time and archival passive acoustic monitoring as a secondary detection/monitoring system.
- BOEM should require the applicant to provide a detailed assessment of magnitude, duration, and spatial extent that underwater noise that will be generated from pile driving and provide detailed plans for how and to what extent that noise will be minimized and mitigated.

#### **2.4.19. Planned Activities Scenario/Cumulative Impacts**

Comments requested that the EIS include a thorough analysis of the cumulative impacts of regional wind energy development including the cumulative effects of the adjacent wind projects. Topics raised in this category included the following:

- Commentors requested that the cumulative impacts offshore wind development along the U.S. east coast be considered.

- The EIS should conduct a focused cumulative impacts analysis that considers planned offshore wind development in the same geographic region, including the final New York Bight Wind Energy Areas (WEAs).
- The cumulative impacts and risks need to be evaluated for species that are widely distributed on the coast including bluefish, flounders, and others that migrate along the coast. Climate change should be an essential consideration in the cumulative effects analysis as the distributions and abundance of many species are changing due to climate change and other factors.
- The EIS should consider the cumulative effect on the unique habitats, species, and landscapes in the Northeast and Mid-Atlantic.
- Adjacent offshore wind projects will have both separate and cumulative adverse visual impacts upon historic properties, sites, and districts listed or eligible for listing in the National Register of Historic Places.
- The EIS should consider the cumulative effect on economic conditions, including commercial fishing and shipping and growth-inducing effects from the use of ports.
- The EIS cumulative impacts analysis should include energy infrastructure, sand mining, aquaculture, vessel activity, fisheries management actions, disposal sites, and other development projects.
- Commentors requested that ecosystem-based approaches be used when assessing cumulative impacts and that cumulative impacts to the surrounding areas be taken into consideration including sound, sound pressure, and particle motion travel well beyond the borders of the lease.
- In cumulative impact analysis, BOEM should indicate when information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate immediate adverse impacts based upon approaches or methods that's generally accepted in the science community.
- Analyses of potential cumulative impacts must be updated as new scientific information becomes available, as new technology becomes available, and as circumstances change

#### **2.4.20. Proposed Action/Project Design Envelope**

Comments discussed the PDE approach and noted it should both not be overly broad and also ensure maximum resource protection. Topics raised in this category included the following:

- Ensure that the range of design parameters are reasonable. A PDE that is too broad would impact your ability to provide a meaningful effects analysis in both the NEPA document and your consultation documents (BA and EFH Assessment).
- The project design envelope approach should ensure maximum environmental and natural resource protection. The project developer should bear a burden of proof in deciding to move forward with any design alternative within that design envelope that does not present, among the alternatives, the minimum adverse impacts to natural resources and wildlife.

### 2.4.21. Purpose and Need

Comments noted that the purpose and need statement that references 924 MW which could limit the turbine size selection and also noted that the purpose and need should focus on environmental safeguards. Topics raised in this category included the following:

- Commenter referenced purpose and need statement “to construct and operate a commercial-scale, offshore wind energy facility with a maximum of 122 turbine foundations”, recommending that the Project should use larger 15 MW units to reduce marine habitat impacts and reduce the overall number of turbine foundations from the proposed maximum of 122 to 62 turbine locations. This would meet its existing PPA with NYSEERDA. Commenter noted that the purpose and need for The Project only requires 924 MW resulting in a maximum of 62 turbine foundations using the 15 MW WTGs.
- The purpose and need statement for should focus on environmental safeguards and eliminating damage to the environment not be based on achieving states' OSW goals or the profit goals of a utility company.

### 2.4.22. Scenic and Visual Resources

Comments discussed the potential negative visual impacts that the Project will have on local historic landmarks and suggested ways to move forward with research and mitigate those impacts. Topics raised in this category included the following:

- Commentors noted that the Project will have adverse visual impacts on numerous historical and cultural resources on Block Island, including the National Historic Landmark Southbeach Lighthouse and request mitigation in the form of providing funds in support of the historic preservation at the Southeast Light and Block Island Historical Society.
- Commentors requested that visual impacts are measured against comparable fossil fuel infrastructure.
- BOEM should work closely with the Southeast Lighthouse Foundation and New Shoreham to ensure the setting and character of their historic resources are not unreasonably compromised.
- Commentors noted that the Visual Impacts Assessment does not adequately evaluate the impacts to all the historic resources on Block Island and requested that the COP be amended to assess accurately adverse impacts avoidance, minimization, or mitigation measures from additional vantage points.
- Commentors are concerned about the lighting impact in night sky during and after construction and urges the use of Automatic Detection Lighting Systems.
- Any additional booster stations that would be proposed would likely have an impact on the wilderness characteristics of Natural, Undeveloped, and Outstanding Opportunities at the Fire Island Wilderness area. Analysis of dark night skies impacts should consider potential impacts under the Wilderness Act.

- BOEM must make all relevant documents and data available to consulting parties and the public including the Historic Resources Visual Effects Analysis that is currently unavailable to consulting parties.
- Consider ways to reduce construction-related visual impacts.

#### **2.4.23. Sea Turtles**

Comments suggested mitigation measures for sea turtles, noted data collection methods, and expressed that the direct and indirect impacts should be analyzed. Topics raised in this category included the following:

- Commenter suggested that mitigation measures should be included that minimize the risk of vessel strike for whales, sea turtles, and Atlantic sturgeon, including consideration of vessel speed restrictions regardless of vessel size.
- BOEM should require all vessels to adhere to a 10-knot speed restriction, and to further slow to 4 knots when a turtle is sighted or when transiting through areas of likely offshore feeding habitats from June 1 to November 30.
- The section describing the “Affected Environment” for protected species should include information on the seasonal abundance and distribution of marine mammals, sea turtles, ESA-listed marine fish, anticipated habitat uses, threats, and the habitats and prey these species depend on throughout the area that may be directly or indirectly impacted.
- The EIS should address behavior and physiological impacts from vessel traffic, noise, foundation lighting and EMF.
- Increased sea turtle tagging and tracking studies are needed to better understand movement, dive patterns and surface time, and habitat use which can, among other uses, help advise monitoring and avoidance, minimization, and mitigation strategies and generate more accurate estimates of sea turtle takes.

#### **2.4.24. Water Quality**

The comments noted that state and federal water quality standards must be considered, commented on potential chemical emission impacts, sediment suspension and deposition, and the impacts of thermal pollution for an open loop cooling system. Topics raised in this category included the following:

- The EIS should evaluate the impacts from the discharge of pollutants from the OCS-DC to the receiving water, including the thermal discharge, changes to circulation, and any chemicals or other additives to the facility’s effluent.
- The EIS should indicate all fluids involved in construction and operation and their potential effect on air and water quality. The EIS may also include the description of green chemical alternatives that can be used.
- Model the extent, distance of total suspended solids (TSS) concentration, and quantity of deposition and assess impacts from project disturbances.

- Any place where the bottom sediments will be disturbed must be evaluated for sediment contamination to understand the potential for environmental effects associated with contaminant release and need to be assessed and managed as part of the offshore wind development process.
- The EIS should describe potential for construction related impacts to the sole source aquifer of Long Island, NY and how they will be addressed.

#### **2.4.25. Wetlands and Waters of the U.S.**

Comments noted that the EIS should evaluate impacts to wetlands and Waters of the U.S, as well as the measures incorporated into the project to avoid and minimize direct and indirect impacts. Topics raised in this category included the following:

- We support the efforts to design a project that avoids impacts and recommend that the DEIS include a specific discussion of existing wetlands, streams and other waters of the United States that could potentially be affected by various project components.
- The EIS should include the range of design/construction measures provided in the COP that can be implemented to avoid and minimize impacts of transmission cables as they transition to shore from the marine environment. We specifically request that the analysis discuss whether submerged aquatic vegetation exists (or has historically existed) in the nearshore cable landfall zone and what measures will be implemented to avoid work in those areas.
- The EIS should discuss the protocols that will be established to minimize impacts associated with the use of Horizontal Directional Drilling (HDD) as one tool to avoid impacts.
- Evaluate potential impacts to Carmans River and species inhabiting the waterbody resulting from the installation of the transmission cable

#### **2.4.26. Other**

There were substantive comments provided that fell outside of the scoping categories, as noted below:

- Commenter expressed concerns regarding first responders, noting that public safety is of utmost importance. Communication of project timelines is critical to ensure that first responders can respond in a timely fashion. These timelines include project schedules, hours of operations, and any delays and detours that may result.
- Specific Tribal concerns referenced for the Unkechaug Nation, Delaware Tribe of Indians, and the Mashantucket Pequot Tribal Nation noted connections to now-submerged ancestral lands and indigenous maritime traditions. BOEM and Sunrise Wind should continue to engage with these tribes to avoid, reduce, or resolve impacts to cultural sites and resources. Cultural and heritage artifacts found by archeological surveys must be returned to the appropriate Tribal Nation

- Provide details on O&M facilities and contemplated port facilities and discuss environmental impacts and appropriate state review processes.
- Impacts of decommissioning on the surrounding ecosystem need to be considered, both for wholesale dismantling and for approaches in which some elements of the project may remain in place. Reuse and recycling of decommissioned equipment should be part of the process, with material disposal/landfilling to be considered as a last resort.
- Commenter requested that lighting plans for both construction and operation phases be included in the EIS.
- Commenter requested that the EIS evaluate impacts to terrestrial vegetation, including the Long Island Central Pine Barrens, as well as measures to prevent the spread of invasive species.
- Commenter requested that cable landings be sensitive to the preservations of shipwreck remains, if discovered.
- Assess impacts to RTE species along all alternative routes, including landfall sites. Discuss avoidance of work during time periods to avoid impacts to RTE species.

#### **2.4.27. General Support or Opposition**

Many comments expressed general support for the project. Some commenters provided comments of support or opposition without providing a justification. Other commenters referred to generic resource topics as a justification for their support or opposition. Commenters are generally supportive of the proposed Project because it may reduce fossil fuel dependence, reduce climate change impacts, and increase job opportunities. A small number of commenters are generally opposed to the proposed Project because it may adversely affect property value.

**Appendix A. List of Submissions and Individual Comments  
by Resource or NEPA Topic**

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## A-1. Index of Comment Submissions Sorted by Submission Number

Table A-1 lists the name and agency or organization affiliation (if any) for each person who provided a scoping submission. The submission identification (ID) number listed below corresponds to the Comment IDs referenced in Section A-2.

**Table A-1 List of Submission Identifications, Names and Affiliations**

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-0004	Jennifer Valentine	
BOEM-2021-0052-0005	Stephen Grossman	
BOEM-2021-0052-0007	James Boyd	Rhode Island Coastal Resources Management Council
BOEM-2021-0052-DRAFT-0002	Kasey Scheid	
BOEM-2021-0052-DRAFT-0003	Maggie Medrano	
BOEM-2021-0052-DRAFT-0004	Cynthia Bristow	
BOEM-2021-0052-DRAFT-0006	Billy Mack	
BOEM-2021-0052-DRAFT-0012	Chris Bowers	
BOEM-2021-0052-DRAFT-0043	Dave Rowe	
BOEM-2021-0052-DRAFT-0044	Alex Williams	
BOEM-2021-0052-DRAFT-0046	Mary Doyle	
BOEM-2021-0052-DRAFT-0049	Robert Baker	
BOEM-2021-0052-DRAFT-0050		Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-001	Michael & Pam Kestenbaum	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-002	Ann Barnett	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-003	Robert Puca	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-004	MI Howe	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-005	Aixa Kendrick	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-006	Mark Christensen	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-007	Edith Alston	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-008	Betsy Kennedy	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-009	Matthew Vanbrocklin	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-010	Caitlin Ferrante	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-011	Al Boccio	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-012	Abby Paris	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-013	Harriette Resnick	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-014	Lawrence Midura	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-015	Gerry Oconnor	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-016	Rob Hill	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-017	Dean Gallea	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-018	Marta Schaaf	Sierra Club

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0050-A1-019	William Squires	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-020	Angel Garcia	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-021	Martha Porter	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-022	Lyle Chastaine	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-023	Ronald Fuller	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-024	Teresa Kotturan	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-025	Marilyn Entwistle	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-026	Gabriele Schafer-Fracaro	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-027	Rand Carter	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-028	Ed Fey	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-029	Kathryn Gilson	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-030	Thomas Grout	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-031	Blair Bertaccini	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-032	Pete Friedrich	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-033	Cynde McCloskey	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-034	Camille Doucet	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-036	David Limburg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-037	Liz Galst	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-038	Margaret Comaskey	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-039	Jay Blackman	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-040	George Remscrm	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-041	Patricia Bartels	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-042	Hali Holmes	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-043	John E Keevert Jr	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-044	Laura Montllor	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-045	Cindy Bobe	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-046	Pamela Geismar	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-047	Mary Troland	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-048	Royal Chamberlain	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-049	Diane Bozzelli	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-050	Tamar Schwartz	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-051	Evelyn Codrington	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-052	Ronald Fields	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-053	John Hyland	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-054	Edward Temple	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-055	Paul Russell	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-056	Kari Thorstensen	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-057	Diane Martella	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-058	Patricia Townsend	Sierra Club

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0050-A1-059	Teresa Schwind	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-060	Manjula Menon	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-061	Merle Molofsky	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-062	Michael Weschler	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-063	Rebecca Greenblatt	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-064	Robert Mott	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-065	Paul Rothman	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-066	Alexandra Wendt	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-067	Rachel Miller	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-068	John South	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-069	Lilly Knuth	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-070	Cornelia Marsh	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-071	Paul Lipton	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-072	Wendy Scherer	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-073	Alan Mack	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-074	Pat Henry	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-075	Eva Welchman	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-076	Rebecca Novick	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-077	Irene Best	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-078	Linda Villano	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-079	Michael Greer	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-080	Clyde Howard	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-081	Justin White	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-082	John Seakwood	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-083	Carol Montgomery	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-084	Joseph Tonini	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-085	Judith Zingher	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-086	Peter Sabol	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-087	Mark Robbins	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-088	Diane Wilkinson	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-089	Lou Sabatini	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-090	Alisa Eilenberg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-091	Abby Rosenberg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-092	David Mondejar	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-093	Carolyn Koelmel	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-094	Rachel Berg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-095	Mary M Shea	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-096	Mindy Abraham	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-097	Vesa Kaakkuriniemi	Sierra Club

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0050-A1-098	Paulette Henderson	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-099	Susan Wald	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-100	Arlene Goodenough	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-101	John Noble	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-102	Helen Shaskan	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-103	Jason Dragseth	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-104	Perri Gaffney	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-105	Lawrence Ross	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-106	Stephanie Lieber	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-107	Nivo Rovedo	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-108	Barbara Ladd	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-109	Darnell Rohrbaugh	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-110	Ruth Bargy	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-111	Amy Wildey-McGill	Sierra Club
BOEM-2021-0052-DRAFT-0052	Laura Maffei	
BOEM-2021-0052-DRAFT-0054	Kelly Andreuzzi	
BOEM-2021-0052-DRAFT-0056		Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-014	Diana Berardino	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-015	Sharon Nolting	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-016	Renee Purse	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-017	Mary Faulk	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-018	Dennis Dittmar	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-019	Tegan Morton	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-020	mary grace	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-021	Ben Kremnitzer	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-022	shyama orum	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-023	Evan Lawrence	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-024	Margaret Chen	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-025	Pamela Miller	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-026	Daniel Hulseapple	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-027	Jeffrey Seidman	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-028	Marie Long	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-029	Anne Nelson	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-030	Denise Shapiro	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-031	Daniel Tainow	Sierra Club
BOEM-2021-0052-DRAFT-0057		Sierra Club
BOEM-2021-0052-DRAFT-0058		Sierra Club
BOEM-2021-0052-DRAFT-0059	Anne Lotito-Schuh	

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0060	Kalpana Bhandarkar	
BOEM-2021-0052-DRAFT-0063	Selina Durio	
BOEM-2021-0052-DRAFT-0066	John Hyland	
BOEM-2021-0052-DRAFT-0067	Matt Cohen	Long Island Association
BOEM-2021-0052-DRAFT-0068	Greg Mataronas	Sakonnet Point Fisheries LLC
BOEM-2021-0052-DRAFT-0069	Michael Jarbeau	Save The Bay
BOEM-2021-0052-DRAFT-0070	Cathy McConnell	
BOEM-2021-0052-DRAFT-0071	Dr. Christopher Moore	New England and Mid-Atlantic Fishery Mgmt Councils
BOEM-2021-0052-DRAFT-0073	Mariah Dignan	Climate Jobs NY
BOEM-2021-0052-DRAFT-0074	Rick Fridell	
BOEM-2021-0052-DRAFT-0075	Kasey Scheid	
BOEM-2021-0052-DRAFT-0076	Ross Gould	Business Network for Offshore Wind
BOEM-2021-0052-DRAFT-0078	Patrick Guidice	
BOEM-2021-0052-DRAFT-0079	Eileen Murphy	NYS Departments of Environmental Conservation, Department of State and the Office of Parks, Recreation and Historic Preservation
BOEM-2021-0052-DRAFT-0080	James Bogen	
BOEM-2021-0052-DRAFT-0081	James Versocki	
BOEM-2021-0052-DRAFT-0082	Paul Pecorale	
BOEM-2021-0052-DRAFT-0083	Brian Vahey	The American Waterways Operators
BOEM-2021-0052-DRAFT-0084	Robert Souto	
BOEM-2021-0052-DRAFT-0085	Richardo Sanchez	Local Union 589
BOEM-2021-0052-DRAFT-0086	Barbara Hafner	
BOEM-2021-0052-DRAFT-0087	Nick Hoh	
BOEM-2021-0052-DRAFT-0089	Jason Walsh	BlueGreen Alliance
BOEM-2021-0052-DRAFT-0090	Will Cook	Town of New Shoreham and the Southeast Lighthouse Foundation
BOEM-2021-0052-DRAFT-0091	Charles Rothenberger	Save the Sound
BOEM-2021-0052-EMAIL-093021-0003	Lisa Berry Engler	Massachusetts Office of Coastal Zone Management
BOEM-2021-0052-EMAIL-093021-0005	Michael Petony	NOAA Fisheries
BOEM-2021-0052-EMAIL-093021-0006	Jonathan Meade	National Park Service
BOEM-2021-0052-EMAIL-100121-0002	Timothy Timmermann	USA EPA
BOEM-2021-0052-EMAIL-100421-0001	Christopher Moore	Mid-Atlantic Fishery Management Council, New England Fishery Management Council
BOEM-2021-0052-EMAIL-100421-0004	Sandi Brewster-walker	Montaukett Indian Nation

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-TRANS-091621-0001	George Povall	OR Energy
BOEM-2021-0052-TRANS-091621-0002	Adrienne Esposito	Citizens Campaign for the Environment
BOEM-2021-0052-TRANS-091621-0003	Kevin McAllister	Defend H2O
BOEM-2021-0052-TRANS-091621-0004	Alec Gomez	Business Network for Offshore Wind
BOEM-2021-0052-TRANS-092021-0001	Mariah Dignan	Climate Jobs New York
BOEM-2021-0052-TRANS-092021-0002	Maura Spery	Mastic Beach Conservancy
BOEM-2021-0052-TRANS-092021-0003	Nancy Solomon	Long Island Traditions
BOEM-2021-0052-TRANS-092021-0004	Caroline Hahn	New York League of Conservation Voters
BOEM-2021-0052-TRANS-092021-0005	Jordan Christensen	Citizens Campaign for the Environment
BOEM-2021-0052-TRANS-092021-0006	Katie Cubina	Mystic Aquarium
BOEM-2021-0052-TRANS-092021-0007	Eleanor Daly Kobel	East End UB
BOEM-2021-0052-TRANS-092221-0001	Joseph Kommer	
BOEM-2021-0052-TRANS-092221-0002	Camden Ackerman	
BOEM-2021-0052-TRANS-092221-0003	Lisa Broughton	Suffolk County
BOEM-2021-0052-TRANS-092221-0004	Gordon Videll	Sea Services North America
BOEM-2021-0052-TRANS-092221-0005	Rebecca Newberry	Blue-Green Alliance
BOEM-2021-0052-TRANS-092221-0006	Aiden Kravitz	

## **A-2. Individual Comments by Resource or NEPA Topic**

### **A-2.1. Air Quality**

**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

#### **Comment Excerpt Text:**

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Pursuant to Section 328 of the Clean Air Act (CAA), Congress required EPA to establish federal air permitting rules to control air pollution from the outer continental shelf (OCS) in order to attain and maintain ambient air quality standards and comply with the provisions of part C of Title I of the CAA. EPA promulgated permitting rules in 40 CFR Part 55, which establish air pollution control requirements for OCS sources consistent with section 328(a)(1) of the CAA. OCS sources located within 25 nautical miles of a State's seaward boundary are subject to both the federal requirements of Part 55 and the state and local requirements of the corresponding onshore area (COA). Beyond 25 miles, OCS sources are not subject to the state and local requirements of the COA. EPA has not delegated Part 55 to any states in the northeastern part of the United States and is the permitting authority for New England OCS areas. Permits issued

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pursuant to 40 CFR Part 55 regulate and restrict air emissions related to construction and operation activities associated with OCS sources, including certain vessels servicing or associated with OCS sources. Permits are required before project construction can begin.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

EPA received a Notice of Intent (NOI) pursuant to 40 CFR § 55.4 on September 9, 2021 from Sunrise Wind, LLC for the project locating in OCS Lease Area 0487. The September 9, 2021 NOI identified Massachusetts as the Nearest Onshore Area (NOA), as defined in 40 CFR § 55.2. If EPA does not receive a request from any neighboring state air pollution control agency to be designated as the COA, Massachusetts (the NOA) will become the designated COA without further Agency action after 60 days (40 CFR 55.5(b)(1)). The Sunrise Wind COP sufficiently characterizes the air permitting obligations for the project and identifies that, for air permitting purposes, requirements shall be the same as would be applicable if the source were located in the COA, i.e., Massachusetts. For EPA to issue a permit under Massachusetts air pollution control regulations, EPA must first have incorporated by reference relevant Massachusetts air pollution control requirements into 40 CFR Part 55. EPA previously incorporated various Massachusetts air pollution control requirements into 40 CFR Part 55 for purposes of permitting the Vineyard Wind 1 offshore wind project. See 83 FR 56259 (November 13, 2018). Due to periodic changes to state regulations, EPA is required to conduct a consistency update from time to time to ensure the incorporated regulations at 40 CFR Part 55 are consistent with the current regulations of the COA. Since the last consistency review, Massachusetts adopted changes to its rules for Air Pollution Control found in 310 CMR 7.00, and most recently amended in March 2021. Pursuant to 40 CFR 55.12(c), EPA will conduct a consistency review of the onshore regulations in Massachusetts and determine if a consistency update rulemaking is necessary. Pursuant to 40 CFR Part 55.4(a), Sunrise Wind must submit an air permit application to EPA within 18 months from the submittal date of the NOI (September 9, 2021). EPA will then issue a draft permit subject to a public comment period no less than 30 days and a public hearing, if deemed necessary. At the conclusion of the public comment period, EPA will address all public comments, make adjustments to the permit as needed and issue a final permit. EPA will provide all relevant permit documents (application, draft permit, fact sheet, supplemental documents, public comments, response to public comments, and final permit) on our CAA permitting website ([www.epa.gov/caa-permitting/epa-issued-caa-permits-region-1](http://www.epa.gov/caa-permitting/epa-issued-caa-permits-region-1)). The process to issue a final air permit will run in parallel with the NEPA process, and EPA intends to issue a final decision on the OCS air permit no later than 90 days after BOEM's issuance of a Record of Decision.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

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**Commenter Type:** Federal Government

**Comment Excerpt Text:**

EPA reviewed the COP with respect to the project's impact on air quality and provides the following comments to clarify EPA's OCS air permitting requirements and to assist BOEM in evaluating air quality related impacts in the DEIS. •Appendix K of the COP provides anticipated air emission estimates from construction and operation activities. Emission estimates from construction activities are projected to be significant, with annual estimates of up to 2,092.8 tons per year (TPY) of nitrogen oxides (NOx), 38.6 TPY of fine particulates (PM2.5/10), 49.1 TPY of volatile organic compounds and 230,504 TPY of Carbon Dioxide Equivalent (CO2e) within 25 nautical miles of the center of the windfarm. Additional estimated emissions from activities from a single potential supporting Port of Providence are 253.7 TPY of NOx, 4.7 TPY of fine particulates, 6.0 TPY of VOC and 27,947 TPY of CO2e. The COP estimates long-term operating emissions to be significantly lower (e.g., 183.8 TPY NOx). The COP, however, does not provide a quantitative "air quality impact analysis" to determine if project emissions would adversely affect the air quality resource. Although over the long-term the development of this project and others is expected to result in avoided emissions (as described in Section 4.4 of Appendix K), there are potential significant shorter-term impacts that we recommend that BOEM assess onshore or at the state seaward boundary due to multiple projects being constructed or operating contemporaneously.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

To determine air quality impacts, air quality modeling should be performed and analyzed with respect to relevant air quality standards and/or background concentrations. For ease of public review and understanding, the EPA recommends that the DEIS contain quantitative summary tables comparing the modeled concentrations to the National Ambient Air Quality Standards (NAAQS), state air quality standards, or other relevant reference measures. The EPA also recommends that the modeling performed for the DEIS locate receptors at the state seaward boundary. Locating the receptors at the state seaward boundary provides information on whether the NAAQS are protected and allows States to meet their State Implementation Plan and Coastal Zone Management Act (CZMA) responsibilities, and will help demonstrate that the air quality within nearshore areas is not adversely impacted. EPA is available to support BOEM with its evaluation of modeling for potential air emissions impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EPA recommends that the DEIS include measures to monitor and mitigate for NAAQS pollutants, such as NO<sub>x</sub>, and PM<sub>2.5</sub>, as well as any regulated toxic and greenhouse gas pollutants beyond what is described in Section 4.5 of Appendix K. EPA suggests that best available technologies and reasonable mitigation measures include the use of ultra-low sulfur fuels, including liquefied natural gas, inherently lower-emitting and high efficiency engine designs, use of Tier 4 certified engines, use of fuel cells and marine batteries, and electric cranes and support equipment. Also, as described in Section 2.1 of Appendix K, wind turbine generators (WTGs) may be equipped with a generator engine for emergency backup power. Diesel-fired engines on the WTGs are a source of air emissions and are subject to EPA's OCS air permit. EPA encourages BOEM to explore and describe in the DEIS options to require alternate lower-emitting power sources such as battery backup or fuel cell technology to provide emergency power to the WTGs during operations.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Section 3.1 of Appendix K indicates that most of the emissions from the project are from vessel engines. To ensure the lowest long-term air quality impact from project vessels that will likely be used by multiple projects, the EPA recommends that BOEM require procurement of best available technology, i.e., the most efficient and lowest emitting vessels available during the vessel-contracting stage of the project (such as Tier 4 certified engines or alternative fueled vessels). In addition, the DEIS should consider the following mitigation options for these vessels:

- o the purchase of lower emitting or electrified crew vessels for ongoing operations and maintenance;
- o anti-idling practices, as noted in Section 4-35 of the COP;
- o retrofitting of older equipment; and
- o add-on air pollution control devices.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Section 4-137 and Appendix K of the COP indicate that emissions of sulfur hexafluoride (SF<sub>6</sub>) are expected from gas-insulated switchgears on the WTGs and the offshore converter station (OCS-DC). SF<sub>6</sub> is the most potent known greenhouse gas, with the potential to trap infrared radiation approximately 23,000 times more effectively than carbon dioxide. SF<sub>6</sub> is also a very stable chemical, with an atmospheric lifetime of 3,200 years. Thus, a relatively small amount of SF<sub>6</sub> can have a significant impact on global climate change. The COP indicates that gas insulated switchgears containing SF<sub>6</sub> will be equipped with gas density monitoring devices to detect SF<sub>6</sub> gas leakages should they occur. This is an important and necessary step. However,

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EPA recommends that BOEM require adoption of SF6-free switchgears (“clean-air”), especially given that there are projected to be a significant number of switchgears at each project and the switchgears will be operating in a harsh marine environment. If SF6-free switchgears are determined to be technically infeasible, or are unavailable, Sunrise Wind would be required to limit leaks to less than 1% in accordance with the Massachusetts Regulations at 310 CMR 7.72. We look forward to working with BOEM and the offshore wind industry to help transition away from the use of SF6 in project equipment.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The COP indicates that multiple ports may support the project along the Atlantic coast. Many ports are located adjacent to communities with existing air quality issues and/or environmental justice concerns. EPA recommends that the DEIS explore the feasibility of requiring emission reduction best practices for ports such as vessel speed reduction requirements, sulfur restrictions in fuel, chemical and waste storage/transfer, dust control or the use of marine shore power systems beyond what is described in Section 4.5 of Appendix K and Sections 3.5.6 and 4-139 of the COP. In addition, the use of Tier 4 Final EPA certified equipment can further reduce emissions at ports. More information regarding air emissions reduction methods at ports can be accessed at <https://www.epa.gov/ports-initiative>

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

EPA’s OCS air permit will contain, at a minimum, requirements for emissions control, emissions limitation, monitoring, testing, and reporting for OCS sources constructing and operating at the Sunrise Wind project area. As part of this effort, Sunrise Wind will be required to provide an analysis demonstrating that ambient impacts will not affect protected Class I areas. If this information would benefit BOEM’s analysis of air quality impacts, we recommend you coordinate with EPA and the applicant on receiving the most recent ambient air impacts analysis and assessment for incorporation into the DEIS analysis. • Climate change impact mitigation and overall improvements to air quality due to avoided emissions are important benefits of offshore wind development. Similar to Section 4.3.4 of the COP, EPA recommends that the DEIS describe how the project may advance the reduction of emissions from the power generation sector in the northeast and emphasize the “avoided emissions.”

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

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**Government Agency:** EPA  
**Commenter:** Timothy Timmermann  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

EPA recognizes the long-term potential environmental and public health benefits of the Sunrise wind renewable energy project with respect to avoided emission of numerous air pollutants including NO<sub>x</sub>, CO<sub>2</sub> and SO<sub>2</sub>. We recommend that the DEIS discuss potential emission reductions associated with the proposed project and alternatives under consideration. In particular, we recommend that BOEM's analysis highlight the air quality benefits of avoided emissions, particularly in areas where there may be issues regarding attainment of the NAAQS.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA  
**Commenter:** Timothy Timmermann  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Two helpful tools in this regard are highlighted below: •EPA's Avoided Emissions and Generation Tool (AVERT) ([www.epa.gov/avert](http://www.epa.gov/avert)) has previously been used to estimate the avoided emissions of offshore wind development, e.g., for the South Fork Wind DEIS, and is a preferred tool for estimating avoided emissions from renewable energy projects. We recommend that BOEM use AVERT which offers analytical benefits, such as PM<sub>2.5</sub> avoided emission rates, hourly offshore wind generation profiles, hourly avoided fossil fuel generation and emissions, and county-level criteria air pollutant reductions. These analytical enhancements increase the data available to the public regarding the benefits of offshore wind and they should be presented in the DEIS. While AVERT is intended to be a straightforward tool to use, we request that BOEM and/or the consultant preparing the DEIS contact EPA to ensure proper use of AVERT and accurate reporting of avoided emissions in the DEIS. The EPA contact for AVERT is Emma Zinsmeister ([Zinsmeister.Emma@epa.gov](mailto:Zinsmeister.Emma@epa.gov)). •EPA's COBRA model ([www.epa.gov/cobra](http://www.epa.gov/cobra)) has been previously used to estimate and monetize the changes in health outcomes due to changes in certain criteria air pollutant emissions of offshore wind development, e.g., for the South Fork Wind DEIS. We commend BOEM use COBRA to estimate the economic benefit of avoided health impacts due to offshore wind development displacing on shore fossil fuel generation. Note that the COBRA analysis requires county-level emissions changes, which can be derived from AVERT. BOEM should also consider evaluating the health impacts of non-power sector-related onshore emissions of PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, NH<sub>3</sub> and VOCs in COBRA as well. While COBRA is intended to be a straightforward tool to use, we request that BOEM and/or the consultant preparing the DEIS contact EPA to ensure accurate reporting of health impacts. The EPA contact for COBRA is Emma Zinsmeister ([Zinsmeister.Emma@epa.gov](mailto:Zinsmeister.Emma@epa.gov)).

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA  
**Commenter:** Timothy Timmermann

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**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Federal agencies supporting projects that are planned to occur within either a nonattainment or maintenance area may be subject to the General Conformity regulations at 40 CFR part 93 subpart B. If otherwise subject to General Conformity, the agency would calculate the annual increase in emissions (i.e., net emissions) of the criteria pollutant(s) that caused the area to be nonattainment (i.e., the relevant pollutants). Specifically, if the annual net increase in the relevant pollutant(s) caused by the action would equal or exceed the threshold rates in the tables under 40 CFR 93.153(b)(1) and (b)(2), the federal agency must prepare an analytical demonstration of conformity that shows the action will not cause new violations of the NAAQS in the nonattainment/maintenance area, will not make existing violations worse, and will not delay attainment of the NAAQS within the area, as required by the provisions of the applicable implementation plan. Based on the demonstration, the federal agency would be required to make a positive finding (i.e., determination) of conformity.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Section 4.3.4.1 Affected Environment, Subsection General Conformity of the COP offers a consistent viewpoint on this issue where it states, “Under NEPA, BOEM will assess Project-related impacts to air quality. Under the CAA, BOEM is obligated to make a general conformity determination based on 40 CFR §51, Subpart W, and Part 93, Subpart B, entitled “Determining Conformity of General Federal Actions to State or Federal Implementation Plans.” In Table 4.3.4-6 “Applicable General Conformity de minimis Thresholds based on Project Counties’ Attainment Status”, the COP lists Providence County, Rhode Island as in attainment for NAAQS and therefore, General Conformity is not applicable. However, on February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit issued its decision in South Coast Air Quality Management District v. EPA (“South Coast II,” 882 F.3d 1138), vacating portions of EPA’s 2008 ozone NAAQS SIP Requirements Rule, but upholding EPA’s revocation of the 1997 ozone NAAQS. The court decision referred to the 1997 ozone NAAQS nonattainment or maintenance areas that were designated attainment for the 2008 ozone NAAQS as “orphan areas.” Due to this, the classification and designation status of the entire state of Rhode Island remains in moderate nonattainment for the 1997 8-hour ozone NAAQS until such time as EPA determines that it meets the CAA requirements for redesignation to attainment. In the South Coast II decision, the court stated that federal partners must do Transportation Conformity if in orphan areas but was not explicit regarding General Conformity. Consistent with what we have told our federal partners, BOEM must decide whether to apply the South Coast II decision for purposes of General Conformity when planning a project in an orphan nonattainment area. If BOEM decides that General Conformity is applicable in orphan non attainment areas per the South Coast II decision, then the emissions that occur within those areas should be considered under General Conformity. We note that BOEM, and the Department of the Interior as a whole,

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must be consistent with the interpretation of the South Coast II decision for this project and future projects

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In Table 4.3.4-9 “Estimated General Conformity Emissions during Construction of the Sunrise Wind Project”, the COP lists emissions exceeding de minimus thresholds within 3 miles of the state of Rhode Island. Considering this and the fact that Rhode Island is in nonattainment for the 1997 ozone NAAQS, EPA recommends that a full analysis be conducted and that BOEM make a determination of General Conformity and include it in the DEIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Government Organization

**Comment Excerpt Text:**

The Draft EIS should be framed in the context of how the project will contribute to regional decarbonization, and clean energy goals, and the consequences of the no-action alternative

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Government Organization

**Comment Excerpt Text:**

Climate change is one of the greatest challenges facing humanity in the 21st century. We are already seeing the consequences: chronic droughts, fire, floods, rising seas, record high temperatures, more frequent extreme storms, fishery disasters, and significant economic losses. The Conservancy recognizes that along the Atlantic coast of the U.S., offshore wind offers incredible potential to generate clean, renewable energy nearby to the cities and communities that need it most.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Government Organization

**Comment Excerpt Text:**

In the US, air pollution from burning fossil fuels leads to annual losses of \$600 billion and the loss of 230,000 lives. Suffolk County regularly receives an “F” for air quality by the American

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Lung Association and experience disproportionately high rates of asthma, heart disease, and other chronic health issues in disadvantaged communities. Transitioning to offshore wind will significantly curb air pollution and provide quantifiable health benefits for New Yorkers. Air pollution reductions from the first 2,400 MW of offshore wind in New York would be valued at roughly \$1 billion and would avoid an estimated 100 premature deaths each year.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Air emissions present a similar story to climate emissions, but with the additional dimension of locational benefits to pollution impacts. Based on previous analyses of offshore wind projects, air quality impacts should be anticipated during construction with smaller and more infrequent impacts anticipated during decommissioning.<sup>53</sup> Previous analyses have shown a “minor beneficial” improvement in air quality is expected from offshore wind development coming online and displacing fossil fuels.<sup>54</sup> These impacts, including the beneficial impacts, need to be considered in the Draft EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Provide ambient air quality data. Include complete National Ambient Air Quality Standards (NAAQS), for Criteria Pollutants, including both the 2015 and 2008 ozone NAAQS. · Provide accurate NAAQS attainment area designations. Note: The COP 's listing of Albany County, NY as an attainment area for all criteria pollutants requires clarification. Albany County was designated and remains nonattainment for the 1997 ozone NAAQS (<https://www3.epa.gov/airquality/greenbook/gncs.html#NY>), but the US. Environmental Protection Agency (EPA) has revoked that standard. The COP also doesn't recognize that Kings County, NY and Suffolk County, NY are both moderate nonattainment for the 2015 ozone NAAQS and that the area will most likely be reclassified by the EPA to "severe" nonattainment since it failed to demonstrate attainment by the July 20, 2021 deadline referenced here: [https://www.dec.ny.gov/docs/air\\_pdf/sipseriouso3nynma.pdf](https://www.dec.ny.gov/docs/air_pdf/sipseriouso3nynma.pdf)). The Agencies recommend further consultation with EPA and the New York State Department of Environmental Conservation (NYSDEC) when preparing the Air Quality section of the EIS to ensure accurate information is provided.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

The COP refers to and relies on emission estimates from Appendix K - Air Quality Emissions Calculations and Methodology. Since Appendix K is Confidential and was not available to the Agencies at the time of this review, these comments are limited to the information and emissions summaries provided in the COP. At this time, the Agencies cannot determine if the methodologies, emissions estimates, and conclusions are consistent with best practices and if the emissions and county assignments for the purposes of general conformity are accurate. Evaluate air pollutant emissions associated with all phases of the construction and operation of the Project, including quantification of emissions of all Clean Air Act criteria pollutants, greenhouse gases (GHGs) (including upstream emissions), and any hazardous air pollutant (HAP) or other air pollutants emitted by the Project. Describe the Project's compliance with all federal and State air emission and air quality regulations, including those related to GHG emissions. Describe the Project's compliance with General Conformity requirements under the Clean Air Act for the New York-Northern New Jersey-Long Island, NY-NJ-CT Nonattainment area.

## **A-2.2.Alternatives**

### **A-2.2.1. Cables and Landfall**

**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The number of offshore wind projects currently at various stages of the BOEM review process presents an opportunity for an expansion of the consideration of relevant intra-lease issues in the upcoming DEIS and ones that follow. We repeat a recommendation made for previous projects that BOEM analyze whether capacity limitations of the onshore transmission grid will limit lease area development and whether there are opportunities for the development of shared export cables and/or common cable corridors that can benefit multiple projects while reducing project impacts and costs. BOEM is uniquely positioned to conduct such an analysis and we believe that analysis would help to identify broader actions and issues that should be addressed to more fully support the goals of Section 207 of the January 27, 2021 Executive Order entitled "Tackling the Climate Crisis at Home and Abroad." We encourage BOEM to include this information in the cumulative impact scenario discussion in the DEIS.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Offshore export cable routing alternatives that use common corridors with adjacent projects should be evaluated and discussed. For lease areas that are adjacent to one another, BOEM should develop common cable corridors to both increase efficiency and predictability and reduce resource impacts. Specifically, common cable corridors would lead to efficiencies in planning, project development, and benthic habitat mapping, more predictability and time savings for applicants and resource agencies. In addition, establishing common cable corridors would facilitate comprehensive avoidance and minimization of impacts to marine resources by reducing the number of corridors and allowing for programmatic-level review and comment.

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**Comment Number:** BOEM-2021-0052-DRAFT-0083

**Organization:** The American Waterways Operators

**Commenter:** Brian Vahey

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Our commitment to environmental stewardship also includes support of renewable energy resources. However, it is critical that such projects not produce navigational hazards that put vessels and their crews at risk, obstruct the movement of commodities on which the nation's economy depends, or cause harm to the environment. It is with these concerns in mind that we have worked closely with the U.S. Bureau of Ocean Energy Management and the U.S. Coast Guard on previous requests for comment on wind energy development areas. The siting of the Sunrise Wind Farm does not appear to conflict with traditional towing vessel navigation routes and would likely not be at risk from the environmental impacts associated with vessels alliding with turbines. However, the towing industry does navigate to the north and northwest of this area, and there are some concerns about the placement of cables from the project. If a vessel must lower an anchor during an emergency situation, towing vessel operators must be sure that they will not inadvertently strike an underwater cable. Such an incident could pose a danger to mariners and the environment, in addition to disrupting the operation of the turbines. Cables from this project, and others, should avoid following navigation routes and fairways. If a cable must be laid in one of these areas, best practice is for it to cut perpendicularly across the route and to be buried a minimum of 15 feet. This will minimize the risk of damaging the cables, threatening mariner safety, and posing dangers to the environment

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** NPS

**Organization:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In order to preserve the “wilderness character” of the unique Wilderness resources at the Seashore, potential impacts to Wilderness characteristics should be identified and evaluated for the construction activities associated with the Sunrise project, in particular associated with the marine cable installation and related transmission upgrades.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0003

**Organization:** Long Island Traditions

**Commenter:** Nancy Solomon

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The connection landing cable would be at Smith Point Bridge in New York and would cross the great South Bay. This 186 mile long cable will interfere with both inshore and offshore fishermen here in New York. It's only three to seven feet deep, and that could easily be exposed during a major storm such as Sandy or more recently Ida. There needs to be an impact study for the impacts of both the cable and the wind farm to baymen and the shellfish beds, where the cable will cross.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0003

**Organization:** Suffolk County

**Commenter:** Lisa Broughton

**Commenter Type:** Local Government

**Comment Excerpt Text:**

we anticipate the onshore portion of the cable to be buried beneath town, county, state roads or right of ways for approximately 18 miles. We urge BOEM to ensure that this project adhere to construction restrictions and to minimize disruption to residents to avoid construction in certain roads and parks during the peak summer season.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0003

**Organization:** Defend H2O

**Commenter:** Kevin McAllister

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Considering sea level rise, rolling barrier islands, the extent that there is actually infrastructure in place here, we absolutely have to factor in sea level rise over the next couple of decades here and the vulnerability of this site. So I guess I would ask that further examination be done to see if there is a potential to actually bypass the barrier island with a subsequent landing on the mainland which again in this area is low-lying, will over time be submerged. There's no question about that in the lower Mastic area. But at least you are getting into a higher elevation and the likelihood of protecting infrastructure is greatly enhanced. So again, I'm speaking a bit short on some of the details, but this really needs to be explored because there's no question this is a

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vulnerable site. And while the park itself has sheet piles of steel seawall, it's no defense against the dynamic nature of this area.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should describe the potential amount of external cable armoring that may be required if sufficient cable burial depth cannot be achieved. The COP suggests a target burial depth 3-7 ft (Section 4-217). We recommend a 7-foot burial depth because we are concerned that given the amount of dredge activity in the project area, there is a risk the cable will become unburied. The EIS should also describe the characteristics of the cable protection materials which may be used. These materials should mimic natural, nearby habitats where possible. These materials will contribute to the net amount of complex habitat that would exist in the area once the project is constructed.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As we have commented in the past, there could be multiple benefits to coordinated transmission planning across multiple projects. For example, shared cable corridors could decrease the amount of disturbed habitat. Impacts to sensitive species could also be slightly reduced if multiple cable installations are coordinated in terms of timing to avoid especially sensitive times of year.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0002

**Organization:** Citizens Campaign for the Environment

**Commenter:** Adrienne Esposito

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

100 percent support the current landing site for the cable at Smiths Point County Park. Given the population density of the South Shore, I think that if you have other locations, it would create conflict and concerns among local residents. So the county park I think is an ideal area. I'm down there a lot. I think it will be the easiest route and the least environmentally, you know, sensitive area. So I think that it makes a lot of good sense.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

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**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM should direct development and cable routes away from complex benthic habitats and also evaluate how and potentially where Nature-Based Design of scour protection and/or cable mattresses can potentially provide benthic/fishery habitat mitigation and enhancement opportunities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061  
**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Cable landing and near/onshore transmission and interconnection sites for Sunrise Wind are proposed to occur through environmentally sensitive barrier island, tidal wetlands, and across an estuary. As of this time there is still much work to do by the developer in communicating with community members, state and local officials, stakeholders, and potentially impacted groups on planning for aspects of the projects that will touch down in state and local jurisdictions. It is possible that route alternatives could be refined during the development of the Draft EIS as local expert perspectives are factored in, or as NYSERDA advances examination of pre-planned approaches for transmission and offloading of the totality of New York State's offshore wind energy procurement objectives. Thus, for this and other offshore wind projects connecting to New York we encourage BOEM to allow for some flexibility in the review of these aspects of the construction plan to account for plan modifications that are likely to occur as all options are thoroughly vetted, receive state and local input, and ongoing transmission studies are concluded.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088  
**Organization:** RODA  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should evaluate a range of burial depths and monitoring techniques. Array design and spacing between turbines are fundamental determinants of the future, or lack thereof, of commercial fishing operations within wind development areas. It is extremely important that interarray and export cables are buried to sufficient depths to reduce the risk of fishing gear interactions. The fishing industry has consistently requested this to be a minimum of 8-10 ft. to avoid interactions; if a shallower depth is permitted, it must be paired with remote monitoring to ensure the cable remains sufficiently buried at all times. BOEM must provide clear standards as to what this depth is, how it is determined, and monitoring protocols to ensure there are no future interactions. Moreover, the project layout should be designed to minimize instances where cables transect fishing tow areas.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088  
**Organization:** RODA  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

It is extremely important to consider impacts from inter-array and export cables for all species found in the lease area. The EIS must analyze impacts from installation (including the duration of impacts after installation) and impacts from the cables themselves. The COP identifies a target burial depth of between 3 to 7 ft, depending on seabed conditions. The fishing industry has consistently requested cables be buried as deep as possible, generally at a minimum of 8-10 ft. below the seabed. If these depths cannot be achieved, at a minimum BOEM must require developers to work directly with the fishing industry to design cable protection methods that are as compatible (as possible) with fishing practices. As the Cable Burial Feasibility Assessment (Appendix G4) is proprietary and inaccessible to the public, it is impossible to determine if any consideration was given to impacts to biological species from cables was included in the developers' assessment. The amount of cable used should be minimized to reduce risk of hanging up by fishing gear. The proposed layout has three substations in the middle of the turbine layout may result in increased challenges for fishing vessels trying to operate within the WEA while avoiding towing over cables.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006  
**Government Agency:** NPS  
**Organization:** National Park Service  
**Commenter:** Jonathan Meade  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The NPS is aware that Sunrise Wind currently is proposing one offshore converter station to be located near the offshore turbine development area. It does not appear that a separate booster station located closer to the onshore cable location is proposed. NPS requests more information as to why this is the case with such a long submarine cable carrying the generated turbine power. Should a booster station closer to Fire Island be proposed, NPS will provide analysis of potential impacts to NPS resources.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093  
**Organization:** National Wildlife Federation et al.  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts from cable landing route (Section III.J): ○ BOEM should evaluate the environmental impacts of the proposed cable landing routes as separate alternatives in the Draft EIS and designate an alternative that has fewer impacts to Important Bird Areas as the preferred alternative. ○ Sunrise Wind should survey cable landing sites for federally-listed seabirds and sandplain gerardia, avoid areas where the species are present, and fund long-term

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plans to propagate, establish, and manage these species in accordance with their species recovery management plans.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Draft EIS should sufficiently analyze the impacts from the subsea cables installed in the SRWEC and inter-array cable. Installation of subsea cables can result in mortality, injury, or displacement of benthic fauna in the path of cable installation.<sup>132</sup> Static subsea cable installation would result in temporary displacement of species inhabiting the cable route, including Atlantic cod and American lobster.<sup>133</sup> Sunrise Wind intends to primarily employ jet plow and mechanical plow technology to bury the subsea cable, where possible.<sup>134</sup> While jet plows have lower impacts than other technologies, use of jet plows for cable installation still results in entrainment of benthic larvae, and eggs and larvae of pelagic finfish and invertebrates, resulting in 100% mortality. The Draft EIS should also assess whether the impacts from entrainment during cable burial could be reduced or avoided by requiring cable burial during certain seasons. Given that landfall will take place within a national seashore and that the Intracoastal Waterway includes SAV designated as HAPC for summer flounder, it is imperative that the Draft EIS adequately assess the impacts to benthic and other resources from the cable landing. The Draft EIS must also evaluate whether the use of HDD will sufficiently minimize impacts and require Sunrise Wind to undertake any other necessary measures to avoid, minimize, and mitigate impacts to the Fire Island National Seashore and Intracoastal Waterway.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate co-locating a portion of the submarine cable on the proposed replacement of the Smith Point Bridge (BIN 3-30077-0) in the Town of Brookhaven, New York to minimize impacts to sensitive environmental resources in Great South Bay, including but not limited to, complex benthic habitats, saltmarshes, SAV, etc.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

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**Comment Excerpt Text:**

Evaluate alternative offshore installation methodologies that allow simultaneous trenching and cable lay to minimize impacts to water quality and benthic habitat. Evaluate a range of sand leveling techniques during cable installation, in addition to the proposed suction hopper dredger and controlled flow excavator, to ensure the least impact to water quality practicable.

**A-2.2.2. Project Relocation****Comment Number:** BOEM-2021-0052-DRAFT-0013**Commenter:** Thomas L. Griffin**Commenter Type:** Individual**Comment Excerpt Text:**

The alternative site located at Quonset Point, North Kingstown, RI is a 3160 acre site devoted to continual industrial development and is available by land, sea, air and rail. Quonset Point is located a mere 8 miles or so by major roadways to Interstate 95 and has a deep water facilities at the Port of Davisville. As a resident of the area, I strongly object to the location of the project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0012**Commenter:** Chris Bowers**Commenter Type:** Individual**Comment Excerpt Text:**

We are writing to express deep concern and disapproval regarding the proposed wind farm operations and maintenance facility potentially to built in Montauk, NY. The alternate North Kingston, RI site is a far superior location for such a facility, for multiple reasons, including: that area is already dedicated to industrial development, is located close to a deep water port, has immediate access to a major highway and, perhaps most importantly, does not have a local economy reliant on tourist dollars that would disappear if the area were subjected to industrial development.

**A-2.2.3. Wind Turbines****Comment Number:** BOEM-2021-0052-EMAIL-093021-0005**Government Agency:** NOAA Fisheries**Commenter:** Michael Petony**Commenter Type:** Federal Government**Comment Excerpt Text:**

Assessment of Hydrodynamics and Oceanographic Conditions An assessment of the potential impacts of the Sunrise Wind project-specific (turbine level) and the full build-out/cumulative offshore wind scenario on hydrodynamics, and oceanographic and atmospheric conditions, will help evaluate impacts on species distribution and the effects to hydrodynamic conditions. The potential impact of offshore wind development is not well known, but the large scale energy

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extraction and the physical presence of wind turbine foundations could have a significant impact on wind speeds, wave heights, currents, vertical stratification of the water column, and primary production in this region, which could affect the ecology, habitat, and egg/larvae and prey distribution of a number of federally managed fish species and protected species.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

SW is considering monopile foundations to support the 122 wind turbine generators (WTGs). Monopile foundations have been shown to have the most adverse environmental impacts relative to other types. They cause the largest habitat loss (resulting in species displacement and/or mortality), have the most turbulent wake and scour effects, cause the most release of suspended sediment and sediment deposition adversely affecting water quality, and have the largest acoustic impacts among all available foundation types.<sup>20</sup> After a comparative analysis of the long-term environmental cost-benefit of various foundation types suitable for the project site, we recommend that SW pursue gravity foundations and suction bucket foundations as alternatives to monopiles for WTG installations. While habitat losses, wake and scour effects, water quality loss from using these foundations would be similar to or larger than that of monopiles, acoustic effects would be smaller, with other impacts and potential benefits being similar.<sup>21</sup> Because

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

consider gravity foundations and suction bucket foundations as alternatives to monopiles for the installation of wind turbine generators

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

consideration of alternatives in turbine specifications that could influence collision risk, including air gap, total rotor swept zone, and turbine height, and adequately assess collision risk to seabirds using science-based analysis of flight heights (averages and ranges), avoidance rates, and other relevant avian flight behavior. The cumulative impacts analysis in the EIS must incorporate results from BOEM's own analysis of the vulnerability of avian species to the WTGs of the OCS wind energy projects to be developed in the foreseeable future.<sup>45</sup> Many tubenoses, for example, congregate outside the breeding season near upwellings and other locations of high productivity. Such concentrated flocks, if occurring within the turbine array, could produce

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significantly large collision events, even if such events are relatively rare. When calculating risk to birds, the EIS must consider this variability of large concentrations of birds even in short periods of time in its analysis of seasonal abundance.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We exhort BOEM to provide decision-makers with all possible technological alternatives for the project in a succinct and lucid manner. In light of two recent incidents at Block Island—one to stop the wind farm operation due to a stress line in the turbine structure, and another regarding inappropriate technology used for cables burying [19]—the importance of robust comparative analysis of available technologies and suppliers is evident. If the Block Island wind farm experiences a temporary halt of operation, the people of Block Island could be supported by conventional electric energy; however, it would create significant disturbances in the case of the 880 MW Sunrise project. Thus, we suggest that the EIS includes a comparative discussion of potential contractors and suppliers of turbine system (hub, blades, nacelle, tower), monitoring systems, electric system (array, export cables), onshore facilities construction, assessing not only economic viability but also their environmental impact, GHG emissions, their reliability, durability, and efficiency. It is vital to indicate all fluids involved in the construction and operation of an offshore wind. Potential leakage of oils, lubricants, other petrochemicals, cooling and anti-corrosion agents used are thousands times lower in comparison with the oil and gas offshore industry. However, what fluids and at what volume will be applied, how they will be discarded, their toxicity for marine life, fisheries, residents, [20] and their potential effect on air and water quality [21] should be described. The EIA may also include the description of green chemical alternatives that can be used.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Sunrise Wind project has a maximum capacity of 1,300 MW. Sunrise has a contract with New York for 880 MW, and up to 44 MW (5%) can be added to this contract without an amendment, for a total of 924 MW. The remaining 376 MW have not yet been contracted for. It is challenging to accurately understand the impacts when the most likely project capacity is yet to be determined. It is also unclear if the impacts assessed in the COP are based on 924 MW or 1,300 MW.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

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**Commenter:** Dr. Christopher Moore  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Sunrise Wind considers the use of monopile foundations for wind turbine generators and piled jacket foundations for the DC conversion station. The different impacts associated with these two foundation types should be clearly identified in the EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071  
**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils  
**Commenter:** Dr. Christopher Moore  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Turbine siting should be informed by recent and ongoing research including the BOEM funded acoustic telemetry study evaluating the distribution and habitat use of spawning cod on and around Cox Ledge (Section 4-233).

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**Comment Number:** BOEM-2021-0052-DRAFT-0055  
**Organization:** Students of University of San Francisco  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

One of our points of concern is the agency's selection of monopile turbine foundations. While monopile foundation remains cheap, stable, and is the most utilized technology at 74.8% of the total offshore wind foundation market [22], it is slowly becoming outdated. NREL predicts a decrease in monopile use up to 50% [22]. In addition, it has several noticeable disadvantages, such as: the considerable amount of steel needed for production, the difficulty to transport them, the accidental marine animals' deaths and disruption of habitats, and the noise pollution during installation. We deem this perpetuation of monopiles in industry's infrastructure as a threat to the gradual implementation of more environmentally sound technologies. For example, floating foundations are potentially easier to install and uninstall, demand less raw material, and can be associated with less noise production, which can disrupt the foraging and communications of marine mammals [23]. While we do not ask to reject monopile foundation altogether, we urge BOEM to provide stakeholders with alternative scenarios besides "use of 100% monopile" such as "use of 100% jackets or tripods," "including floating foundation into the project as an experimental part." It is also important to consider and prioritize the bigger radius, and accordingly bigger turbine capacity, of the blades in order to diminish the number of turbines for the installation.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093  
**Organization:** National Wildlife Federation et al.  
**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

BOEM should assume that “the largest turbine that is presently commercially available” be used to evaluate potential impacts.<sup>36</sup> Changes in turbine size could have beneficial impacts (such as fewer turbines spaced further apart) as well as potentially negative impacts (larger rotation zones that could impact certain species like higher flying birds). We urge BOEM to ensure that future cumulative impact models continue to keep pace with technology.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

There is no substantial evidence to suggest that larger turbines, spaced farther apart, reduce risks to birds, and it should be a goal of BOEM to understand the effects of displacement and mortality relative to turbine size and spacing. It will be important for BOEM to consider the full range of possible turbine parameters expected for the Sunrise Wind project. Any changes to the project design envelope, especially those that result in changes to the rotor swept zone or maximum blade tip height, could require additional review under NEPA. The Draft EIS should include a risk assessment, considering the full range of the potential rotor swept zone provided in the COP, to assess 1) impacts from collision and barrier effects to migrating birds, and 2) potential increased habitat loss that may need to occur in order to reach offshore wind energy goals.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

The Agencies further recommend that BOEM consider adding the placement of fixed structures in an otherwise open water- and air-column environment as an impact-producing factor. This characteristic of the Project may cause several key potential impacts of importance to New York State, including the potential displacement of vessel traffic and disruption of migratory pathways.

**A-2.2.4. Other Comments on Alternatives**

**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

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**Comment Excerpt Text:**

The “Alternatives” section of the EIS should consider and evaluate the full range of reasonable alternatives to the proposed action, including those that would minimize damage to the environment. The analysis must include development of one or more reasonable alternatives to avoid or minimize adverse effects to environmental resources, including NMFS trust resources.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Sunrise Wind has proposed an Offshore Converter Station and one direct current (DC) submarine export cable bundle in place of using alternating current (AC) submarine cable bundles for exporting wind energy onshore from the lease area. Of particular concern for fisheries resources are the proposed water withdrawals required for the offshore converter station, including the potential for impingement or entrainment of early life stages of marine species, heated effluent discharge, and differences in EMF emission levels. Currently, the COP presents the results of impact assessments to resources associated with the proposed DC cable export option. While differences in the project components that would be necessary for the proposed DC export option and an AC export option are presented, there is no evaluation of how the different project components associated with each option would affect resources. An alternative that evaluates and considers the impacts to resources as a result of both an AC and the proposed DC export option should be included in the EIS.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The proposed Sunrise Wind project would be located on the southern edge of Cox Ledge, with a portion of the proposed development overlapping with hard bottom complex habitat that is Essential Fish Habitat (EFH) for a number of managed fish species and trust resources for which NMFS has conservation responsibilities. While the minimization of impacts should be considered in the development of all alternatives, given the particular complexity of habitat in this lease area and the importance of Cox Ledge to NOAA trust resources, it will be critical for you to consider a discrete alternative that reduces impacts to fisheries habitats that are more sensitive and vulnerable to impacts. Cox Ledge is an important area for fishing activity, and adverse impacts to fish habitat or recruitment of economically valuable species may result in subsequent impacts on commercial and recreational fishing opportunities and associated communities. It will be especially important to consider both impacts to complex habitats and habitat use by Atlantic cod, a species that is culturally and economically significant to the region. Atlantic cod aggregate to spawn in the project area, and spawning activity is particularly

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vulnerable to disruption. The complex habitats used by Atlantic cod and other species are vulnerable to disturbances or alterations that can impact the physical and biological components of these habitats that provide complexity. Impacts to the physical (e.g. three-dimensional structure, crevices) and biological (e.g. epifauna) may be permanent or long-term, typically taking years to decades for recovery. Therefore, an alternative that minimizes effects of the project on these important habitats should be considered in the EIS.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

we expect complex habitat areas to be found along the northern project boundary, where the project overlaps with Cox Ledge and known areas of cod spawning activities. There may also be large areas of complex habitats along the central and eastern portions of the lease area. The alternative should evaluate the habitat data and identify areas where construction should be avoided or where micrositing should be considered to minimize impacts. The alternative should not only consider locations for turbine removal and/or micrositing, but also consider portions of the lease where cod spawning aggregations have been detected and areas dominated by complex habitats that provide important functions for associated living marine resources, such as Atlantic cod.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

A habitat minimization alternative(s) should consider impacts of the project both in the lease area as well as along the export cable. These components may be considered as two separate alternatives or a one alternative that identifies measures to reduce fisheries habitat impacts for the entire project area and includes both the lease area and the export cable corridor. This habitat impact minimization alternative(s) should evaluate not just impacts of WTG construction and operation, but also ways to minimize impacts from cables on sensitive habitats. This should include the inter-array cable routes and proposed export cable corridor, and potential routing modifications that avoid and minimize impacts to important, sensitive, and complex habitats located in the project area, including submerged aquatic vegetation (SAV). Specifically, the inter-array and export cables should be routed to avoid and minimize impacts to complex habitats and the onshore cable landing where SAV has been historically mapped.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

While measures to minimize impacts of the project on vulnerable habitats and species should be considered for all alternatives, the fisheries habitat impact minimization alternative should consider and fully evaluate these measures in detail.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Further, this alternative should consider measures to increase habitat value through the material and composition of any proposed scour protection, for both cables and turbines. The analysis should consider how different types of materials employed may or may not maximize the habitat value for juvenile species, such as Atlantic cod. Mitigation measures evaluated through this alternative may also be considered or mixed and matched with other alternatives.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

While the onshore landing includes the use of HDD for the final landfall connection, an in-water work area appears to fall within the mapped SAV beds, thus alternative in-water work areas should be considered and evaluated. Routing and construction methods that allow for full cable burial to minimize permanent habitat impacts and potential interactions with fishing gear should be considered as a component of this alternative. This habitat alternative (or alternatives) should be evaluated as an individual alternative(s) that may be mixed or matched with other identified alternatives.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In addition to an overall evaluation of the proposed water withdrawals and heated effluent discharges effects for vulnerable life history stages of species expected to occur in the project area, specific evaluations should focus on impacts to Atlantic cod and North Atlantic right

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whales. A species-specific evaluation of potential impacts to Atlantic cod eggs and larvae should also be included in the analysis of this alternative. This evaluation should incorporate and fully consider the proximity of cod spawning activity in the project area to evaluate the potential effects of the OCS to Atlantic cod. Similarly, the EIS should fully consider the potential for impingement or entrainment of copepods, which are a critical foraging resource for North Atlantic right whales. The analysis of this alternative should address how each project component of the two different options (DC versus AC) would affect fisheries resources and the species that depend on those resources for food. This analysis should address not only what resources and habitats would be impacted, but also include a temporal component for each project element by specifying the duration of the identified impact and any expected recovery timeframes.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

to cool the HVDC transformer platforms, consider using air-cooling systems, or sustainable closed-loop sea water cooling systems, or emergent pumpless technologies, instead of open-loop raw seawater cooling system to reduce adverse environmental impacts

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Ocean currents will dissipate the heat of discharged water before it poses harm to wildlife. But the continued seabed disturbance from intake and discharge will have adverse impacts on habitats and wildlife. We recommend three options to cool the offshore wind HVDC transformer platforms: 1. use air-cooling instead of sea water cooling 2. use sustainable closed-loop sea water cooling systems to reduce environmental impact 3. evaluate emergent technologies such as the EU-funded COOLWIND project that does not require seawater pumps, filters, heat exchangers or expensive salt water piping, nor chlorination of seawater. Instead of pumping cold seawater to the transformer platform, heated water from the converters is circulated and chilled in a subsea mounted cooler? with less environmental pollution, less power consumption and less emissions.<sup>19</sup>

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A Fisheries Habitat Minimization Alternative should be developed to avoid siting foundations in/routing cables through complex habitats to decrease the overall adverse impacts to EFH and lessen the direct mortality of fish and invertebrates.<sup>24</sup> Furthermore, SW project developers and operators must be required to: ? use anchors and jack-up features only if no other less-impactful alternative is available ? employ ramp-up or soft-start<sup>25</sup> (i.e. gradual increase of sound level) protocols during pile driving to allow mobile species to vacate the area prior to the commencement of pile-driving activities ? bury electrical cables (to a depth determined by technical experts) to minimize seabed habitat loss and reduce the effects of EMF ? install scour protection ? develop and implement comprehensive waste management plans, and train all project personnel to prevent spills of hazardous substances, and to control water pollution commit to conducting comprehensive long-term science-based monitoring before, during, and after construction to document impacts to benthic habitat and EFH and recovery, compared to pre-construction survey baseline. The monitoring strategies must incorporate relevant stakeholder recommendations where practicable. Monitoring reports must be made publicly available in real time. Adaptive management strategies must be included in the EIS to address and mitigate, in near real time, any adverse impacts identified. ? invest in research to better understand the potential cumulative effects of OSW- related acoustic and barometric disturbances on, and behavioral responses on economically and ecologically important fisheries and benthic resources. This study should focus on a broad representative group of species with the widest ?range of hearing capabilities and mechanisms of the fishes present in the OSW areas?.<sup>26</sup>

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We recommend that the DEIS include a Fisheries Habitat Impact Minimization alternative (Habitat alternative) designed with input from key state and federal agencies and stakeholders. The DEIS should specifically detail how the 880 MW project (which presumably will not occupy the entire lease area footprint) can be configured to avoid cod spawning areas, complex bottom habitat (a portion of the northern project lease area overlaps Cox Ledge) and other marine resources. The habitat alternative should be informed by location specific benthic and habitat characterizations that can then be used to evaluate and compare the impacts of the alternatives. Consideration of project specific information at the DEIS stage, not later in the process when opportunity for public comment is past, will allow for a transparent discussion of the overall layout and size of the project within the design envelope. The DEIS analysis of the Habitat alternative should contain enough information to describe whether portions of the lease should be avoided due to potential impacts to complex bottom habitat and the least impactful location for other elements of the project especially the proposed export cable corridor. We specifically recommend that BOEM consider an alternative that avoids placement of wind turbines within the complex bottom habitat located in the northwest corner of the lease site.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

EPA recommends that BOEM evaluate a range of alternatives that includes consideration of the cooling water withdrawals and effluent discharges of the OCS-DC. The DEIS should describe the water withdrawals and discharge of pollutants from the OCS-DC and evaluate the potential water quality impacts of its operation with particular focus on cooling water intake requirements at CWA Section 316(b) and ocean discharge criteria at CWA Section 403(c). See 40 CFR Part 125 Subparts I and M. In addition, EPA recommends that BOEM consider a reasonable range of alternative methods of reducing or eliminating pollutant discharges and reducing or eliminating any adverse effects from water withdrawals for cooling.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The DEIS should consider the impacts of cooling water withdrawals on the community of aquatic organisms in the area of the intake, including consideration of how those effects could be reduced by any mitigation measures employed to comply with the requirements of Section 316(b). The analysis should include estimates of impingement and entrainment of aquatic life and the impact of those losses on finfish resources, essential fish habitat, plankton, sea turtles and marine mammals, birds, and threatened and endangered species. We also specifically recommend that BOEM consider the proximity to local cod spawning habitat and other habitat characteristics that would influence the density of early life stages of fish in the vicinity of the OCS-DC.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Consideration of a reasonable range of alternatives in the DEIS is a critical part of the NEPA process. We recommend that BOEM evaluate a range of alternatives for the various elements of the Sunrise Wind project including the offshore export cable, the inter-array cables, landfall location, and the overall configuration of the wind farm (WTG locations) within the lease area. Our experience with previous projects demonstrates that it is important for the DEIS to fully consider alternatives in the DEIS to allow for the development of a project that meets the project purpose and need while also avoiding, minimizing, and offsetting impacts to the greatest degree

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possible consistent with the input of state and federal stakeholders. The alternatives analysis should analyze the difference in overall impacts associated with the deployment of a range of WTG MW generation capacities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM should add an alternative which considers the impacts of a closed loop cooling system for the AC/DC converter station, and additionally require the applicant to submit an assessment of potential impacts of entrainment and impingement of zooplankton, fish eggs and early life stages of fish and invertebrates that will potentially be affected.

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**Comment Number:** BOEM-2021-0052-DRAFT-0051

**Organization:** Win With Wind

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

If BOEM declines to approve the Project's Construction and Operations Plan ("COP"), other wind developers will take note and could be discouraged from proposing new facilities, or from continuing with an existing permitting process. The protracted and ultimately unsuccessful effort to build the Cape Wind project, for example, subsequently cast a pall over offshore wind in the United States.<sup>15</sup> A failure to permit the Project at this stage is likely to have a similar impact. A decision imposing new requirements that would render the Project economically nonviable could also act as a deterrent to developers, who may subsequently see no reason to invest in new offshore wind facilities. BOEM should include these downstream effects in its analysis of project alternatives, including a no action alternative.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Oceana encourages BOEM to include alternatives specific to each phase of the project (siting, construction, operation, and decommissioning) to ensure the environmental effects of the project are avoided and if not avoided then mitigated or minimized.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

As discussed above, a wide range of areas of the ocean have been designated by fisheries managers for their importance in supporting sustainable fisheries including EFH for spawning, breeding, feeding and growth, and HAPC, a subset of EFH that are important, sensitive to human-induced environmental degradation, threatened by development, or rare. Further, some areas have been identified as deep-sea coral areas under the deep-sea coral Research and Technology Program and support slow-growing corals in temperate and deep habitats.<sup>12</sup> The EIS should explore these habitat areas in and around the project site and include alternatives to avoid these areas, particularly HAPCs. If the areas cannot be avoided, alternatives should be developed to minimize the frequency, intensity, and duration of the effects with clear requirements to monitor the effects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Collectively the SMAs and the archive of DMAs are useful to illustrate important areas for NARWs that should be avoided in offshore wind development. Relative to the current project in the MA/RI WEA, Oceana includes a map from a 2020 NOAA report on SMAs DMAs in the U.S. Atlantic to show the persistence of DMAs in the MA/RI WEA region.<sup>11</sup> The EIS should include alternatives to avoid development of offshore wind in 1) Seasonal Management Areas and 2) in areas where persistent or long-duration DMAs are established and extended for more than three months in any one year of the most recent five.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The environmental effects of leasing and development were explicitly bifurcated in the NEPA process that uses an EA to assess the impact of leasing but not development. Now the process is considering the effects of development and the agencies must seriously consider a No Action alternative that avoids all effects of offshore wind development in this area. As with all leases, it is important to note that the lease for this project included no guarantee that development will be permitted.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Some areas of the oceans have higher levels of protections due to their importance to fisheries, wildlife, or other reasons. Offshore wind development should not occur in marine monuments or sanctuaries; habitat areas of particular concern including areas that include deep sea corals; Seasonal Management Areas (SMAs), or persistent Dynamic Management Areas (DMAs) created to reduce risk of vessel collision with NARWs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0069

**Organization:** Save The Bay

**Commenter:** Michael Jarbeau

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Sunrise wind proposes the use of Direct Current (DC) transmission cables and an associated offshore conversion station that would use approximately 8.1 million gallons of seawater per day in an open loop cooling system. The developer claims that this system is necessary due to the long transmission cable run from the lease area to the planned landing site. Save The Bay objects to the use of such technology and equipment in offshore wind projects. Open loop cooling systems have a troubling history of significant, long-term impacts to the environment due to entrainment issues, heated water discharge, and impacts to spawning and habitat. The EIS must be developed to include realistic alternatives to this open loop cooling system design.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We also recommend considering a closed loop cooling system alternative for the DC conversion station, in addition to the proposed open loop approach.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We recommend that BOEM develop a habitat minimization alternative which would micro-site interarray and export cables and exclude potential turbine or substation locations with the goal of minimizing impacts to sensitive habitats including eelgrass, hard bottom, and complex topography. The COP states that the export cable "will be sited to avoid and minimize impacts to sensitive habitats (e.g., hard bottom habitats) to the extent practicable"; however, it is not clear how this determination will be made and the amount of flexibility there is with turbine micrositing (Section 4-217).

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should also consider an alternative which would minimize impacts to commercial and recreational fisheries. Similar to a habitat alternative, this could include reducing the number of turbines installed and excluding locations that have greater overlaps with fishing activity. We recommend working with affected fishermen to understand the locations of greatest concern.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should analyze multiple distinct alternatives associated with smallest, largest, and one or more intermediary potential scales of the project in terms of the number of turbines which might be installed. When describing alternatives for fewer than the full 122 turbines, the EIS should outline how it will be determined which of the 122 possible locations may not be used. These choices have implications for habitat, fisheries, and other environmental impacts. It will be important to clearly outline a wide range of possible scenarios, especially if the project size is unknown at the time of EIS completion.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

CCE recommends that BOEM consider the environmental benefits of choosing a closed loop system for the offshore substation. The substation is currently proposed to be an open loop system and is located in a cod spawning ground. It is important to mitigate the entrainment and impingement of local fish populations to the greatest extent possible, and the benefits of a closed loop system should be evaluated as a possible alternative to the proposed action in the EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We encourage BOEM to develop a Fisheries Habitat Impact Minimization Alternative designed to avoid impacting pre-existing complex fish/invertebrate habitat (as was done in the South Fork Wind DEIS) using the best available information on benthic habitats within the project area and transmission cable route. While the developer-provided benthic surveys that suggest the project area largely consists of sand and mud, the northwest quadrant includes boulders characteristic of glacial moraine (COP Appendix M1, Fig. 3.1-3). We recognize that Sunrise Wind will have the same micro-siting constraints as the South Fork project because of the regional, uniform, 1 x 1 nm spacing agreement that exists in the Southern New England lease areas. Thus, our recommendation for Sunrise is similar to our recommendations for South Fork in this regard. While avoiding complex habitats is preferable, it is important to recognize that the design of the project itself has the potential to expand, enhance, or restore hard bottom habitats through strategic investments in nature-based design of scour protection and cable mattresses.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Cooling Station The Draft EIS must fully analyze environmental impacts of the cooling water intake system (CWIS) proposed for the Offshore Converter Station (OCS-DC), especially the impacts to marine species in rebuilding plans and protected resources. The EIS must also consider a range of alternatives including all reasonable mitigation options to avoid impingement and entrainment of all marine species, so that BOEM may meet the statutory obligation to ensure the "location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact."<sup>14</sup> The environmental concerns are not just on the "...highly localized increases in water temperature in the vicinity of the discharge location of the OCCS-DC" that could result in mortality of some species intolerant of high temperatures. They also include the mortality of larval and juvenile fish (potentially adult fish too as the COP does not specify the size range of species that could be pulled into the intake) removed from the water column and killed during the filtration process, which removes suspended particles larger than 500 microns. For example, Atlantic cod spawning on Cox Ledge may be disrupted by the noise emitted from turbines hindering communication but their eggs and/or larvae may be at higher risk given the proximity to this WEA.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** NPS

**Organization:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

NPS needs to know more about the proposal to build a barge system to ferry equipment, materials and supplies over to Fire Island since the William Floyd Parkway Bridge is no longer capable of carrying the estimated weight to bring everything needed to Fire Island. We are

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concerned that there be no encroachment across the Wilderness boundary and no diminishment of Wilderness characteristics. The NPS will work with the developer, BOEM and other potentially affect agencies to understand barge project details and protect NPS resource values.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We recommend that BOEM coordinate with the EPA to require Sunrise Wind to redesign the conversion station to use closed loop cooling. Providing this guidance prior to developing a Draft EIS will reduce the burden on federal agencies in terms of effort needed to calculate the impacts of open loop cooling to a long list of marine species and also save money for the Project developer, who can pivot their cooling design to closed loop prior to the completion of the design for the proposed open-loop cooling system. In addition, by promptly sending this signal to all developers, BOEM can forestall other projects from pursuing open loop cooling systems such that their COPs propose closed loop cooling for AC to DC conversion stations.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Reasonable alternatives to the proposed action that may reduce environmental impacts 'to ocean and coastal habitats, navigation and vessel traffic, and commercial and for-hire recreational fishing.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate expanding the Project Design Envelope to include a closed cycle cooling system or similar technology and a range of withdrawal volumes and discharges at the Offshore DC Converter Station, in accordance with EPA Phase I rule (40 CFR 125.84) and to avoid adverse environmental impacts associated with water intakes and thermal discharges (e.g., entrainment, impingement, physical, chemical and thermal effects to aquatic organisms, temperature changes to receiving waters, potential to become an attractive nuisance).

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## **A-2.3.Bats**

**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

A comprehensive survey of bats offshore and along the coasts of the Gulf of Maine, mid-Atlantic, and the Great Lakes detected bats up to 70 nm from the mainland, although their activity generally declined with increased distance from shore.<sup>55</sup> However, there is very little data available on the interaction of bats with offshore wind energy turbines. The bat species potentially present in SW area are already facing multiple stressors on land including WTG collisions, habitat loss, climate change impacts, and deadly diseases like the fungal white-nose syndrome. These stressors can potentially alter the behavior of cave-dwelling and tree-roosting bats, and also alter the migratory paths of the tree roosting species, thus increasing their use of the offshore environment.<sup>56</sup> Nine species of native bats are present in Massachusetts.<sup>57</sup> • Of the six cave-dwelling resident bats [little brown bat (*Myotis lucifugus*), northern long-eared bat (*M. septentrionalis*), eastern small-footed bat (*M. leibii*), Indiana bat (*M. sodalis*), tricolored bat (*Perimyotis subflavus*), and the big brown bat (*Eptesicus fuscus*)], the Indiana bat is listed as Endangered<sup>58</sup> and the northern long-eared bat is a Threatened species under the ESA.<sup>59</sup> All except the big brown bat are listed as Endangered under MA law. The USFWS is currently conducting a court-ordered review to determine, by November 2022, if the northern long-eared bat warrants uplisting to Endangered status under the ESA.<sup>60</sup> The listing statuses of the little brown and tricolored bats are also being reviewed by the USFWS.<sup>61,62</sup> The three migratory tree roosting bat species include the silver-haired bat (*Lasionycteris noctivagans*), eastern red bat (*Lasiurus borealis*), and the hoary bat (*Lasiurus cinereus*)

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

Better understanding of bat presence and behavior in SW area is needed to afford them protection from potential adverse impacts of SW project activities. Lack of knowledge on the precise spatiotemporal movements of specific bat species cannot and must not be used to draw any conclusions on the potential presence of any native bat species in SW area. Both tree-roosting and cave-dwelling bats populations have high mortality from collisions with terrestrial WTGs,<sup>63</sup> and most, if not all, of the 9 bat species found in MA have been tracked crossing open waters of the northeast Atlantic. The EIS must consider impacts to all bat species with a presence in this region. The EIS must include the Endangered Indiana bat because it has been shown to be present in the region and tracked crossing the coastal waters.<sup>64</sup> BOEM must consider all available science and technology-based recommendations on avoidance and mitigation measures at the outset lest more species become listed within the lifetime of the proposed SW project.

**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Collisions with WTGs and noise pollution are the primary impacts of OSW on bats. In its EIS, BOEM must evaluate cumulative impacts from other regional OSW and non-OSW offshore and coastal activities, adopt a precautionary approach where the data is inadequate or absent, consider alternatives to all aspects of the SW COP, and develop wildlife impact avoidance and mitigation strategies at the outset in consultation with USFWS and other relevant agencies. Better understanding of bat presence and behavior in SW area is needed to afford them protection from potential adverse impacts of SW project activities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

evaluate bat deterrent technologies being developed for land-based turbines for deployment or modified for use in the offshore environment to minimize bat impacts: – turbine coatings to counteract any attraction to smooth surfaces which might be perceived as water<sup>67</sup> – ultraviolet lighting which many bat species can see<sup>68</sup> – ultrasonic noise emitters to effectively “jam” bats’ radars and make WTGs unappealing to bats<sup>69</sup> – acoustic monitoring at the height of turbine nacelles<sup>70</sup> – targeted tagging – thermal imaging technology to detect collisions • explore targeted or smart operational curtailment (e.g. via feathering of turbine blades, which at high risk periods, has been shown to reduce bat fatalities by

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

develop a comprehensive regional bat monitoring plan in collaboration and consultation with scientists and technical experts. This plan must include continued visual monitoring using real-time detection systems such as Motus tracking<sup>65</sup>, field surveys, etc. and acoustic monitoring at the height of turbine nacelles<sup>66</sup> • evaluate bat deterrent technologies being developed for land-based turbines for deployment or modified for use in the offshore environment to minimize bat impacts: – turbine coatings to counteract any attraction to smooth surfaces which might be perceived as water<sup>67</sup> – ultraviolet lighting which many bat species can see<sup>68</sup> – ultrasonic noise emitters to effectively “jam” bats’ radars and make WTGs unappealing to bats<sup>69</sup> – acoustic monitoring at the height of turbine nacelles<sup>70</sup> – targeted tagging – thermal imaging technology to detect collisions • explore targeted or smart operational curtailment (e.g. via feathering of turbine blades, which at high risk periods, has been shown to reduce bat fatalities by

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

consult with the USFWS on SW project impacts to listed/potentially listed bat species in developing and implementing protocols to avoid, minimize, and mitigate such impacts. • support and invest in scientific and technological research to: – develop methods and technologies for monitoring, risk assessment, direct detection of collisions specifically in the offshore environment<sup>78</sup> so that OSW-related bat mortalities could be accurately quantified since traditional fatality assessment (i.e. relying on carcasses around WTGs) is not feasible at offshore sites. – continually evaluate mitigation strategies being developed for land-based wind energy projects for their potential application to OSWs. Bat mortality has been shown to increase with the tower height of land-based WTGs,<sup>79</sup> suggesting that fewer, larger turbines deployed in OSWs may be detrimental to bats. — improve acoustic monitoring to distinguish between calls of different species.<sup>80</sup>

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts to bats (Section III.I): ○ Because so little is known about potential bat impacts from offshore wind, BOEM should require support for and, once they are verified and commercially available, adoption of monitoring technologies as part of Sunrise Wind’s monitoring framework and protocol. ○ BOEM’s impact analyses must account for the potential for bats to be attracted to offshore wind facilities; the impact analyses should also not assume that pre-construction bat activity will correlate with post-construction bat fatalities. ○ BOEM should analyze impacts to cave-hibernating bats, including federally listed species, from offshore components of Sunrise Wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Recognizing that much remains unknown regarding the impacts to bats from offshore wind in the United States, BOEM must require an explicitly defined monitoring and adaptive management plan. This plan must include a commitment to standardized monitoring both before construction and during operations. Additionally, because technologies to improve understanding of and reduce bat risk offshore (e.g., strike detection and deterrent technologies) are likely to be developed over the life of Sunrise Wind, the Draft EIS for Sunrise Wind should specifically

require the adoption of monitoring technologies when they are verified and commercially available as part of the Project’s monitoring framework and protocol. Bats, especially migratory tree bat species like the eastern red, hoary, and silver-haired bats, are believed to be attracted to land-based wind turbines<sup>434</sup> and have been recorded altering flight paths to approach turbines.<sup>435</sup> Although no scientific consensus exists on why bats are attracted to onshore wind facilities, theories include that bats may perceive turbines as trees to roost in and bats may seek insect prey that congregate near turbines.<sup>436</sup> This attraction behavior puts bats at increased risk for collision with turbine blades and whether such behavior could occur at offshore wind turbines merits careful consideration. The COP notes that bats could potentially be attracted to offshore components of Sunrise Wind Farm (including turbines) which could increase collision risk.<sup>437</sup> However, despite this acknowledgement, Sunrise Wind proposed that the wide spacing of their turbines is a mitigation measure, as it “may allow bats to avoid individual WTGs and minimize risk of potential collision.”<sup>438</sup> This does not align with bats’ likely attraction to offshore wind turbines. Further, as discussed in Section III.H.11, there is no research to support that turbine spacing affects risk. When preparing the Draft EIS, BOEM should account for bats’ potential attraction to, and increased risk of collision with, offshore wind turbines and should not rely on bat avoidance to minimize impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Avian and Bats: Discuss seasonal distribution, aggregation, abundance and migration routes. Discuss sonar and echolocation for bats. Discuss sea duck abundance. Note: Use the most recent Atlantic Coast Sea Duck Surveys.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Avian and Bats: Discuss behavior and physiological impacts from aviation lighting. Evaluate and consider the Block Island Wind Farm post-construction acoustic surveys, and vessel-based surveys on the Fugro Enterprise that were completed in 2017 when assessing impacts to avian and bats.

## **A-2.4. Benthic Resources**

**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

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**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

For benthic resources, fish, and invertebrate species, this section should include an assessment of species status and habitat requirements, including benthic, demersal, benthic-pelagic, and pelagic species and infaunal, emergent fauna, and epifaunal species living on and within surrounding substrates.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

For more vulnerable and difficult-to-replace resources such as natural hard bottom complex substrates (particularly those with macroalgae and/or epifauna), submerged aquatic vegetation (SAV), dense faunal beds (e.g., cerianthid beds), shellfish habitat and reefs, other biogenic reefs, and prominent benthic features, alternatives that avoid and minimize impacts to these habitats should be evaluated and given full consideration. Compensatory mitigation should be provided for unavoidable adverse effects. Inherent to this is the necessity to conduct high-resolution benthic habitat mapping that characterizes and delineates all habitats in the lease area and within all potential cable corridor areas.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The description of the “Affected Environment” should recognize the ocean environment as dynamic, not static, and acknowledge that the environment, and species within the environment, vary over time and seasons. This section should include information on the physical (temperature, salinity, depth, and dissolved oxygen) and biological (e.g. plankton) oceanography. It is important that the EIS discuss seasonal changes and long-term trends in the environment as well as hydrodynamic regimes and how they influence the distribution and abundance of marine resources. Within this section, the EIS should include results of on-site surveys, site-specific habitat information, and characterization of benthic and pelagic communities. Additional details should be provided related to all habitat types located within the project area with a particular focus on complex habitats.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

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**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The ecological impacts resulting from the loss of seabed and the associated benthic communities and forage base and changes to predator/prey relationships should be evaluated. This should include a discussion of the ecological and economic impacts associated with habitat conversion from WTG installation, offshore substations, cable installation, and scour and cable protection. This analysis should also include site-specific benthic data collection and an evaluation of impacts of the project on different habitat types and fisheries resources that rely on them.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA  
**Commenter:** Timothy Timmermann  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The COP (page4-67) describes survey data that reveals the presence of high-density boulder fields in the northwest corner of the lease area, citing Appendix G1. We note that Appendix G1 (Marine Site Investigation Report) is labeled “Confidential –Not for public disclosure.” While the COP provides some discussion and graphics that are based on this survey, detailed information on complex benthic habitat is critical to the public’s understanding of whether any aspect of project construction is likely to impact important benthic habitat and inform options for avoiding or minimizing impacts. We recommend that the Marine Site Investigation Report (Appendix G1) be made available to the public for review as part of the DEIS, as well as any other reports that present information on benthic surveys of the lease site or cable transit routes. Business sensitive information can always be redacted in the report, if warranted. The COP (page 4-173) points to benthic community studies conducted at surrounding lease sites, but it’s unclear if any benthic community studies were conducted within the Sunrise lease area. Any such studies would be important to understanding the benthic community structure within the project area that may be affected by the construction and/or operation of the project.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0003

**Government Agency:** Massachusetts Office of Coastal Zone Management  
**Commenter:** Lisa Berry Engler  
**Commenter Type:** State Government

**Comment Excerpt Text:**

The trawl surveys, acoustic telemetry studies of Atlantic cod and Highly Migratory Species, acoustic telemetry for evaluating electromagnetic frequency effects on elasmobranchs and horseshoe crabs, and soft and hard bottom benthic monitoring plans are rigorous and well-designed and should provide data to answer important questions about how the construction and

operation of the Sunrise Wind farm might affect the distribution, abundance, and feeding of key species that currently exist within and adjacent to the project's footprint.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Because benthic data are not provided in the COP or appendices, we are unable to recommend specific areas to be avoided. Provision of high-resolution benthic habitat maps early in the process is important. These data are needed for NMFS to conduct essential fish habitat consultations. This consultation process is designed to avoid impacts wherever possible and determine mitigation measures where impacts cannot be avoided. These data should be included in the COP.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A loss of attached fauna is expected when boulders are moved. The COP asserts that function will be restored in less than one year due to recolonization (Section 4-9 and 4-205). Two studies done at the Block Island Wind Farm<sup>5</sup> are referenced to support this one-year timeframe. We were unable to locate a copy of the 2016 report, but we disagree that Guarinello and Carey (2020) provides evidence for one-year recovery of benthic epifauna. This study notes a progression from bare cobble and rock (March 2016) towards moderate epifaunal cover (August 2016), mostly an invasive tunicate, *Didemnum vexillum*. The authors noted that they could only hypothesize, based on this initial colonization, that affected cobbles and boulders would eventually host a more diverse array of attached fauna and associated mobile taxa, which is the endpoint we would argue constitutes benthic recovery. This partial recovery in a less than one year timeframe should not be used as rationale to suggest minimal benthic impacts are associated with boulder relocation. These concerns also apply to impacts of anchoring, which were considered as part of the Guarinello and Carey study.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0005

**Organization:** Citizens Campaign for the Environment

**Commenter:** Jordan Christensen

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In addition to a lot of the fisheries impacts that we know have been included in previous EISs, we would also like to see quantified the positive impact of the creation of artificial reefs from these projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts to benthic resources, finfish, invertebrates, and essential fish habitat (Section III.E): ○ To ensure that the Draft EIS accurately evaluates impacts, BOEM and/or the National Marine Fisheries Service should conduct a (1) quantification of benthic habitat types and an (2) acoustic telemetry study of cod spawning distribution and habitat in the area of the Sunrise Wind Farm. ○ Sunrise Wind should avoid siting wind turbines and export cables in complex habitats. ○ BOEM should require robust monitoring of impacts to essential fish habitat and benthic resources in the area of the Sunrise Wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Based on the site-specific Sediment Profile and Plan View Imaging (SPI/PV) survey conducted for the area of the Sunrise Wind Farm, the following benthic substrate types were observed: (1) sand and mud, (2) sand and mud with ripples, (3) sand, (4) sand with ripples, (5) sand with mobile gravel, (6) patchy cobbles and boulders on sand, and (7) cobbles and boulders on sand. To avoid, minimize, and mitigate impacts to complex habitats, which are important to a number of species' reproduction and survival, Sunrise Wind should employ micro-siting to avoid such habitats. Thus, as part of the Draft EIS, BOEM should assess impacts to complex habitats from the Sunrise Wind Farm and whether micro-siting in areas where complex habitats are predominant would adequately avoid, minimize, and mitigate impacts to complex habitats, and in the case of glacial moraines designated as areas of particular concern, strictly avoid impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

From an ecological perspective, the benthic environments within these coastal and marine jurisdictional areas include a variety of resources of concern to the NPS, including physical benthic habitat characteristics as well as the biotic communities associated with them (e.g., aquatic vegetation and fauna living in and depending on these habitats), all of which affect and

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are affected by the water column. Limited information is available for the submerged benthic habitats; however a benthic habitat mapping project was completed for Fire Island National Seashore in response to Hurricane Sandy. Offshore wind development can impact benthic ecosystems in a variety of ways depending on the location and development phase. In addition to direct impacts, such development may result in indirect impacts associated with artificial reef effects, seafloor disturbance, and the introduction of energy emissions (e.g., noise, vibrations, and electromagnetic fields) that could have long-term impacts on benthic ecosystem structure and function. The NPS appreciates the efforts made, as described in Appendix M to the COP, to survey and describe the benthic environment of the project area. Reports associated with the project includes data such as bottom surface features, sediment characteristics, and vegetative and macrofaunal species distributions, descriptions and management interest; results of these reports and other local benthic analyses, including cumulative impacts to seagrass beds (and suitable habitat as indicated by historical seagrass distribution) and other declining benthic resources, should be considered as part of the analysis of potential impacts to the benthic environment. Moreover, the proposed marine cable installation adjacent to and within the boundaries of Fire Island National Seashore will require additional collaboration to ensure those activities do not disturb sensitive park benthic resources.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Discuss existing benthic and shellfish resources.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate export cable burial depth to avoid EMF impacts and conflicts with fishing gear. A range of depths and the potential for anchor strikes from commercial shipping and fishing vessels should be evaluated. Note: The Agencies have received reports of anchor strikes and gear interactions on buried telecommunication cables in the vicinity of the export cable. Identify Best Management Practices to reduce risks from extreme environmental conditions (i.e., rough seas, complex currents, and cold waters), vulnerable habitats (i.e., SAV including seagrass and other macroalgae) and at-risk species. Evaluate shifting habitats from introduced structures. Evaluate regime shifts due to changing food sources. Discuss changes in habitat from turbine and cable installation (including boulder relocation, boulder relocation trials, and seafloor leveling). Evaluate impacts on Plankton. Evaluate impacts from excavation, sidecasting, sediment

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dispersal. Evaluate impacts from CWIS on egg and larval stages. Evaluate required anchoring areas during construction and maintenance activities to minimize areas of disturbance.

## **A-2.5.Birds**

**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Migration of various birds (including at-risk species like red knot, piping plover, and whimbrel) over the Atlantic Ocean has been documented.<sup>49</sup> While nocturnal migrants are known to typically fly above the rotor swept zone for current wind turbines in operation, they may also fly lower, potentially within the rotor swept zone, during inclement weather and cross winds.<sup>50</sup> – aerial surveys over the southern New England/mid-Atlantic OSW planning areas to capture annual and seasonal variations in avian movement that are not adequately accounted for by the current MDAT regional avian activity surveys. Begin surveys as soon as possible and repeat frequently enough to cover within and between seasonal and annual variation in avian distribution to capture changes in distribution caused by OSW

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The SW project area is within the Atlantic Flyway avian migratory corridor whose diverse and complex coastal and pelagic ecosystems and geographies encompass critical feeding, foraging, breeding habitats of hundreds of resident and nocturnal /diurnal migratory species including raptors, songbirds, coastal shorebirds, waterfowl, waders, and pelagic birds.<sup>38</sup> Among these broad groups found in SW area are several listed and at-risk avian species protected by multiple statutes, conservation policies, agreements, and treaties.<sup>39,40</sup> In its preparation of the EIS, BOEM must consider impacts from project construction, operation, maintenance, repowering, and decommissioning to all species of concern

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS must use models produced from standardized monitoring/survey data collection methods and address the biases of each method used in the COP. The EIS must include: • accurate estimates of avian populations The EIS must include population-level impacts s local population-level assessment of collision impacts • thorough evaluation of local population-level cumulative impacts in addition to flyway-wide impacts on a broad range of bird species with a

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presence in the SW area particularly passerines and other nocturnal migrants, seabirds, and species most at risk, employing complementary methods and technologies.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM must require developers to minimize construction and operational lighting throughout the footprint of OSW projects following BOEM guidelines<sup>46</sup> to minimize collision risk. A comprehensive regional avian monitoring plan is required to determine the OSW impacts on the vast number of resident and diurnal/nocturnal migratory birds (several of which are endangered species) using the coastal, near shore and offshore pelagic environments of the SW area. This plan must be developed and implemented in collaboration and consultation with ornithologists and technical experts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In accordance with executive order 14008, sec.207, which states that offshore wind resource development must accompany "...robust protection of our lands, waters, and biodiversity," [1] we advise additional scrutiny of sea floor bed and avian airflows since there was no EIS conducted prior to lease auction. To address the Migratory Bird Treaty Act [9], we suggest GIS analysis with data overlay to show that the remoteness of the project will not interfere with migratory patterns. BOEM must also remain in cooperation with the Fish and Wildlife Service (FWS) [9] to evaluate the impact on birds and bats.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

effective baseline data collection protocols for the SW region must be initiated immediately and continued through decommissioning including complementary acoustic and visual monitoring methods and technologies, e.g. marine radar surveys, vessel surveys, personned or digital aerial transect surveys, acoustic monitoring, radio telemetry, satellite telemetry, etc. to fill knowledge gaps and to inform future OSW installation processes. Some of the survey and monitoring methods/technologies and their scope include: – personned or digital (for higher altitudes if safety is an issue) aerial transect surveys coupled with vessel surveys to track larger bodied species of all relevant taxa and to inform OSW siting that minimizes avian impacts while also

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measuring the realized level of impacts from before and after construction. Distance sampling is the most obvious method to address inaccuracies in transect surveys and we recommend that BOEM incorporate this accepted method into SW area survey protocols along with predictive models where available. – satellite tracking information from Movebank<sup>47</sup> and Icarus Initiative<sup>48</sup> for larger bodied shorebirds, along with additional research and tagging of priority bird species. – radio telemetry for evaluation of full life cycle of sensitive smaller bodied species. – satellite telemetry technology supplemented with pressure sensors to obtain fine scale movement data and flight altitude – marine radar methods to monitor nocturnal migrants. Migration of various birds (including at-risk species like red knot, piping plover, and whimbrel) over the Atlantic Ocean has been documented.<sup>49</sup> While nocturnal migrants are known to typically fly above the rotor swept zone for current wind turbines in operation, they may also fly lower, potentially within the rotor swept zone, during inclement weather and cross winds.<sup>50</sup> – aerial surveys over the southern New England/mid-Atlantic OSW planning areas to capture annual and seasonal variations in avian movement that are not adequately accounted for by the current MDAT regional avian activity surveys. Begin surveys as soon as possible and repeat frequently enough to cover within and between seasonal and annual variation in avian distribution to capture changes in distribution caused by OSW

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

real-time implementation strategies to use the collected data in adaptive management. The adaptive management framework should include cost effective operational adjustments and advances in detection and avoidance technology, e.g. “smart curtailment” to contain reasonable loss of energy production, seasonal adjustments based on mortality data as needed to compare with defined thresholds, etc. This framework also requires interagency (BOEM and USFWS) coordination and commitment beyond SW project that would be applicable to OSW projects planned and proposed off Atlantic coast. • installation, upgrades, or maintenance of new and/or existing network of such as Motus Wildlife Tracking System<sup>52</sup> receivers on WTGs and onshore OSW infrastructure

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Investment in research to understand the effects of displacement and mortality relative to turbine size and spacing. There is no substantial evidence to suggest that larger turbines spaced farther apart lower bird collision risks. Turbulence above and below the rotor swept zone can affect flight performance. If this makes the birds more susceptible to physical interactions with turbines, then larger turbines would only increase that risk. The risk of collision with the tower itself and turbulence around the rotor swept zone must also be evaluated. • Support for the

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development of technologies to detect bird collisions or mortalities informed by onshore post-construction mortality studies. The Department of Energy recently funded development of collision detection technology to detect small object collisions with WTGs.<sup>53</sup> Similar technologies being tested elsewhere might become available in time if/when SW COP is approved and ready to be implemented.<sup>54</sup> Require developers to report mortality events promptly and publicly and require turbine developers to integrate these systems into their turbines. • The impacts of less energy production from increased spacing with fewer larger turbines within the footprint of OSW project versus the additional habitat loss impacts from more of smaller projects (and more space) required to meet state and national energy goals must be balanced in the context of avian conservation. Fund studies to address this alternative through financial support of OSW project developers or using tax revenues.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-098

**Organization:** Sierra Club

**Commenter:** Paulette Henderson

**Commenter Type:** Individual

**Comment Excerpt Text:**

As more advanced means of solar and wind become available, we can dismantle with wind mills which are dangerous to birds. But for the time being, we must take the risk of using wind mills.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-102

**Organization:** Sierra Club

**Commenter:** Helen Shaskan

**Commenter Type:** Individual

**Comment Excerpt Text:**

My one concern about wind power is the negative effect it may have on migrating birds.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts to birds (Section III.H): ○ The Draft EIS should consider impacts to avian species of conservation obligation, including but not limited to birds protected by Endangered Species Act, the Migratory Bird Treaty Act, BOEM’s Memorandum of Understanding with the U.S. Fish and Wildlife Service, and the International Union for Conservation of Nature. ○ The Draft EIS must be transparent in its use of collision and displacement risk assessments for the project and acknowledge limitations of these assessments. ○ The Draft EIS should provide clear parameters for monitoring impacts from the project before, during, and after construction and during operation, incorporating guidance from New York State Energy Research and Development Authority’s Environmental Technical Working Group, the Atlantic Marine Bird Cooperative,

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and non-profit groups contributing to this letter, keeping in mind that impacts are likely to occur beyond the project footprint and multiple tools will be necessary to create a complete picture of potential impacts to birds in and around the project boundary (e.g., marine radar, satellite and radio telemetry, and telemetry surveys covering up to 20 km beyond the project footprint). ○ BOEM should require a plan for documenting, minimizing, and compensating for loss of birds from collision with turbines, including losses that are identified after the project is constructed or are unknown at the time of developing the plan, which may include but is not limited to temporary curtailment strategies and collision detection technology. ○ The Draft EIS should outline actions to limit impacts to breeding, migrating, wintering, and staging birds from both offshore and onshore construction activities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Draft EIS must address population-level, cumulative impacts to avian populations from developing Sunrise Wind Farm and other areas in the Atlantic outer continental shelf (OCS) expected to be developed in the reasonably foreseeable future. In doing so, BOEM must consider impacts to a broader range of avian species which may be impacted by Sunrise Wind Farm, and not limit its evaluation to federally-listed species. Many of the species which may migrate through the Sunrise Wind Farm area are also protected under various state regulations, in addition to the federal ESA and the MBTA. Therefore, the Draft EIS should consider impacts to species protected under New York, Rhode Island, Connecticut, and Massachusetts endangered species laws, as well as the species of greatest conservation need designated under the states' Wildlife Action Plans. Radio and satellite telemetry and radar monitoring methods should be employed to evaluate risks to species which are likely to use the Project Area for migration. The Draft EIS must adequately assess collision risk to seabirds. This must include an analysis, using the most current available science, of flight heights (averages and ranges), avoidance rates, and other relevant avian flight behavior at the very least. The Draft EIS must also consider the range of turbine specifications that could influence collision risk, including air gap, total rotor swept zone, and turbine height. The Draft EIS should include a CRM-driven analysis for all species of conservation obligation which may occur within 20 km of the Sunrise Wind Farm footprint and for which a current CRM would be appropriate, even if the species has not been documented within the footprint of Sunrise Wind Farm. This should include a recent stochastic derivation of the Band model, such as the McGregor (2018)348 version. Construction activities from the cable laying and pile driving will likely impact birds, regardless of timing. Beach nesting birds, like Piping Plover, American Oystercatcher, Least Tern, Herring Gull, Double-crested Cormorant, and Common Tern, may be present in and around the Project Area from March through September; Northern Gannet, Red Knots, Semipalmated Sandpiper, and Black-bellied Plover may be affected by construction activities in spring and fall. Marine birds, such as shearwater and petrel, will be present around the Project during the winter. If the construction of cable routes is timed to avoid beach nesting birds, then it will likely impact wintering seabirds. While it may not be possible to avoid impacts entirely, the Draft EIS needs to be transparent in addressing these impacts and provide a path to mitigate these impacts.

## **A-2.6.Climate Change**

**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

Even absent direct quantification through the social cost of carbon, there are adverse economic impacts from climate change that exist and should be accounted for in the Sunrise Wind Draft EIS. These impacts include, as noted in previous BOEM analysis:

- Property or infrastructure damage and increased insurance costs and reduced economic viability of coastal communities resulting from sea level rise and increased storm severity/frequency;
- Damage to structures, infrastructures, beaches, and coastal land, with numerous economic impacts resulting from erosion and deposition of sediments;
- Adverse impacts on commercial and for-hire fishing, individual recreational fishing, and sightseeing resulting from ocean acidification, altered habitats, altered migration patterns, and increased disease frequency in marine species.<sup>52</sup>

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

Renewable energy is an urgently needed solution to mitigate fossil fuel-driven climate crisis. We recognize offshore wind energy (OSW) as an urgently needed tool in our national renewable energy portfolio to reduce greenhouse gas emissions. Offshore wind power will play a significant role in meeting the high electricity demands of densely populated coastal areas where land-based renewable sources could not be easily deployed. However, BOEM must not rush the process to meet the current national goal of generating 30 gigawatts of OSW by 2030<sup>7</sup> since offshore windfarms will result in permanent alterations to the marine environment with significant consequences to the survival of wildlife therein. Development of OSW to mitigate climate crisis cannot and must not compound the biodiversity crisis<sup>8</sup> by driving vulnerable marine and terrestrial fauna and flora to extinction. OSW development must be undertaken with thoughtful science-based consideration and accounting of all OSW impacts, long-term projections of various climate crisis scenarios, reasonably foreseeable coastal and maritime changes from anthropogenic activities. This deliberate approach is essential to develop avoidance and mitigation strategies to prevent the extinction of impacted marine wildlife.

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**Comment Number:** BOEM-2021-0052-DRAFT-0001

**Commenter:** Anonymous Anonymous

**Commenter Type:** Individual

**Comment Excerpt Text:**

I also recommend we reclaim any residential structures within one mile of the coast line as they become flooded, for sale, or by eminent domain. We would save the taxpayer trillions in climate change damages. The coast lines should be public land.

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**Comment Number:** BOEM-2021-0052-0006

**Government Agency:** Suffolk County, NY

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Climate change presents a real, grave challenge to our planet. This summer we saw one third of our country in drought, one third on fire and one third flooded. Offshore wind, including projects like Sunrise Wind, are critical to our country's ability to begin to reduce carbon emissions in order to slow or reverse the devastation that is occurring

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**Comment Number:** BOEM-2021-0052-DRAFT-0051

**Organization:** Win With Wind

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

This offshore wind development will deliver quantifiable climate and health benefits: \$54 to \$120 per Megawatt-hour ("Mwh"), according to a 2016 study.<sup>3</sup> In contrast, continued CO<sub>2</sub> emissions through consumption of fossil fuels have "a near-linear relationship" with global warming.<sup>4</sup> As residents of Long Island, Win With Wind members are aware that coastal communities are uniquely threatened by the climate change impacts wrought by greenhouse gas emissions.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As residents of the US, we express genuine interest in the development of the renewable energy industries, a vital part of combating Climate Change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0064

**Organization:** Long Island Federation of Labor, AFL-CIO

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Long Island workers continue to occupy the front lines in the battle against climate change. It affects our properties and our jobs. We all pay a heavy price to remediate the damage inflicted by high winds, flooding and rising sea levels

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**Comment Number:** BOEM-2021-0052-DRAFT-0076

**Organization:** Business Network for Offshore Wind

**Commenter:** Ross Gould

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A recent IPCC Report found that immediate, rapid and large-scale reductions in greenhouse emissions are necessary to limit warming to 1.5 C or even 2 C. With every seemingly small temperature increase, changes in extremes continue to become larger. Every additional 0.5 C of warming causes increases in the intensity and frequency of hot extremes, including heatwaves, heavy precipitation and agricultural and ecological droughts in some regions, according to the report. The Sunrise project would be a major step in reaching those greenhouse emission reduction goals, and it would help establish the infrastructure for future offshore wind projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

New York State is a leader in the fight against climate change and national champion for offshore wind, having passed the strongest climate change law in the nation in 2019. New York is working towards achieving mandates of 70% renewable energy by 2030, carbon neutral electricity by 2040, and a net zero carbon economy by 2050. We cannot achieve these goals, particularly in downstate New York, without achieving or exceeding our target of 9,000 mw of offshore wind. The Biden administration announced plans to address climate change and put forth a goal of reaching a net-zero carbon economy by 2050. Long Island is on the front lines of climate change. The NYSERDA white paper on the Climate Leadership and Community Protection Act asserts that a major obstacle facing New York in meeting our climate change goals is the "tale of two grids". Upstate uses 88% zero-emission resources but only represents 1/3rd of the energy load, while downstate is 2/3rds of the load and 69% fossil fuels. The only clear pathway to implement a just transition from polluting fossil fuels to renewable energy downstate is by utilizing offshore wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The environmental benefits of advancing offshore wind farms to reduce climate impacts needs to be weighed against any potential impacts associated with construction and maintenance of offshore wind farms. CCE believes that offshore wind is one significant part of the antidote in fighting climate change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0091

**Organization:** Save the Sound

**Commenter:** Charles Rothenberger

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Save the Sound supports the responsible development of our offshore wind resources as a necessary element of addressing climate change through the widescale deployment of clean, renewable energy.

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**Comment Number:** BOEM-2021-0052-DRAFT-0066

**Commenter:** John Hyland

**Commenter Type:** Individual

**Comment Excerpt Text:**

As the recent UN scientific report (on top of countless and mounting studies) indicated, we are at the "Code Red" point, one of extreme urgency. I am aware of the need for "due diligence", careful review for such a significant undertaking. I am also aware that the groundwork has been laid, that the workers, their unions, and their communities are ready and eager to move forward. for the benefit of all. The time is now. Finish the approval process. Get the work underway. The climate will not wait, is not waiting. The need for clean energy and good union jobs is not going away, Do not miss this opportunity. Let's move forward together. Thank you.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0004

**Organization:** Business Network for Offshore Wind

**Commenter:** Alec Gomez

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

To meet our climate goals, BOEM should advance review of Sunrise wind and other offshore wind proposals promptly and predictably.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0002

**Organization:** Mastic Beach Conservancy

**Commenter:** Maura Spery

**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

And in talking about the Violet's Cove space, we'd love to see that as an educational incubator, where we can take the people in the community and teach them about sea level rise, teach them about different ways to adapt and how important it is to combat climate change now which is what you guys are doing.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0005

**Organization:** Citizens Campaign for the Environment

**Commenter:** Jordan Christensen

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

But I just want to point out that climate change is absolutely the biggest threat facing -- right you know all of our green mammals, our fisheries are close to communities and we hope that this is quantified in EIS. So we know any large scale energy infrastructure project, particularly when the size of Sunrise, will have some impact, but we hope that as the EIS moves forward, it weighs that against the, you know, grave, issues of doing nothing to combat climate change or to not moving forward with this project or similar offshore wind projects.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0003

**Organization:** Suffolk County

**Commenter:** Lisa Broughton

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Climate change presents a real grave challenge to our planet. This summer we saw one-third of our country in drought, one-third on fire and one-third flooded. Offshore wind, including the Sunrise Wind project, are critical to our country's ability to begin to reduce carbon emissions in order to slow or reverse the devastation that is occurring. For all of these reasons stated above, we urge BOEM to approve the project as the preferred alternative.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0004

**Organization:** Sea Services North America

**Commenter:** Gordon Videll

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Climate change is real and deliberate steps need to be taken to protect our oceans. As our waters change, disruption may destroy the commercial fishing, if not mitigated. Natural resources of our waters belong to all of us and coexistence, mutually beneficial opportunities and working together to make these projects work for everyone

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**Comment Number:** BOEM-2021-0052-DRAFT-0061  
**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Draft EIS should be framed in the context of how the project will contribute to regional decarbonization, and clean energy goals, and the consequences of the no-action alternative

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**Comment Number:** BOEM-2021-0052-DRAFT-0061  
**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Climate change is one of the greatest challenges facing humanity in the 21st century. We are already seeing the consequences: chronic droughts, fire, floods, rising seas, record high temperatures, more frequent extreme storms, fishery disasters, and significant economic losses. The Conservancy recognizes that along the Atlantic coast of the U.S., offshore wind offers incredible potential to generate clean, renewable energy nearby to the cities and communities that need it most.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050  
**Organization:** Sierra Club  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Sunrise Wind project is an important and precedent-setting project for New York and the US offshore wind industry, and an important part of building a clean energy workforce and domestic supply chain that stretches throughout the country. Across the eastern seaboard, offshore wind will create tens of thousands of family supporting jobs, pump billions in economic growth into coastal communities, protect wildlife, lower climate pollution, and safeguard navigation. Additionally, rapidly scaling offshore wind promotes clean and safe domestic energy sources and will help ensure geopolitical security; combat climate change; and provide electricity that is affordable, reliable, safe, secure, and clean for New Yorkers, allowing New York to rapidly transition away from fossil fuel combustion in the power sector. As a New Yorker, I urge BOEM to consider these benefits to public health, the economy, our climate, and to achieving a reliable fossil fuel free grid in New York in the EIS. Ensuring that the Sunrise Wind project advances and launches a new, responsible offshore wind industry will combat climate change and create a thriving clean energy economy.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-001  
**Organization:** Sierra Club  
**Commenter:** Michael & Pam Kestenbaum  
**Commenter Type:** Individual

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**Comment Excerpt Text:**

We can no longer wait to decide what we might -or might not- do to address climate change! Timing is crucial and action must be taken now. Approving the environmentally responsible development of offshore wind will bring us closer to meeting our desperately needed climate goals.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-008**Organization:** Sierra Club**Commenter:** Betsy Kennedy**Commenter Type:** Individual**Comment Excerpt Text:**

Our global temperature is rising now. We need to end fossil fuel emissions as soon as possible, we don't have time to waste. Even 2030 is too long.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-009**Organization:** Sierra Club**Commenter:** Matthew Vanbrocklin**Commenter Type:** Individual**Comment Excerpt Text:**

As a geoscientist, i feel it is essential to humanity, and most life on this planet, to leave fossil fuels behind and continue to vigorously develop and impliment green and renewable energy technolgies. Wind farms are not perfect, science needs to be done to limit negative impacts on wildlife and habitats. Done smartly, this is a necessary step to our energy future. And what harm windfarms might do, is far less the harm of man made climate change. Humanity left the Stone Age behind, not do to lack of stones, but due to better technologies. It is time for humanity to leave the stone age energy technology of fossil fuels behind and move to better, cleaner, less harming, green, and renewable energy technologies.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-012**Organization:** Sierra Club**Commenter:** Abby Paris**Commenter Type:** Individual**Comment Excerpt Text:**

Let's lower the Climate crisis. Add wind energy!

**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-016**Organization:** Sierra Club**Commenter:** Renee Purse

**Commenter Type:** Individual

**Comment Excerpt Text:**

There is no time to lose. We have to try every way we can to decrease our carbon emissions.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-017

**Organization:** Sierra Club

**Commenter:** Dean Gallea

**Commenter Type:** Individual

**Comment Excerpt Text:**

We need to build out renewable energy production supplanting carbon-based generation wherever possible, as soon as we can. Please approve this important effort.

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-017

**Organization:** Sierra Club

**Commenter:** Mary Faulk

**Commenter Type:** Individual

**Comment Excerpt Text:**

I have seen off shore wind and we need it now to decrease greenhouse gases and power our homes.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-018

**Organization:** Sierra Club

**Commenter:** Marta Schaaf

**Commenter Type:** Individual

**Comment Excerpt Text:**

As a parent and a doctor of public health, I am acutely aware of the real and present danger posed by climate change. If NYS were its own country, it would be the tenth largest economy in the world. What we do matters. We need to lead the way for renewables. We can do this in part by approving the Sunrise Wind Project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-019

**Organization:** Sierra Club

**Commenter:** Tegan Morton

**Commenter Type:** Individual

**Comment Excerpt Text:**

New Yorkers don't have time to waste on continuing unsustainable energy sources. Wind farm is an investment in New Yorkers' future and it is critical to build climate resiliency and mitigate the worst effects of climate change while we still can.

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-020

**Organization:** Sierra Club

**Commenter:** mary grace

**Commenter Type:** Individual

**Comment Excerpt Text:**

Anywhere we can place a wind farm , we should place it. NYS can be in the forefront of proving clean green energy to its constituents . It is not a matter of choice but one of necessity. Climate change must be aggressively dealt with. Do it now. The earth needs all the help it can get NOW thank you!

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-024

**Organization:** Sierra Club

**Commenter:** Margaret Chen

**Commenter Type:** Individual

**Comment Excerpt Text:**

We must get off of fossil fuels and to renewals. I want my grandchildren to have a future.

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-025

**Organization:** Sierra Club

**Commenter:** Pamela Miller

**Commenter Type:** Individual

**Comment Excerpt Text:**

Let's have wind powered energy before it's too late to make any difference to climate warming!  
Wind now!

---

**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-026

**Organization:** Sierra Club

**Commenter:** Daniel Hulseapple

**Commenter Type:** Individual

**Comment Excerpt Text:**

It is possible to save the planet and humanity from the destruction of the climate that has sustained life since the beginning. What is done now is just a beginning.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-027  
**Organization:** Sierra Club  
**Commenter:** Rand Carter  
**Commenter Type:** Individual

**Comment Excerpt Text:**

It is imperative that we move from fossil fuel to renewable energy as soon as possible if we want to avoid further climate change-based disasters.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-029  
**Organization:** Sierra Club  
**Commenter:** Kathryn Gilson  
**Commenter Type:** Individual

**Comment Excerpt Text:**

We must start taking action to mitigate the impacts of climate change. We can not keep surviving on empty words, promises, and prayers. Take action now to start making us more resilient.

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-029  
**Organization:** Sierra Club  
**Commenter:** Anne Nelson  
**Commenter Type:** Individual

**Comment Excerpt Text:**

ANYTHING you can do to help our climate emergency is so important. Anne Nelson

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-030  
**Organization:** Sierra Club  
**Commenter:** Thomas Grout  
**Commenter Type:** Individual

**Comment Excerpt Text:**

We are seeing the climate change with increasing average temperatures, increasing violent climate events and wildfires resulting from droughts. It is important that New York take every opportunity to increase safely the production of renewable energy. The Sunrise Wind Project is one of the projects needed to generate renewable energy.

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**Comment Number:** BOEM-2021-0052-DRAFT-0056-A19-030  
**Organization:** Sierra Club  
**Commenter:** Denise Shapiro  
**Commenter Type:** Individual

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**Comment Excerpt Text:**

It's time to move from polluting oil and gas to environmentally friendly wind power.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-031**Organization:** Sierra Club**Commenter:** Blair Bertaccini**Commenter Type:** Individual**Comment Excerpt Text:**

All scientific evidence shows we have no time to wait to phase out carbon based energy rapidly. This project is step in that direction and I want to urge your approval to help save our planet from further destruction and chaos.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-041**Organization:** Sierra Club**Commenter:** Patricia Bartels**Commenter Type:** Individual**Comment Excerpt Text:**

In spite of all the difficult issues we are facing TODAY, the effects of climate change are the most urgent, this would be a most helpful early step to help us meet the challenges!!

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-042**Organization:** Sierra Club**Commenter:** Hali Holmes**Commenter Type:** Individual**Comment Excerpt Text:**

For the sake of my granddaughter and all future generations of children, it's important that we do all we can to move away from fossil fuels and towards clean energy, including wind energy.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-049**Organization:** Sierra Club**Commenter:** Diane Bozzelli**Commenter Type:** Individual**Comment Excerpt Text:**

We really need to stop talking about tackling our contributions to climate change and do something that makes a difference.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-050

**Organization:** Sierra Club  
**Commenter:** Tamar Schwartz  
**Commenter Type:** Individual

**Comment Excerpt Text:**

Renewable energy is so important to our planet's future.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-051

**Organization:** Sierra Club  
**Commenter:** Evelyn Codrington  
**Commenter Type:** Individual

**Comment Excerpt Text:**

It is imperative that we move to approve the Sunrise Wind Project to protect our future generations to come from Global Warming.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-053

**Organization:** Sierra Club  
**Commenter:** John Hyland  
**Commenter Type:** Individual

**Comment Excerpt Text:**

Reports from the UN and science organizations become more dire by the day. We are in Code Red/ May Day times, beyond crisis and into emergency mode. Act now.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-055

**Organization:** Sierra Club  
**Commenter:** Paul Russell  
**Commenter Type:** Individual

**Comment Excerpt Text:**

It's way past time for New York to move dramatically and urgently to address catastrophic climate change. Wind power is a start.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-057

**Organization:** Sierra Club  
**Commenter:** Diane Martella  
**Commenter Type:** Individual

**Comment Excerpt Text:**

I believe strongly that this country needs to do everything possible to combat climate change. Solar power is one of our biggest weapons, so I hope the offshore wind farm will come to fruition sooner rather than later.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-061

**Organization:** Sierra Club

**Commenter:** Merle Molofsky

**Commenter Type:** Individual

**Comment Excerpt Text:**

Environmental issues are of grave concern. I want my three children, six grandchildren, one great-grandchild, and everyone else on earth, to live in a safe and clean environment. Clean energy is an ethical goal!

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-065

**Organization:** Sierra Club

**Commenter:** Paul Rothman

**Commenter Type:** Individual

**Comment Excerpt Text:**

Climate change is impacting us more every year and we don't have time to waste in transitioning to clean, renewable energy.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-069

**Organization:** Sierra Club

**Commenter:** Lilly Knuth

**Commenter Type:** Individual

**Comment Excerpt Text:**

Climate change is here and renewable energies are needed.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-072

**Organization:** Sierra Club

**Commenter:** Wendy Scherer

**Commenter Type:** Individual

**Comment Excerpt Text:**

Please, can we have more renewable energy and mitigate climate change?!

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-073

**Organization:** Sierra Club

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**Commenter:** Alan Mack  
**Commenter Type:** Individual

**Comment Excerpt Text:**  
Climate Change is the most important issue.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-076  
**Organization:** Sierra Club  
**Commenter:** Rebecca Novick  
**Commenter Type:** Individual

**Comment Excerpt Text:**  
I am incredibly worried about climate change and I see a complete transition to renewable energy as one of the necessary ways to address this crisis.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-082  
**Organization:** Sierra Club  
**Commenter:** John Seakwood  
**Commenter Type:** Individual

**Comment Excerpt Text:**  
It's code red time for climate. We need to move projects like this one forward!

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-083  
**Organization:** Sierra Club  
**Commenter:** Carol Montgomery  
**Commenter Type:** Individual

**Comment Excerpt Text:**  
This is very important to our ongoing effort to address climate change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-023  
**Organization:** Sierra Club  
**Commenter:** Ronald Fuller  
**Commenter Type:** Individual

**Comment Excerpt Text:**  
We must act immediately and decisively to change our sources of energy from fossil fuels to wind and sun.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-080

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**Organization:** Sierra Club  
**Commenter:** Clyde Howard  
**Commenter Type:** Individual

**Comment Excerpt Text:**

I am concerned about climate change and the negative effects on our environment of extracting, transporting and using fossil fuels to supply our energy needs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-089

**Organization:** Sierra Club  
**Commenter:** Lou Sabatini  
**Commenter Type:** Individual

**Comment Excerpt Text:**

The UN report on climate change made it clear that we are running out of time.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-095

**Organization:** Sierra Club  
**Commenter:** Mary M Shea  
**Commenter Type:** Individual

**Comment Excerpt Text:**

I am worried about the world we will leave behind for our grandchildren and those who follow them.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-099

**Organization:** Sierra Club  
**Commenter:** Susan Wald  
**Commenter Type:** Individual

**Comment Excerpt Text:**

There is no PLANet B. Time is running out to stop climate change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-101

**Organization:** Sierra Club  
**Commenter:** John Noble  
**Commenter Type:** Individual

**Comment Excerpt Text:**

I am deeply concerned about climate change and its devastating impact on our health, livelihood, and economy.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-103

**Organization:** Sierra Club

**Commenter:** Jason Dragseth

**Commenter Type:** Individual

**Comment Excerpt Text:**

Our planet is warming and old, dirty, fossil fuel-based production and transmission systems are largely to blame.

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**Comment Number:** BOEM-2021-0052-DRAFT-0045

**Organization:** International Brotherhood of Electrical Workers

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The proposed project's positive environmental impacts are critical to achieve a meaningful reduction in harmful greenhouse gases, such as carbon, and to improve overall environmental health.

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**Comment Number:** BOEM-2021-0052-DRAFT-0060

**Commenter:** Kalpana Bhandarkar

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

I want to ensure that we mitigate the impact of climate change on our and future generations and we collectively commit to renewable energy sources.

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**Comment Number:** BOEM-2021-0052-DRAFT-0073

**Organization:** Climate Jobs NY

**Commenter:** Mariah Dignan

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As we experience more intense and frequent storms, droughts, and extreme weather events from coast to coast, the alarm bells are ringing to make large scale investments in renewable energy like offshore wind. We must put ourselves on the path to a low-carbon future while creating new quality union careers that provide family-sustaining wages and benefits for communities across the nation. We can help launch that potential with Sunrise Wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0076

**Organization:** Business Network for Offshore Wind

**Commenter:** Ross Gould

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**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM must consider the benefits of the avoided costs that result from the climate mitigation impacts of offshore wind. Mitigation of climate change results in avoided damages and the associated costs to homeowners, businesses, and the government. BOEM must consider these economic impacts from climate change as they weigh the social and economic benefits of offshore wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Climate change is altering ecosystems faster than species can adjust. World Wildlife Federation scientists have estimated that most species on this planet (including plants) will have to "move" faster than 1,000 meters (3280 feet) per year if they are to keep within the climate zone which they need for survival. Many species will not be able to redistribute themselves fast enough to keep up with the coming changes. These species may well become extinct. When evaluating offshore wind projects, it is imperative that we do not frame this decision as the choice between offshore wind and nothing. The choice is between offshore wind and fossil fuels. As BOEM moves forward with the COP and EIS, it should measure the visual impacts, community impacts, and impacts on birds, fish, and marine species against the comparable fossil fuel infrastructure.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-091

**Organization:** Sierra Club

**Commenter:** Abby Rosenberg

**Commenter Type:** Individual

**Comment Excerpt Text:**

New York needs to be run on more clean energy and this is one of the few steps I've seen towards that end. Having a tangible and real plan to slow the progress of climate change and ensure that my home continues to be safe to myself, my friends, and my family as we all grow older on Long Island. I want you to think of me, who is young and simply wants to continue to have nature in my life as I grow up. With the rates of climate change as is, this future is less and less visible to me. This project will ensure that New York continues to be safe and is one of the many things that we can do to preserve nature.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0002

**Organization:** Citizens Campaign for the Environment

**Commenter:** Adrienne Esposito

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The second thing is that in the EIS and since it's a scoping hearing, we think it's very important that not only the impacts of the wind farm be looked at and examined, but also the impacts of not doing a wind farm and not battling climate change also needs to be examined. So if we continue to rely on fossil fuels and as an island, we are on ground, we are at ground zero dealing with climate change. We all know that on Long Island. So I think it's really important that in the study, there's some dialogue what happens particularly to climate change continues and on fossil fuel power plants. And that's vital. As coastal communities, we have really been inundated with sea level rise challenges, more flooding, salt water intrusion into our aquifer system

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0002

**Organization:** Citizens Campaign for the Environment

**Commenter:** Adrienne Esposito

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Also, since right whales were mentioned by the previous speaker, 100 percent we want to protect right whales. But I'm sure you are familiar with the recent study released that said the greatest danger to right whales is climate change. So my concern is some people, you know, talk about preserving habitats or birds or whales. But we have to keep in mind it's imperative and essential that we keep in mind the greatest threat to species, oceans, fishing and coastal communities is climate change. Offshore wind is one of the antidotes to that. So we need to understand promoting that antidote is part of the cure and part of the assessment, and really that has a great deal of validity in being part of the assessment and being part of the EIS document.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0001

**Organization:** Climate Jobs New York

**Commenter:** Mariah Dignan

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As we see more intense and frequent storms, droughts and wildfires from coast to coast, it is clear the alarm bells are ringing to make large scale investments in renewables like offshore wind in order to put ourselves on the path to a low carbon future while creating new quality union careers that provide family sustaining wages and benefits for communities across the nation. We can help launch this potential with projects like Sunrise.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0006

**Organization:** Mystic Aquarium

**Commenter:** Katie Cubina

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

I'm here today to voice Mystic Aquariums' institutional support for Sunrise Wind, and the responsible development of offshore wind is a critical tool to mitigate the worst impacts of climate change

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Draft EIS should be framed in the context of how the project will contribute to regional decarbonization, and clean energy goals, and the consequences of the no-action alternative.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Development of the Biden Administration's offshore wind energy goal is an essential part of achieving the east-coast state's collective regional greenhouse gas reduction goals, and an important step towards reducing the rate and severity of climate change. While the steps needed to implement these goals warrant expediency, it is also our legal and moral responsibility to carefully take steps to avoid, minimize, and where necessary, mitigate impacts that this and other offshore wind energy projects may have on marine and avian life.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA unequivocally supports efforts to address climate change, there is little to no information from BOEM on the net greenhouse gas (GHG) reductions and what mitigative benefits to climate change are offered by the proposed projects. Any such analysis should include all stages of an OSW project, from surveying to decommissioning of turbines. This should be specific to the materials used for a project as the larger projects would require more source materials, potentially having a greater environmental impact, and different materials carry their own ramifications. A simple approach to calculate net carbon dioxide emissions from OSW projects has been developed and concluded that OSW had lower net carbon dioxide emissions compared to fossil fuels but it was higher than that onshore wind.<sup>3</sup> The carbon emissions of an OSW project itself may be difficult to calculate without knowing how much of the grid will actually be in operation. It is also important to understand both what amount of GHG would be offset by these projects, as well as what additional emissions may be produced. Activities associated with renewable energy including OSW will contribute to carbon emissions and more information is needed as to the scale of this contribution. Resource-intensive activities associated with

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production of turbine components and batteries will have further impacts. Some available literature considers much of the carbon dioxide emissions associated with construction and operations to be mitigated by recycling of the turbines after decommissioning. However, it will be impossible to know whether components will be recycled after the Sunrise Wind project is decommissioned if this information is not included in the EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Finally, a GHG analysis must evaluate the effects of a loss of seafood availability. In a recent study comparing the GHG emissions of three sources of animal protein, wild-caught seafood had the lowest impact in each of the categories of GHG emissions, energy use, air pollution, and water pollution. It is estimated that if just two people with high meat consumption replaced that meat with fish, it would save the emissions equivalent of about driving 6,000 miles over the course of a year.<sup>4</sup> Carbon emissions associated with seafood production in countries with less stringent environmental regulations (i.e. outside the U.S.) are higher than those of domestic seafood; reduced availability or prohibitive pricing of products will drive consumers to replace sustainable U.S. seafood with higher-carbon proteins.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Climate change will result in a wide range of significant adverse environmental impacts in the Project Area. As identified by BOEM in a previous environmental analysis for an offshore wind project, these impacts include: ● “alter[ation of] ecological characteristics of benthic habitat, EFH [essential fish habitat], invertebrates, and finfish, primarily through increasing water temperatures.”<sup>37</sup> ● ocean acidification, contributing to “reduced growth or the decline of reefs and other habitats formed by shells” and to “the reduced growth or decline of invertebrates that have calcareous shells” and “lead to shifts in prey distribution and abundance.”<sup>38</sup> ● ocean warming, which affects coastal habitats and “influence[s] finfish and invertebrate migration and may increase the frequency or magnitude of disease.”<sup>39</sup> These climate impacts affect a broad range of species utilizing coastal and marine ecosystems including marine mammals, turtles, birds, and fish. A number of impact-producing factors (IPFs) in previous offshore wind environmental reviews are related to climate change. For instance, “increased storm frequency and severity during breeding season can reduce productivity of bird nesting colonies and kill adults, eggs, and chicks.”<sup>40</sup> These same IPFs may result in “changes in nesting and foraging habitat abundance and distribution, and changes to migration patterns and timing.”<sup>41</sup> For sea turtles, climate change is altering existing habitats, rendering some areas unsuitable for some species and more suitable for others.<sup>42</sup> These IPFs also have the potential to “result in impacts on marine mammals” including physiological stress and behavioral changes,<sup>43</sup> as well as

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“reduced breeding, and/or foraging habitat availability, and disruptions in migration.”<sup>44</sup> These impacts must be accounted for in the Sunrise Wind Draft EIS. Additionally, as BOEM noted in a prior analysis, offshore wind generation will likely directly displace fossil fuel generation. Due to offshore wind’s ability to displace more highly polluting fossil resources, the climate impacts of the proposed offshore wind buildout would be net climate beneficial. Consequently, cumulative effects of offshore wind development may result in long-term, low-intensity beneficial cumulative impacts on wildlife and long-term beneficial impacts on demographics, employment, and economics

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Air emissions present a similar story to climate emissions, but with the additional dimension of locational benefits to pollution impacts. Based on previous analyses of offshore wind projects, air quality impacts should be anticipated during construction with smaller and more infrequent impacts anticipated during decommissioning.<sup>53</sup> Previous analyses have shown a “minor beneficial” improvement in air quality is expected from offshore wind development coming online and displacing fossil fuels.<sup>54</sup> These impacts, including the beneficial impacts, need to be considered in the Draft EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As a general matter, BOEM should also take immediate measures to address data uncertainty related to the influence of climate change on coastal and marine species and habitats (e.g., range shifts). Acknowledging global climate change as a potential cumulative impact is not enough. BOEM should act expeditiously to obtain additional empirical data on current shifts in species and habitat distributions and work to improve its predictive modeling of future species distributions and factor this information into offshore wind project siting, construction, and operations to account for uncertainty related to climate-induced dynamic shifts in distribution (e.g., marine mammals, birds, forage fish, and sharks).

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

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Assess the Project's consistency and alignment with state-level climate change and energy policies and laws, including but not limited to the Climate Leadership and Community Protection Act (CLCPA or "Climate Act"). This includes CLCPA's required GHG emissions reductions of 40% from 1990 levels by 2030 and 85% from 1990 levels by 2050, as well as the following requirements for the New York State's electricity generation: 70% renewable energy by 2030, 100% zero emission by 2040, and 9,000 megawatts of offshore wind by 2035. This also includes consideration of the Project's impacts on disadvantaged communities including measures being taken to ensure GHG emissions and co-pollutants are not disproportionately burdening disadvantaged communities. Consider environmental impacts associated with the construction and operation of the Project in light of current and future changes to the environment as a result of climate change including sea-level rise, warming ocean temperatures, and increasing frequency and intensity of extreme weather events. Evaluate habitat changes and spatial shifting of marine populations due to climate change. Evaluate the Net Carbon Footprint of the Project.

### **A-2.7. Coastal Habitat and Fauna**

**Comment Number:** BOEM-2021-0052-DRAFT-0013

**Commenter:** Thomas L. Griffin

**Commenter Type:** Individual

**Comment Excerpt Text:**

This proposal for construction at the entry to Montauk Lake will cause huge disruption to the prime nature and fishing location. There is clearly a problem that should be addressed here. - Dredging Lake Montauk Harbor Inlet to 14 foot contour or deeper The transfer of oils and grease at this location is a huge risk to the environment of Lake Montauk.

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**Comment Number:** BOEM-2021-0052-DRAFT-0089

**Organization:** BlueGreen Alliance

**Commenter:** Jason Walsh

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Avoiding sensitive habitat areas, requiring strong measures to protect wildlife throughout each state of the development process, and comprehensive monitoring of wildlife and habitat before, during, and after construction, are all essential for the responsible development of offshore wind energy.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0002

**Organization:** Mastic Beach Conservancy

**Commenter:** Maura Sperry

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We are here and our mission is to create blue and green trails in Mastic Beach. And we think that we would be wonderful partners with you, since you're coming in through Smith Point and we are looking to connect Smith Point to our six miles of beautiful, contiguous, publicly accessible trails in Mastic Beach.

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**Comment Number:** BOEM-2021-0052-DRAFT-0012

**Commenter:** Chris Bowers

**Commenter Type:** Individual

**Comment Excerpt Text:**

The Montauk inlet and marina, Lake Montauk and broader Montauk are not meant for or equipped to handle large scale industrial development. Our waters and their ecosystems are fragile and interconnected, from the ocean to the lakes to the wetlands. Pollution in one of these bodies affects the others.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate potential temporary and permanent impacts to land use and water-dependent uses along the shoreline from siting new infrastructure that will need to be constructed to accommodate the Project, including temporary, docks and piers and proposed shoreline stabilization. Evaluate potential impacts to vegetated dune and beach habitats. Consider impacts to Coastal Erosion Hazard Areas (New York State Environmental Conservation Law Article 34). Assess potential impacts to NYS Significant Coastal Fish and Wildlife Habitats using the State narratives developed for: Smith Point County Park, Great South Bay - East, Moriches Bay, Carmans River. Available at: <https://dos.ny.gov/significant-coastal-fish-wildlifehabitats>.

## **A-2.8. Coastal Zone Consistency**

**Comment Number:** BOEM-2021-0052-0007

**Government Agency:** Rhode Island Coastal Resources Management Council

**Commenter:** James Boyd

**Commenter Type:** State Government

**Comment Excerpt Text:**

It is RICRMC's strong recommendation that a state's federal consistency review for offshore wind projects should begin with BOEM's publication of the Draft Environment Impact Statement (EIS) and issuance of the Notice of Availability (NOA) for offshore wind projects under Subpart E of 15 C.F.R § 930.

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**Comment Number:** BOEM-2021-0052-0007

**Government Agency:** Rhode Island Coastal Resources Management Council

**Commenter:** James Boyd

**Commenter Type:** State Government

**Comment Excerpt Text:**

In the RICRMC's opinion, however, the availability and review of an offshore wind energy project's DEIS commensurate with initiation of the CZMA federal consistency review period would lead to a more informed and science-driven decision-making process in consideration of the proposed project alternatives as detailed within the DEIS. We also conclude that such review alignment would provide for a more timely state decision in offshore wind matters and provide predictability for developers.

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**Comment Number:** BOEM-2021-0052-0007

**Government Agency:** Rhode Island Coastal Resources Management Council

**Commenter:** James Boyd

**Commenter Type:** State Government

**Comment Excerpt Text:**

Thus, it would be much more beneficial to the state cooperating agencies if the initiation of the CZMA federal consistency review starts with BOEM's release of the DEIS. We urge BOEM to work with other federal agencies, in particular NOAA, to properly align the CZMA federal consistency review process with the BOEM's COP review process so that the DEIS is available to guide and inform the state's CZMA federal consistency decision. In order to better align 30 C.F.R. § 585 with 15 C.F.R. § 930, the RICRMC suggests making the revisions to NOAA's federal consistency regulations (15 C.F.R. § 930) so that the consistency certification is not filed with the state until the DEIS is publicly available (generally lining up with BOEM's issuance of the NOA).

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**Comment Number:** BOEM-2021-0052-0007

**Government Agency:** Rhode Island Coastal Resources Management Council

**Commenter:** James Boyd

**Commenter Type:** State Government

**Comment Excerpt Text:**

The filing of the consistency certification with the state agency should be delayed until the DEIS is made public so that the state CZMA federal consistency review can commence once all the pertinent information is available. Importantly, several project alternatives are part of the DEIS and must be considered under a state agencies CZMA review. In the RICRMC's opinion, the CZMA process should not begin until BOEM issues the NOA for the DEIS. The state agency review of the consistency certification can then begin at the time the state agency receives the certification (amendment to § 930.77 Commencement of state agency review and public notice).

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## **A-2.9. Commercial Fisheries and For-Hire Recreational Fishing**

**Comment Number:** BOEM-2021-0052-0006

**Government Agency:** Suffolk County, NY

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Throughout the discussions with wind developers over the past several years, Suffolk County has stressed that cooperation with and protection of our heritage fishing industries is a top priority. We understand that the lease area where Sunrise Wind will be located was developed and refined by BOEM with significant stakeholder input over a period of years to minimize and avoid impacts to the marine environment and to fishing interests.

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**Comment Number:** BOEM-2021-0052-0007

**Government Agency:** Rhode Island Coastal Resources Management Council

**Commenter:** James Boyd

**Commenter Type:** State Government

**Comment Excerpt Text:**

The RICRMC requests that BOEM ensure that the developer work with the state and commercial, charter and recreational fishing interests, as well as NOAA and state agency fisheries staff, to minimize impacts to these fishery activities and the marine habitats that support these fisheries. Any proposed fisheries mitigations plans must be developed in collaboration with the RICRMC, including the RICRMC Fishermen's Advisory Board as part of Rhode Island's federal consistency review

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**Comment Number:** BOEM-2021-0052-DRAFT-0068

**Organization:** Sakonnet Point Fisheries LLC

**Commenter:** Greg Mataronas

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

There needs to be more research into the potential impacts from wind farms on commercially important species. This includes the plankton communities that serve as the very basis for the food chain and biological productivity of this area. Right now, fishermen and the species that they depend on catching are being pushed aside as collateral damage without proper research into the effects of construction, operation, and decommissioning of these industrial wind farms in our ocean.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0003

**Government Agency:** Massachusetts Office of Coastal Zone Management

**Commenter:** Lisa Berry Engler

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**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should fully characterize the extent and value of commercial, for-hire, and charter fishing within the project footprint (i.e., the lease area and cable corridor). The characterization should include a breakdown of the economic exposure of the proposed project by state, Massachusetts port, gear type and species. This characterization will inform efforts to avoid, minimize, and mitigate impacts to the commercial and for-hire fishing industry of Massachusetts and other affected states

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0003

**Organization:** Suffolk County

**Commenter:** Lisa Broughton

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Current and newly proposed environmental impact studies and monitoring installations must be clearly communicated to our fishing interests. We urge BOEM to ensure full participation and consideration of Suffolk County's fishing industry representatives throughout the permitting process, and to be aware of the pre-application process that may identify new or unexpected impacts that will need to be addressed.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0004

**Organization:** Sea Services North America

**Commenter:** Gordon Videll

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The sustainability of our industry and the fair treatment of commercial fishermen needs to remain a top priority for everyone.

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**Comment Number:** BOEM-2021-0052-0006

**Government Agency:** Suffolk County, NY

**Commenter Type:** Local Government

**Comment Excerpt Text:**

It is clear that offshore wind projects are a critical part of the comprehensive plan to combat climate change, but we must continue to do everything we can to avoid adverse impacts on existing fishing ecosystems. Continuing in that spirit, current and newly proposed environmental impact studies and monitoring installations must be clearly communicated to our local fishing interests. We urge BOEM to ensure full participation and consideration of Suffolk County's fishing industry representatives throughout the permitting process, and to be aware that the pre-application process may identify new or unexpected impacts that will need to be addressed.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Oceana also encourages BOEM to conduct similar outreach and consultation with state and regional managers at the Atlantic States Marine Fisheries Commission with authority and responsibility for inshore fisheries to ensure effects on inshore habitats are minimized.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM should coordinate early and often with NOAA Fisheries on the most appropriate data for analysis of potential impacts to fisheries, including fishing and transiting locations, as well as socioeconomic impacts. The EIS should clearly and repeatedly acknowledge the limitations of each data set and should include recent data and should analyze multiple years of data to capture variations in fisheries and environmental conditions. Important data limitations, including but not limited to the location of private recreational fishing effort, should be supplemented with stakeholder input. Summary information on Council-managed fisheries is also available on the Council websites, [www.mafmc.org](http://www.mafmc.org), and [www.nefmc.org](http://www.nefmc.org), at fishery management plan-specific links, typically via annual fishery information reports (MAFMC) or recent plan amendment or framework documents (both councils).

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Commercial, for-hire recreational, and private recreational fishing will all be impacted by this project in different ways. Therefore, they should be considered separately, but in the same or adjacent sections of the document. The EIS should describe how impacts may vary by target species, gear type, fishing location (e.g., from shore, mid-water, on different bottom types, near structures such as shipwrecks, other artificial reefs, or boulders) and commercial or recreational fishing (including recreational fishing from shore, private vessels, party/charter vessels, and tournaments). Turbine foundations and their associated fouling communities will create artificial reefs, which are expected to attract certain fishery species (e.g., black sea bass). However, the addition of new structured habitat in this area will replace existing habitat types and could displace other species which prefer soft sediments (e.g., flatfish). The EIS should acknowledge

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that although the artificial reef effect will be beneficial for some species, it will not be universally beneficial for all species. Secondary, cascading effects should be evaluated in the impacts analyses because community composition could change within and beyond the project area through the introduction of predators, re-distribution of juveniles, etc.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Commercial and recreational fishermen may not be able to take full advantage of any increased availability of target species due to concerns about safely maneuvering, drifting, or anchoring near turbines. Safety considerations will vary based on weather, gear type, vessel size, and specific fishing practices which can vary by target species. Although some fishermen may have experience fishing near the five turbines off Block Island, this may not prepare them for fishing safely within the Sunrise Wind project, which could include up to 122 turbines. The EIS should evaluate these safety considerations and their potential variations across different fisheries. In addition, if fishermen shift their effort outside the project area during construction or long-term operations, this will potentially put them in areas of higher vessel traffic and gear conflict. Fishing vessels utilize certain fishing grounds based on where target species are located and where management regulations allow; thus, vessels cannot necessarily relocate to a different area to avoid the windfarm without socioeconomic impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The COP suggests that there will be direct, long-term impacts on fishing, but these impacts will be minimal because commercial fishermen will still be permitted to fish within the area and there will likely be a 1nm x 1nm layout (Section 4-613). We do not agree with this conclusion as some fishermen may choose not to fish within the wind energy area for navigation safety reasons and may not be able to recoup the loss of landings and revenue by shifting effort elsewhere. In addition, relocation of boulders for cable laying, as described in the COP, will cause disruptions in private and for-hire recreational fishing activity, as some boulders are targeted by recreational fishermen and it could take several trips to find their new locations. While the relocated boulders may continue to attract recreational fishery species, relocation is not a negligible impact on the fleet. Detailed reporting on where boulders are moved to should be required as a mitigation strategy. In addition, if boulders are aggregated as suggested in the COP, this could result in potential hangs for commercial mobile bottom-tending gears, which is another important reason to widely disseminate the new locations.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should give special consideration to Atlantic herring, given its overfished status. Ocean quahogs are harvested in and around this area; however, confidentiality precludes including fishery-level data within the COP and appendices due to the small number of vessels. It is nonetheless important to monitor impacts as we have concerns about the individual and cumulative effects of wind development on this fishery. Commercial and recreational fisheries provide a wide range of benefits to coastal communities; not all are captured by looking only at financial metrics. The EIS should not overly rely on exvessel value when assessing and weighting impacts across various fisheries. Focusing on exvessel value can mask other important considerations such as the number of impacted fishery participants, the use of a low-value species as bait for a high-value species, or a seasonally important fishery.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

For example, the project area is very important to the skate fishery, which supplies bait for other fisheries including lobster, Jonah crab, red crab, and others. The EIS should address indirect effects, such as impacts on a fishery which does not occur in the area but relies on bait harvested from the area. Models exist to estimate the amount of fisheries revenue generated from within the project area; however, it is important to acknowledge that changes in transit patterns will also have economic impacts which will be challenging to accurately quantify.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should acknowledge that the addition of new complex habitat due to cable armoring will replace existing habitat types and the impacts of such a change should be analyzed. In addition, the fishing industry is especially concerned with the use of concrete mattresses due to the potential for hanging/snagging mobile gears. The COP (page 4-617) states that cable protection will have minimal impacts on fisheries as it will be used in areas that are not likely currently trawled or dredged. Sufficient information has not been provided to support this statement and this conflicts with concerns we have heard from fishermen. It should also be considered that

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natural snags are already well known to fishermen, and in many cases are charted, but that it will take time for fishermen to learn the locations of the cable protection materials. The EIS and COP should provide maps of benthic features so that readers can use these maps to evaluate conclusions reached regarding both habitat and fisheries effects of development.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should consider aquaculture separately from commercial and recreational fishing. Aquaculture is distinct from wild capture fisheries in many ways. For example, gear is installed in the water long term, there is a different management and regulatory process, and different environmental impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We continue to have significant concerns about the cumulative impacts of offshore wind development on fishery independent surveys. Major negative impacts to these surveys would translate into greater uncertainty in stock assessments, the potential for more conservative fisheries management measures, and resulting impacts on fishery participants and communities. We are encouraged by BOEM's commitment to working with NOAA on long term solutions to this challenge through the regional, programmatic, Federal Survey Mitigation Program, described in the Record of Decision for the Vineyard Wind 1 project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As the offshore wind industry increases, it is also imperative to protect the jobs that depend on marine resources, like fishermen and tourism workers. There have been several safety concerns pertaining to commercial fishermen. The fishing advocacy group Saving Seafood, says wind farms could impact scalloping, a trade that makes New Bedford the highest valued port in the country [14]. While the Sunrise project is further from the area, there must be rigorous planning and analysis to evaluate economic risk in juxtaposition to the economic costs of Climate Change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088  
**Organization:** RODA  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA reiterates the importance of any entity analyzing fisheries data to work cooperatively with NOAA Fisheries, state agencies, and the fishing industry. To that end, BOEM would improve its prior analyses by expanding the time series of data analyzed and by expanding its cooperation with the fishing industry and/or NOAA Fisheries and state agencies to enhance appropriate data sets. Fishery management measures make it difficult to predict future fishing patterns because they are modified frequently based on variations in stock size and distribution. This also means that a short snapshot of fishing activity is not representative of the long-term needs of individual fisheries. The continued reliance on Automated Identification System (AIS) data to characterize fishing activity in most OSW-related analyses, particularly those regarding at-sea safety and fishing behavior, is concerning. AIS is not required on commercial fishing vessels less than 65 feet in length. The large majority of fishing vessels operating in all existing OSW lease areas are smaller. Nor are AIS-equipped vessels required to utilize it past 12 nm from shore. Any analysis reliant on AIS data therefore suffers from the fatal flaws of entire size classes of vessels not included in the dataset and significant spatial limitations. RODA and the fishing industry as a whole have repeatedly raised this issue with BOEM, USCG, and directly to OSW developers, yet AIS continues to be utilized and promoted as the main dataset to describe fishing patterns.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088  
**Organization:** RODA  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The economic importance of fishing, and economic losses associated with loss of fishing grounds and indirect effects, have been systematically underrepresented both in this COP and throughout OSW development more generally. Any economic analysis in a forthcoming EIS must analyze the significant "multiplier effects" that make fisheries far more valuable throughout the supply chain than a simple exposure calculation would suggest. This includes an expected "cascading effect" in diversified fishing businesses where economic stability in one season is required to support their activities in other fisheries throughout the year.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079  
**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation  
**Commenter:** Eileen Murphy  
**Commenter Type:** State Government

**Comment Excerpt Text:**

Commercial Shipping Industry: Economic impact analysis, including direct and indirect exposure and downstream economic effects to shore-based industries. Evaluate impacts due to restricted port access from increased vessels and construction activities. Fishing Fleets and Land-based Fishing Communities: Economic impact analysis for commercial and recreational for-hire fishermen, including direct and indirect exposure and downstream economic effects to seafood processing, ship repair, and other shore-based industries.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate impacts to landing values. Fishing area displacement. Note: To achieve the goal of co-existence with commercial fishing, BOEM should analyze whether the proposed turbine spacing will accommodate existing commercial fishing practices for actively fished species (i.e., fluke, squid, scallop, black sea bass, etc.) in the lease area. Temporary and permanent impacts should be evaluated across all project phases. Evaluate potential gear loss. Evaluate impacts from increased steam time (i.e., increased travel time/fuel costs to navigate around the Project and access fishing grounds). Consider and discuss safety concerns. Assess conflicts with cable protection (i.e. concrete mattresses). Assess potential impacts of uncovering of buried cables over time or following storm events.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

The Agencies urge BOEM to minimize interruptions to state and federal fisheries surveys to the maximum extent possible. These fishery resource surveys provide valuable long term data and are critical for effective fisheries management throughout the region. Accordingly, BOEM should continue to work with NOAA NMFS on the implementation of the NOAA Fisheries' Federal Survey Mitigation Program in order to ensure that fisheries resource surveys can co-exist with the development of this Project. As outlined by BOEM and NOAA, this may include evaluation of new survey methodologies, calibration of new approaches to existing surveys, and ultimately maintaining a consistent, reliable, and unbiased fisheries survey approach throughout the development and operation of offshore wind projects ("Bureau of Ocean Energy Management and NOAA Demonstrate the Power of a Government-wide Approach to Sustainable Fisheries and Offshore Wind", May 28, 2021).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The “Affected Environment” section should also include all of the biological, cultural, and socioeconomic issues related to fisheries and marine resources that may be affected by this project, including species that live within, or seasonally use, the immediate project area and adjacent locations, including habitat use for spawning activity.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Further, the assessment should include a robust analysis of the effects of any ongoing or planned surveys or monitoring of fisheries resources by the developer and the effects of those surveys on protected species (e.g., potential for entanglement of ESA listed whales, sea turtles, and Atlantic sturgeon in gillnet surveys).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In addition to focused evaluations on protected species, fish, invertebrates, and habitats, the “Environmental Consequences” section of the EIS should include a subsection evaluating impacts to commercial and recreational fisheries. The EIS should discuss biological impacts to marine species caused by the temporary or permanent loss/conversion of bottom habitat (i.e., resource distribution, productivity, or abundance changes) and direct or indirect socioeconomic impacts to commercial and recreational fishing activities and support businesses from project construction and operation such as loss of access to important fishing areas due to the presence of structures (WTGs, substations, cables, scour protection). This evaluation should also include any potential displacement of fishing activities and resulting changes to catch rates and increased gear conflicts, bycatch, and fishing pressure in other locations.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

When structuring the fishery socioeconomic impact evaluation, you should address all of the elements identified in the checklist we provided in January 2021, or explain why specific elements on that checklist were not included in the EIS. As noted above, our fishery socioeconomic impact summaries can and should serve as the foundation for this analysis in the EIS, although additional project-specific analysis may be necessary to address particular impacts or mitigation/compensation arrangements with affected fisheries.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Additionally, the potential for bycatch measures resulting from protected species interactions due to shifts in fishing activity and increased uncertainty in protected species assessments should be analyzed and discussed. Details of compensation plans describing qualifying factors, time constraints, allowed claim frequency, etc. should also be included when possible, particularly if used as mitigation measures to reduce economic impacts from access loss/restriction, effort displacement, or gear damage/loss.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should evaluate the cumulative impacts of multiple projects on fishing operations, such as changes to time and area fished, gear type used, fisheries targeted, and landing ports. Some fishing vessels operate in multiple areas that may be subject to wind project development. While some may choose to continue to fish in these areas, others may be displaced from one or more project areas and fish in different areas outside the project areas. Therefore, it is important to evaluate how all existing and potential future wind projects could affect overall fishing operations due to effort displacement, shifts from one fishery to another, changes to gear usage and frequency, changes to fishery distribution and abundance, and increased fishing effort due to fishing in less productive areas. It is not enough to simply state that economic impacts of this project can be mitigated by fishing elsewhere without considering and addressing other factors that may impede effort displacement, including development of other wind projects in adjacent and nearby waters.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

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**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should consider the socio-economic impacts on fishing communities that cannot relocate fishing activity due to cultural norms (fishing grounds claimed or used by others), cost limitations (too expensive to travel greater distances to other fishing areas), and other relevant limiting factors such as fishing regulations that limit where and when a particular vessel can fish with particular gear for a particular species. Shifts in fishing behavior, including location and timing, may result in cumulative impacts to habitat as well as target and bycatch species (both fish and protected species) that have not been previously analyzed in fishery management actions. Finally, reduced regional scientific survey access to project areas could increase uncertainty in associated stock assessments and result in more conservative quotas that would negatively impact fishery operations in all fisheries. Accordingly, the analysis should also consider cumulative impacts of all wind projects in the context of existing fisheries management measures. Project-specific Monitoring

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should also consider how any proposed wind farm may displace or alter fishing or existing vessel activity that may change the risk to protected species from interactions with fisheries or vessels either within or outside the lease area, including potential risks of interactions with recreational fishing activity around foundations and entanglement in marine debris that may become ensnared on the foundations. Additionally, the EIS should consider effects of any surveys that may occur following potential COP approval that may affect listed species (e.g., gillnet or trawl surveys to characterize fisheries resources), as well as any pre- or postconstruction monitoring that may affect listed species. For further information on effects to consider, please refer to the ESA Information Needs document.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Under the FWCA, our authority extends to numerous other aquatic resources in the area of the proposed project, including, but not limited to, the following species and their habitats: American lobster (*Homarus americanus*), sand lance (*Ammodytes dubius* and *Ammodytes americanus*), striped bass (*Morone saxatilis*), American shad (*Alosa sapidissima*), alewife (*Alosa*

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pseudoharengus) and blueback herring (*Alosa aestivalis*) (collectively known as river herring), Atlantic menhaden (*Brevoortia tyrannus*), Atlantic silversides (*Menidia menidia*), oyster (*Crassostrea virginica*), blue mussel (*Mytilus edulis*), tautog (*Tautoga onitis*), weakfish (*Cynoscion regalis*) and other assorted fish and invertebrates. NOAA jointly manages a number of these species through Interstate FMPs with the Atlantic States Marine Fisheries Commission. A list of Commission species and plans can be found on their website at <http://www.asmfc.org>. We anticipate all of these species will be included in your impact assessments, both in the EFH Assessment and NEPA document. We also expect the assessment to include impacts to the recreational and commercial fishing communities that rely on these species. The behaviors and habitat needs of diadromous and estuary-dependent fishes (associated with cable route locations) may not be represented by a discussion solely of the surrounding marine fishes in the WTG area. The discussion for FWCA species should be designed around an ecological guild model that uses locally important species to evaluate the project impacts to organisms or populations associated with the various trophic levels and life history strategies exhibited by FWCA species known to occupy the project area as residents or transients. Focus should be on issues surrounding particular species, life history stages, or habitat components that would be most susceptible to the various potential project impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

As noted in our socioeconomic impact summary reports for this project (available at [https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND\\_AREA\\_REPORTS/Sunrise\\_Wind.html#Most\\_Impacted\\_FMPs](https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/Sunrise_Wind.html#Most_Impacted_FMPs)), skates, monkfish, silver hake (whiting), scup, longfin squid, Northeast multispecies (yellowtail flounder), summer flounder, American lobster, and Atlantic sea scallop are the primary commercial fisheries affected in terms of landing amounts and fishery revenue. The project area is the primary fishing location for the skate bait fishery. Impacts to the skate bait fishery could have indirect impacts on other fisheries (lobster, Jonah crab, red crab) if bait supply is disrupted as a result of this project. When evaluating fishery impacts, the EIS should discuss these fisheries and associated direct and indirect impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

While our socioeconomic impact reports offer comprehensive summaries of historic fishery operations within the project area, some limitations should be noted. The true scale of surfclam/ocean quahog fishery operations within the project area and along the export cable corridor is somewhat masked and not directly identified in the species and fishery management

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plan (FMP) tables in our socioeconomic impact summary reports. Because we are required to protect confidential information, most surfclam/ocean quahog landings and revenues are aggregated in the “all others” category in Tables 1.1 and 1.2, respectively. Some sense of the scale of surfclam/ocean quahog operations can be identified in Tables 4.1 and 4.2, which describe fishery landings and revenue by gear type, respectively. While the COP notes the generally high historic activity by this fishery in affected areas based on vessel monitoring system (VMS) data, the EIS should more thoroughly evaluate the potential impacts on this fishery even if precise estimates cannot be shared. Because lobster vessels are only required to submit vessel trip reports (VTRs) if they are issued a Federal permit for another species (many are not), lobster and Jonah crab operations are not fully captured in available VTR data and are underrepresented in our socioeconomic impact summary report. Similarly, information on highly migratory species catch are only partially captured in VTRs available from the Greater Atlantic Regional Fisheries Office and are instead found in VTRs available from our Southeast Regional Office and the large pelagics survey (available at <https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-downloads>). Such sources should be consulted when preparing the EIS.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Our party/charter recreational fishing summary report

([https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND\\_AREA\\_REPORTS/party\\_charter\\_reports/Sunrise\\_Wind\\_rec.html](https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/party_charter_reports/Sunrise_Wind_rec.html)) provides detailed information on for-hire fishing activities within this project area. The report identifies the summer flounder, scup, black sea bass, and Northeast multispecies (groundfish) fisheries as the primary party/charter fisheries that operate in this area, and identifies the number of annual vessel trips and angler trips into the area by port. Private angler recreational catch data are not collected with sufficient area precision to determine the amount of catch inside a particular wind project area. Despite this limitation, the project area is likely to affect important regional recreational fisheries and a discussion of party/charter and private angler catch should be included in the EIS. Any requests for fishery data should be submitted to [nmfs.gar.data.requests@noaa.gov](mailto:nmfs.gar.data.requests@noaa.gov).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

BOEM should use information from all available and appropriate sources to characterize fishing operations and evaluate the potential impacts of the proposed project on private anglers, commercial and party/charter fishing vessels, and associated communities. As noted above,

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consideration of data across a broad time frame (10 years or more), including data from the most recent 2 years, is necessary to reflect both recent operations and annual fluctuations in fishing operations due to changing environmental conditions, market price, and management measures. As such, the COP and future EIS should include the most recent information available. We rely on VTRs as the best source of area-based data for all federally-managed commercial and party/charter fisheries. Both VMS and automatic identification system (AIS) data provide higher resolution spatial data, but such sources are not adequate to provide information on all commercial fisheries or fishing vessels, especially the skate and whiting fisheries which do not have a VMS requirement. As discussed in the COP, multiple sources of data should be analyzed together to present a more complete picture of overall fishery operations and avoid drawing inappropriate conclusions by considering only one data source. In evaluating the use of existing data sources, please refer to the list of data limitations provided in our January 2021 socioeconomic checklist. When using these data to analyze the impacts of the proposed project, BOEM should recognize such limitations and tailor impact conclusions based on the data used. Care should be taken to put operations into the proper context in future analysis to avoid mischaracterizing fishing operations and potential impacts associated with the proposed project. Further, assumptions and methods used to extrapolate data from incomplete data sources should be clearly articulated, although extrapolations should be minimized to avoid reaching inaccurate conclusions from limited data. The socioeconomic impact analysis in the EIS for this project should request and use updated data reflecting the correct areas identified for this project.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

A quantitative analysis of the potential biological, social and economic costs of the project to fishing industries and their communities must be included in the EIS. As noted above, we have provided a checklist outlining the elements we expect to be included in an analysis of the socioeconomic impacts of this project. Our previously referenced socioeconomic impact summaries address nearly all of the elements on the checklist and can be used as the foundation of such an analysis. The analysis should also address potential costs associated with reduced fishing revenues as a result of short or long-term effort displacement, impacts on catch rates, changes to species composition, potential impacts of construction activity on spawning success and future recruitment, and permanent or short-term changes to EFH during construction, operation, and decommissioning the project. Vessels may experience increased operational costs from increased insurance rates to fish within wind farms or additional fuel required to transit around wind farms or search for new fishing locations. Opportunity costs such as revenue lost by fishing effort that is displaced into less productive areas, including vessels displaced out of the project area and those already fishing in an area into which displaced vessels move, should be assessed. This is a critical analysis, as even marginal changes in costs could be impactful for some fisheries. Similarly, analysis of the affiliated non-market social impacts of such activities should be included in the EIS, including impacts to cultural norms, fishermen or fishing community social relationships, and health and well-being (see Fisheries Social Impact

Assessment Guidance Document <https://media.fisheries.noaa.gov/dam-migration/01-111-02.pdf> and Practitioner's Handbook [https://spo.nmfs.noaa.gov/sites/default/files/TM212\\_0.pdf](https://spo.nmfs.noaa.gov/sites/default/files/TM212_0.pdf)). Finally, the EIS should consider and discuss any mitigation measures contemplated to reduce any adverse impacts to fishing operations, particularly those due to loss of area access or gear damage/loss.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Consistent with our comments on other projects, we recommend BOEM avoid/minimize impacts to fishery resources and existing and anticipated future fishing operations from this project. As noted above, this project could alter EFH for certain species, while construction activities and noise could disrupt spawning behavior, mask species communications, and negatively impact eggs and larvae. If WTGs increase habitat preferred by species such as black sea bass and enhance the geographic expansion of such stocks, the project could also alter predator/prey relationships and increase sources of natural mortality, while also attracting increased recreational fishing effort. These effects could have short- and potentially long-term impacts to such resources and resulting consequences to fisheries that target them. Apart from indirect biological impacts, the project could result in direct impacts to fishing operations in the form of reduced area access, increased steaming time, and navigational/operational impediments. Beyond the operational impacts (access/navigation) due to the presence of structures, the COP notes that pre-construction preparation could involve relocating boulders and unexploded ordnance (UXO). Shifting the location of known obstructions or UXO may cause safety impacts to vessels, including gear/vessel damage and personal injury. Because dredge gear is used substantially throughout the project area and export cable, it is also important for the project to bury cables as deeply as possible to avoid damage to both fishing gear and cables. The EIS should discuss these issues and include measures to avoid and minimize such impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We continue to observe that the impacts to our scientific surveys are incorrectly characterized and not accurately described in the COP prepared for this action. It is inaccurate to suggest that survey vessels or airplanes could simply alter course to avoid WTGs, or that a sampling location that is occupied by a WTG could be removed from future consideration without affecting the survey, sampling design assumptions, or concomitant scientific advice derived from the data collections. The brief text provided in the COP related to scientific surveys contradicts the best available scientific information on the issue. This should be rectified in the final version of the

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COP. More importantly, the analysis in the COP should not be carried forward into the EIS prepared for this project.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

As noted for other wind development projects, the Sunrise Wind project is anticipated to have major adverse impacts on NMFS Northeast Fisheries Science Center scientific surveys, which will, in turn, result in adverse impacts on fishery participants and communities, conservation and recovery of protected species, and on the American public. This project would have direct impacts on the federal multi-species bottom trawl survey conducted on the FSV Henry Bigelow, the surfclam and ocean quahog clam dredge surveys conducted on chartered commercial fishing platforms, the integrated benthic/sea scallop habitat survey, ship and aerial-based marine mammal and sea turtle surveys, and the shelf-wide Ecosystem Monitoring Survey (Ecomon). Based on standard operating practices conducted by the NOAA Office of Marine and Aviation Operations, WTG arrays would preclude safe navigation and safe and effective deployment of mobile survey gear on NOAA ships. The impacts to our scientific surveys from this project will be driven by four main mechanisms: 1) exclusion of NMFS sampling platforms from the wind development area, 2) impacts on the random-stratified statistical design that is the basis for data analysis and use in scientific assessments, advice, and analyses; 3) the alteration of benthic, pelagic, and airspace habitats in and around the wind energy development; and 4) potential reductions in sampling outside wind areas caused by potential increased transit time by NOAA vessels. Adverse effects on monitoring and assessment activities would directly impact the critical scientific information used for fisheries management and the recovery and conservation programs for protected species. These impacts would result in increased uncertainty in the surveys' measures of abundance, which could potentially lead to lower quotas for commercial and recreational fishermen and lower associated fishing revenue based on current fishery management council risk policies. These impacts will occur over the lifetime of wind energy operations at the project area and in the region (to at least 2050).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Given the anticipated development of offshore wind in our region, it is critical to expeditiously establish and implement a regional federal scientific survey mitigation program to address this significant issue. Such a survey mitigation program would include the following elements: 1. Evaluation of scientific survey designs; 2. Identification and development of new survey approaches; 3. Calibration of new survey approaches; 4. Development of interim provisional

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survey indices; 5. Integration of project-specific monitoring plans to address regional survey needs; and 6. Development of new data collection, analysis, management, and dissemination systems.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Information from project-specific mitigation plans could be critical inputs to the development and implementation of any future federal survey mitigation program if they are designed to address project level impacts on federal surveys. Project-level impacts on scientific surveys should require project-level mitigation measures for each of the seven scientific surveys disrupted by the Sunrise Wind project. Monitoring activities currently employed by Vineyard Wind have not been designed to mitigate project level impacts on NMFS scientific surveys. As project monitoring plans are further considered and developed, these approaches should be standardized, meet existing scientific survey protocols and develop new methods using independent-peer review processes, and methods should be calibrated to and integrated with federal regional scientific surveys, and annual data collections implemented for the operational life span of the project, or until such time as a programmatic federal scientific survey mitigation program is established. Text provided in documents prepared for other projects with similar impacts can be used to inform the assessment of scientific survey impacts for this project. Consistent with work we have done with you in the past, the NEPA document should include a full description of scientific surveys to be impacted, the history of each time series, and relative importance of the impacted scientific surveys on management advice, decision-making, and other end-users. We encourage you to work closely with us to ensure potential impacts to our scientific survey operations and consequent effects to fisheries stock assessments, fishery management measures, and protected species conservation efforts are evaluated in the EIS for this and other projects, including any efforts to mitigate such impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In addition to impacts on fisheries independent survey data collections, analysis of impacts on fisheries dependent data collections, e.g., landings, biological samples, and observer data, due to potential changes in effort should also be required. This assessment should consider potential changes in mortality rates for target and non-target species and potential fisheries interactions with marine mammals and threatened and endangered species. This analysis should also consider the potential changes in fisheries dependent data collections on stocks expected to be impacted by offshore wind development impact producing effects and on the anticipated displacement of

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fishing operations. How these effects impact specific stock assessments should also be evaluated in addition to how these changes may impact the effectiveness of fishery management measures in meeting their objectives.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The discussion of the affected commercial and recreational (party/charter and private angler) fisheries should assess landings, revenue, and effort; fishery participants, including vessels, gear types, and dependency upon fishing within the project area; potential impacts beyond the vessel owner level (e.g., shoreside support services such as dealers, processors, distributors, suppliers, etc.); and coastal communities dependent on fishing. Our offshore wind socioeconomic impacts page (available at: [https://www.fisheries.noaa.gov/resource/data/socioeconomic-impacts-atlanticoffshore-wind-development?utm\\_medium=email](https://www.fisheries.noaa.gov/resource/data/socioeconomic-impacts-atlanticoffshore-wind-development?utm_medium=email))

## **A-2.10. Cultural, Historical, and Archeological Resources**

**Comment Number:** BOEM-2021-0052-DRAFT-0042

**Organization:** Block Island Historical Society

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In reviewing the scope of the above project, we believe that the project will have adverse visual impacts on numerous historical and cultural resources on Block Island, including, but not limited to, the National Historic Landmark Southbeach Lighthouse. As to the request for comments on possible mitigations, we do not have suggestions that would significantly alter the adverse visual impacts to historical and cultural resources on Block Island. We encourage you to seek alternative mitigation in the form of providing funds in support of the historic preservation and public interpretive activities at the Southeast Light and Block Island Historical Society.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In order to comply with section 106 of the National Historic Preservation Act (54 USC § 306108), BOEM must consult with the appropriate preservation offices and tribes and identify no-anchorage areas to avoid documented resources such as shipwrecks and paleo landforms [11]. BOEM has prepared an extensive analysis of an in-house GIS database of known historic resources, public data and online map databases, research papers of the visual effects to above-ground historic properties, previously completed historical assessments from the Revolution

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Wind Farm, and guidance from federal and local government and Native American tribes [7]. We view the Unanticipated Discovery Plan a responsible and necessary action plan in the event that significant sites are inadvertently disturbed during construction.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Our aim in these comments, and in ongoing consultation with BOEM, is to ensure that the BOEM's permitting process follows the law, and that BOEM selects an alternative that preserves the historic integrity of the surrounding area, including the Southeast Lighthouse, a National Historic Landmark (NHL). We further insist that BOEM comply with the requirements of the National Environmental Policy Act (NEPA) and Section 106 and 110(f) of the National Historic Preservation Act (NHPA).

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

As BOEM proceeds with the evaluation of the Project, it must consider resources on Block Island, and in particular the Southeast Lighthouse NHL, and work closely with consulting parties to evaluate impacts. In addition to its obligations under Section 106 of the NHPA, BOEM is required to address impacts to NHLs, such as Southeast Lighthouse, differently than it addresses other historic properties, something the COP fails to mention. To fulfill its legal obligations for permitting, BOEM must undertake all possible planning to minimize harm to the Southeast Light pursuant to Section 110(f) of the NHPA.<sup>3</sup> Section 110(f) provides: Prior to the approval of any Federal undertaking which may directly and adversely affect any [NHL], the head of the responsible Federal agency shall, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to such landmark, and shall afford the Advisory Council a reasonable opportunity to comment on the undertaking.<sup>4</sup> The COP and NOI do not make clear whether BOEM has initiated the Section 110(f) process or whether and how BOEM has undertaken such planning and actions as would be necessary to minimize harm to the Southeast Lighthouse. In fact, none of the available documents contain any information at all about how BOEM intends to demonstrate compliance with Section 110(f) of the NHPA. BOEM must address impacts to the Southeast Lighthouse differently than it addresses impacts to other historic properties in the Project area for Section 110(f) purposes, and we are concerned that BOEM is overlooking this requirement in its review.

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**Comment Number:** BOEM-2021-0052-EMAIL-100421-0004

**Organization:** MONTAUKETT INDIAN NATION

**Commenter:** Sandi Brewster-walker

**Commenter Type:** Tribal Government

**Comment Excerpt Text:**

What is the level of archaeological sensitivity assessment of the submerged Paleo cultural Landscape, when the Sunrise Wind Export cables approaches the inlets, and bay, then arrive on Long Island? What lies beneath and on the bottom of the waters and soil connected to the Sunrise Wind Project? Will artifacts of the history, culture, and heritage of the first Long Island people be found? The Sunrise Project has the opportunity to find out during an intensive geophysical, geological, and archaeological investigation prior to the laying of the Wind Export Cable, and the Onshore Transmission Cable coming ashore near the Unkechaug Nation territory ? WHAT LIES BENEATH.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0003

**Organization:** Long Island Traditions

**Commenter:** Nancy Solomon

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

And tangible cultural resources are critical to our regional identity and to ignore this could mean the end of this fragile occupational and recreational resource. Substituting NEPA and NHPA eliminates the assessment of these cultural traditions. Should the EIS deem that there will be little impact to these cultural resources, we ask that Olstead and related companies, establish an mitigation fund for the impacted fishermen, many of whom could lose their livelihood

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

BOEM must comply with the National Historic Preservation Act (NHPA). First, SELF and New Shoreham expect BOEM to use this consultation opportunity to fulfill its obligations to consult under federal law. "Consultation," under the NHPA, "means the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process."<sup>1</sup> As consulting parties, we expect BOEM to actively seek, discuss, and consider our views in permitting and mitigating this Project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

BOEM must also ensure compliance with the NHPA, and in doing so must work with SELF and New Shoreham to identify historically significant resources. Section 106 of the NHPA requires BOEM to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve throughout the country.<sup>2</sup> Section 106 requires federal agencies to identify any historic properties that will be affected by the project, evaluate the effects, and seek to reduce, minimize, and mitigate those effects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Spoilation of the historic landscape of Block Island will have irreparable effects on historic and culturally significant land and these potential adverse effects must be carefully considered.

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**Comment Number:** BOEM-2021-0052-EMAIL-100421-0004

**Organization:** MONTAUKETT INDIAN NATION

**Commenter:** Sandi Brewster-walker

**Commenter Type:** Tribal Government

**Comment Excerpt Text:**

We must ask again will the Long Island Native American Community be notified of any archaeological surveys, and if found will cultural and heritage artifacts be returned to the appropriate Tribal Nation? Finally, when the cable enters the waters of the Fire Island inlet near the old Forge River Life Saving Station (Mastic) will the Sunrise project be sensitive to the preservation of the remains of the shipwrecks? Our research on this issue is not complete, and we look forward to learning more about the Sunrise Wind Project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

During preparation of this EIS, BOEM intends to ensure that the NEPA process will meet its National Historic Preservation Act (NHPA) obligation. The construction of wind turbine generators (WTGs), offshore substation, installation of electrical support cables, operations and maintenance (OCultural, Historical, and Archaeological Resources During preparation of this EIS, BOEM intends to ensure that the NEPA process will meet its National Historic Preservation Act (NHPA) obligation. The construction of wind turbine generators (WTGs), offshore substation, installation of electrical support cables, operations and maintenance (O

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

During preparation of this EIS, BOEM intends to ensure that the NEPA process will meet its National Historic Preservation Act (NHPA) obligation. The construction of wind turbine generators (WTGs), offshore substation, installation of electrical support cables, operations and maintenance (OCultural, Historical, and Archaeological Resources During preparation of this EIS, BOEM intends to ensure that the NEPA process will meet its National Historic Preservation Act (NHPA) obligation. The construction of wind turbine generators (WTGs), offshore substation, installation of electrical support cables, operations and maintenance (O

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

During preparation of this EIS, BOEM intends to ensure that the NEPA process will meet its National Historic Preservation Act (NHPA) obligation. The construction of wind turbine generators (WTGs), offshore substation, installation of electrical support cables, operations and maintenance (Cultural, Historical, and Archaeological Resources During preparation of this EIS, BOEM intends to ensure that the NEPA process will meet its National Historic Preservation Act (NHPA) obligation. The construction of wind turbine generators (WTGs), offshore substation, installation of electrical support cables, operations and maintenance.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Of note, the coastal and marine areas of the Seashore have known and unknown submerged archaeological resources related to historic activities and events of importance to area Federal Indian Tribes with whom BOEM is consulting.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In addition to the analysis of impacts to cultural resources and historic properties under NEPA, the effects to historic properties need be analyzed under both Section 106 and 110(f) of the NHPA. The NPS recognizes that BOEM intends to use the NEPA process and documentation to comply with Section 106. As noted above we identified the historic properties the NPS identified at this time and look forward to BOEM determining the APE so that we can assist BOEM to determine any additional NHLs that may be within that APE. The SHPOs and THPOs should also be consulted to identify NHLs potentially effected as well as additional historic properties listed on the National Register. As BOEM embarks on the identification of historic properties that may be affected and conduct further analysis to determine if there will be any effects to those properties, the NPS first recommends establishing and including who may be the appropriate consulting parties. While the identification of consulting parties should be determined in consultation with the SHPOs and THPOs, the NPS recommends that the Fire Island Lighthouse Preservation Society be included for consultation on effects to the Lighthouse complex. We also recommend that tribes be included in identifying historic properties and determining potential effects to them. As BOEM proceeds with identifying historic properties that may be affected please keep in mind those resources will extend beyond historic structures to also include archeological resources, cultural landscapes and ethnographic resources.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Based on our initial review of the area where the wind turbine generators would be located, the following NHLs may be impacted by the proposed wind farm development or its ancillary facilities: • Block Island Southeast Lighthouse • Ocean Drive Historic District • Bellevue Avenue Historic District • Marble House • The Breakers • Battle of Rhode Island Historic District • Montauk Point Lighthouse • Nantucket Island NHL District including the Maria Mitchell Loines Observatory and Vestal • Street Observatory within the District Once BOEM has determined the Area of Potential Effect (APE), NPS staff would be glad to assist in identifying any additional NHLs within the APE. NHL identification should also be verified through consultation with the SHPOs of the surrounding states as well as federally recognized tribes and Tribal Historic Preservation Officers (THPOs), as applicable.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Indian Nations Consultation. Note: New York shares geographic borders with the Shinnecock Indian Nation and the Unkechaug Nation as well as mutual environmental concerns and urges BOEM to engage in consultation with the nations through all stages of the National OCS Program. Statutory reference: 43 USC §1344 (a)(1), (a)(2)(B), (F). Evaluate impacts to archeological and cultural resources.

## **A-2.11. Demographic, Employment and Economics**

### **A-2.11.1. Employment and Job Creation**

**Comment Number:** BOEM-2021-0052-DRAFT-0002

**Commenter:** Kasey Scheid

**Commenter Type:** Individual

**Comment Excerpt Text:**

I am a union member and I strongly believe that Americans should not have to choose between a good job and a clean environment we can and must have both. The Sunrise Wind Project is an opportunity to not only drive the nation's clean energy future, but can help create quality, family sustaining union jobs at the same time. I urge BOEM to move forward with the permitting process while prioritizing the creation of good union jobs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0007

**Organization:** Local 28 Sheet Metal Workers

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

I am a member of the New York labor movement and I support offshore wind and the Sunrise Wind project. We can create a clean energy economy that puts workers and their families first by including strong labor standards like paying prevailing wage, project labor agreements, and labor peace agreements in this and future offshore wind projects.

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**Comment Number:** BOEM-2021-0052-0006

**Government Agency:** Suffolk County, NY

**Commenter Type:** Local Government

**Comment Excerpt Text:**

The Sunrise Wind project, and subsequent large scale projects, will lead to the creation of much needed infrastructure investments and thousands of jobs that come with good, living wages and benefits. We understand that construction of the Sunrise Wind Project will be built under a PLA with union labor. We anticipate the creation of 800 direct jobs from this project. We have been working closely with local colleges and our partners in organized labor to train our workforce to fill these positions and we consider this a priority

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**Comment Number:** BOEM-2021-0052-DRAFT-0044

**Commenter:** Alex Williams

**Commenter Type:** Individual

**Comment Excerpt Text:**

I am a community member and I strongly believe that Americans should not have to choose between a good job and a clean environment-we can and must have both. The Sunrise Wind Project is an opportunity to not only drive the nation's clean energy future, but can help create quality, family sustaining union jobs at the same time. I urge BOEM to move forward with the permitting process while prioritizing the creation of good union jobs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0045

**Organization:** International Brotherhood of Electrical Workers

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The IBEW strongly believes that Americans should not have to choose between a good job and a clean environment - we can and must have both. The Sunrise Wind Project is an opportunity to not only drive the nation's clean energy future, but can help create quality, family-sustaining union jobs at the same time. I urge BOEM to move forward with the permitting process while prioritizing the creating of good union jobs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0052

**Commenter:** Laura Maffei

**Commenter Type:** Individual

**Comment Excerpt Text:**

The Sunrise Wind Project is an opportunity to not only drive the nation's clean energy future, but can help create quality, family sustaining union jobs at the same time. I urge BOEM to move forward with the permitting process while prioritizing the creation of good union jobs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0062

**Organization:** Center for Economic Growth

**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

The offshore wind industry will also contribute a variety of economic benefits to the U.S. economy, including jobs, supply chain, direct and secondary economic benefits and output, and investment in critical coastal infrastructure. Developing, building, and operating offshore wind projects offers the promise of job creation and a chance for skilled workers to apply their craft to a new industry.

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**Comment Number:** BOEM-2021-0052-DRAFT-0062

**Organization:** Center for Economic Growth

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

These environmentally friendly economic benefits are particularly crucial as our region and country begin to recover from the unprecedented economic and social impacts of the COVID-19 pandemic. We believe that offshore wind has the potential to be a significant part of the economic recovery by stimulating coastal economies up and down the east coast.

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**Comment Number:** BOEM-2021-0052-DRAFT-0065

**Organization:** Long Island Federation of Labor

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

I am a member of the New York labor movement and I support offshore wind and the Sunrise Wind project. We can create a clean energy economy that puts workers and their families first by including strong labor standards like paying prevailing wage, project labor agreements, and labor peace agreements in this and future offshore wind projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0067

**Organization:** Long Island Association

**Commenter:** Matt Cohen

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In addition to the positive environmental benefits, Sunrise Wind is poised to have a significant impact on Long Island's economy, creating hundreds of new jobs, including direct union jobs, and vast opportunities for businesses that can contribute to the offshore wind supply chain. Additionally, Orsted and Eversource have committed \$10 million to seed fund a National Offshore Wind Training Center in Suffolk County to prepare our region for the jobs that will result from this and other offshore wind projects and will locate their operation and maintenance hubs in the Town of Brookhaven

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**Comment Number:** BOEM-2021-0052-DRAFT-0070

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**Commenter:** Cathy McConnell  
**Commenter Type:** Individual

**Comment Excerpt Text:**

We have almost run out of time to begin the transition to a low carbon/carbon neutral future, and Offshore wind projects are a critical and necessary part of that move. I am a member of the Long Islanders for Climate Justice and I support offshore wind and the Sunrise Wind project. We can create a clean energy economy that puts workers and their families first by including strong labor standards like paying prevailing wage, project labor agreements, and labor peace agreements in this and future offshore wind projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0073  
**Organization:** Climate Jobs NY  
**Commenter:** Mariah Dignan  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

By launching the pipeline of offshore wind projects in New York and throughout the Northeast, BOEM can help maximize the economic development and job opportunities in this industry, with the potential for hundreds of thousands of good-paying jobs across the nation. Specifically for the New York region, the New York Energy Research and Development Authority (NYSERDA) forecasts that the state's five awarded offshore wind projects will create 6,800 family-sustaining jobs, power 2.4 million homes, and have over \$12 billion in economic impact across the state.

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**Comment Number:** BOEM-2021-0052-DRAFT-0076  
**Organization:** Business Network for Offshore Wind  
**Commenter:** Ross Gould  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In addition to environmental benefits, Sunrise Wind will generate significant positive economic impacts for New York that will boost the local economy for decades to come. Sunrise Wind will support approximately 800 jobs over the project's lifetime. As part of the project, Sunrise Wind will invest \$10 million for a National Workforce Training Center on Long Island, to create a curriculum and develop training programs supporting new jobs in the growing offshore wind industry. Sunrise also plans to build a new Operation and Maintenance Hub in Port Jefferson, NY, creating up to 100 new and permanent full-time jobs during the expected two decades of operation.

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**Comment Number:** BOEM-2021-0052-DRAFT-0089  
**Organization:** BlueGreen Alliance  
**Commenter:** Jason Walsh  
**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

The project is expected to have a significant economic impact on New York. The project will require a network of domestic suppliers and specialized marine transport vessels, and in some cases, an overhaul to the current ports and onshore facilities, all representing millions of dollars in investment in New York and thousands of local jobs. Orstead and Eversource have committed to directly invest more than \$408 million in New York to deploy the Sunrise Wind project, which is estimated to generate up to 800 direct jobs through the project's construction. The project will also create an Operations and Maintenance Hub in Port Jefferson, supporting approximately 100 permanent, full-time jobs over the 25-year lifespan of the project. Additionally, there is a committed \$10 million in seed funding to create a National Offshore Wind Training Center in Suffolk County. We thank you in advance for your review of this project's socioeconomic and environmental impacts, and early consideration of stakeholder input.

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**Comment Number:** BOEM-2021-0052-DRAFT-0089

**Organization:** BlueGreen Alliance

**Commenter:** Jason Walsh

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The DEIS should also evaluate the programs necessary for training and expanding the domestic workforce with an emphasis on ensuring opportunities for displaced energy workers, as well as fostering equitable access to career pathways in the industry. When done right, offshore wind power will create thousands of high-quality, family-sustaining jobs in manufacturing, construction, operations and maintenance, and in the development of port facilities, transmission, and other associated infrastructure. We appreciate your work to prepare a DEIS, informed by early-stakeholder input, and to conduct a diligent socioeconomic review of this project so that we may realize the thousands of jobs and millions of dollars in economic benefits that will be provided by offshore wind.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0004

**Organization:** Business Network for Offshore Wind

**Commenter:** Alec Gomez

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

All of these vessels represent family-sustaining American jobs. Sunrise Wind is also bringing benefits to New Yorkers across the state. The project will fabricate key components for foundations in the capital region.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0001

**Organization:** Climate Jobs New York

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**Commenter:** Mariah Dignan  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Together, the researchers that own that facility in East Setauket and the Port Jefferson harbor and home port will create approximately 100 permanent, direct jobs for the region, as well as indirect and induced jobs. Sunrise, coupled with the other awarded offshore projects to be cited off of Long Island, offers significant opportunity for economic development and the creation of good paying union green jobs. Long Island can become a center for offshore wind, and we're excited to do so.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0004  
**Organization:** New York League of Conservation Voters  
**Commenter:** Caroline Hahn  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Sunrise Wind will promote clean, reliable and safe development of domestic energy sources and clean energy, job creation. Hundreds of millions of dollars will be invested directly into New York as a part of Sunrise Wind and more than 800 jobs will be created, including family sustaining union jobs. Additionally, Orstead and Eversource have committed \$10 million to fund a national offshore wind Training Center in Suffolk County, which will create tremendous economic opportunity in the form of jobs and community benefits.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0001  
**Commenter:** Joseph Kommer  
**Commenter Type:** Individual

**Comment Excerpt Text:**

I do think that it is important to emphasize the benefits to not just the local communities, but also potentially to the greater northeast region, and in fact, you need to train a new workforce that obviously has enormous benefits for Long Island, both onshore and offshore. If it also involves retraining technicians that are already involved in other related ocean exploration fields, I think that's an awesome utilization of talents that may otherwise be lost.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0003  
**Organization:** Suffolk County  
**Commenter:** Lisa Broughton  
**Commenter Type:** Local Government

**Comment Excerpt Text:**

Sunrise Wind project will lead to the creation of much-needed infrastructure investments and thousands of jobs that come with good living wages and benefits. We understand that

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construction of the Sunrise Wind project will be built under a PLA with union labor. We anticipate the creation of 800 direct jobs from this project. We've been working closely with our local colleges and our partners in organized labor to train our workforce to fill these positions, and we consider this priority.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Though it will require strong federal and state foresight and leadership, the development a U.S. offshore wind industry has the potential to transform a large segment of our energy production sector and breathe new life and good paying jobs to our nations working waterfronts, many of which are within or adjacent to historically disenfranchised communities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050

**Organization:** Sierra Club

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Sunrise Wind project is a crucial step to launching anew, green job-creating industry in New York, allowing our state to meet our climate goals, revitalize our economy, create family supporting jobs, and clean up our air and water.

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**Comment Number:** BOEM-2021-0052-0006

**Government Agency:** Suffolk County, NY

**Commenter Type:** Local Government

**Comment Excerpt Text:**

The Sunrise Wind project, and subsequent large scale projects, will lead to the creation of much needed infrastructure investments and thousands of jobs that come with good, living wages and benefits. We understand that construction of the Sunrise Wind Project will be built under a PLA with union labor. We anticipate the creation of 800 direct jobs from this project. We have been working closely with local colleges and our partners in organized labor to train our workforce to fill these positions and we consider this a priority. As part of Orsted's U.S. offshore wind build-out, they have already pledged nearly \$500M towards port facilities including one at Port Jefferson, NY which is located in Suffolk County. We are proud that our local port will harbor the first-ever American-flagged, Jones Act-qualified Service Operation Vessels, which will support Sunrise Wind, South Fork Wind, another Suffolk project, and additional projects as they are built.

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**Comment Number:** BOEM-2021-0052-DRAFT-0003  
**Commenter:** Maggie Medrano  
**Commenter Type:** Individual

**Comment Excerpt Text:**

As a Long Islander, I support offshore wind. Large scale utility development like offshore wind not only will help reduce our massive carbon footprint but will also mean a tremendous amount of economic opportunity in the form of jobs

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**Comment Number:** BOEM-2021-0052-DRAFT-0004  
**Commenter:** Cynthia Bristow  
**Commenter Type:** Individual

**Comment Excerpt Text:**

As a Long Islander, I support offshore wind. Large scale utility development like offshore wind not only will help reduce our massive carbon footprint but will also mean a tremendous amount of economic opportunity in the form of jobs and community benefits. We have been preparing for this moment for a very long time. We urge approvals and next steps for the Sunrise Wind project to be as expeditious as possible to get New Yorkers to work, and we urge BOEM to prioritize high-road labor practices in offshore wind projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0051  
**Organization:** Win With Wind  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Departments of Interior (DOI), Energy (DOE), and Commerce (DOC) are announcing a shared goal to deploy 30 gigawatts (GW) of offshore wind in the United States by 2030, while protecting biodiversity and promoting ocean co-use. Meeting this target will trigger more than \$12 billion per year in capital investment in projects on both U.S. coasts, create tens of thousands of good-paying, union jobs, with more than 44,000 workers employed in offshore wind by 2030 and nearly 33,000 additional jobs in communities supported by offshore wind activity. It will also generate enough power to meet the demand of more than 10 million American homes for a year, and avoid 78 million metric tons of CO<sub>2</sub> emissions.<sup>20</sup> In addition to the above-listed benefits of meeting the 30 GW goal, meeting this goal will also "catalyze significant supply chain benefits, including new port upgrade investments totaling more than \$500 million," and "will unlock a pathway to 110 GW by 2050, generating 77,000 offshore wind jobs and more than 57,000 additional jobs in communities supported by offshore wind activity."<sup>21</sup> BOEM's review of the project should include an assessment of these significant downstream benefits of project approval.

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**Comment Number:** BOEM-2021-0052-DRAFT-0062  
**Organization:** Center for Economic Growth

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**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Sunrise Wind has committed to utilizing union labor to build the project. Not only will Sunrise Wind create hundreds of jobs, but the project has committed to support the development of a National Workforce Training Center on Long Island and to utilize a facility within Albany County, New York to assemble key components for offshore wind turbines. By approving the Article VII certificate for the Sunrise Wind project, economic opportunities can be provided to individuals in different regions within our state.

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**Comment Number:** BOEM-2021-0052-DRAFT-0064

**Organization:** Long Island Federation of Labor, AFL-CIO

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Clearly, we have an enormous stake in removing greenhouse gases from the atmosphere, and the development of offshore wind is the immediate first step. There are substantial economic benefits to embarking on this new industry. The Orsted/Eversource development team is committed to investing millions of dollars into the regional and state economy, creating long-lasting careers in the offshore wind industry and addressing pressing environmental concerns related to climate change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0064

**Organization:** Long Island Federation of Labor, AFL-CIO

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A significant aspect of the project is the on-going relationship between Orsted/Eversource and the local labor movement. The developers have committed to negotiating project labor agreements with the Building Trades for the construction aspects of the project. This means that New York will convert to renewable energy by creating family sustaining jobs and career opportunities for the next generation of workers coming into the industry. Labor agreements ensure that the project will benefit from years of experience, apprenticeship training, and a commitment to safety on the job.

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**Comment Number:** BOEM-2021-0052-DRAFT-0064

**Organization:** Long Island Federation of Labor, AFL-CIO

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The NOWTC will be a regional center for Global Wind Organization workforce certifications, and it will encourage the development of a regional supply chain for the industry. We urge

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BOEM to advance Sunrise Wind through the permitting process and maintain the momentum the President has demanded to address the twin challenges of climate change and good jobs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0073

**Organization:** Climate Jobs NY

**Commenter:** Mariah Dignan

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

It is crucial to note that the only way to ensure the jobs created in offshore wind are high road is by having project labor agreements, prevailing wages, and labor peace agreements for operations and maintenance. Strong labor standards will provide Long Islanders and New Yorkers with family-sustaining wages and benefits in a new industry. The construction of the Sunrise Wind Project will be built under a PLA with local union labor, and we must replicate this type of community engagement and workforce development commitments across the United States. Another significant opportunity for union members is to construct and maintain the onshore transmission work to handle the load from Sunrise Wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Sunrise Wind will spur an offshore wind economy in New York and will bring up to 800 good paying jobs to our region. CCE was thrilled to hear that Sunrise Wind will be serviced by an operations and maintenance hub in Port Jefferson and will be investing over \$400 million in the state, including a \$10 million National Offshore Wind Training Center in Suffolk County and \$10 million in port infrastructure. A job analysis should be included in the EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0078

**Commenter:** Patrick Guidice

**Commenter Type:** Individual

**Comment Excerpt Text:**

It is my strong opinion that Americans should not have to choose between a good job and a clean environment-we can and must have both. The Sunrise Wind Project is an opportunity to not only drive the nation's clean energy future, but can help create quality, family sustaining union jobs at the same time. I urge BOEM to move forward with the permitting process while prioritizing the creation of good union jobs to construct these generation facilities and to maintain them in order to provide safe reliable service.

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**Comment Number:** BOEM-2021-0052-DRAFT-0089

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**Organization:** BlueGreen Alliance  
**Commenter:** Jason Walsh  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The DEIS should include a robust analysis of socioeconomic impacts associated with the project. In particular, BOEM's analysis of socioeconomic impacts should include consideration of Orsted and Eversource's commitments around use of domestic content; Project Labor Agreements (PLAs), Community Benefits Agreement (CBAs); utilization of registered apprentices and other labor-management training programs; protection against worker misclassification and wage theft; neutrality agreements; local hire; and prevailing wage. In its proposed sale notice (PSN) for the sale of commercial wind energy leases on the Outer Continental Shelf (OCS) in the New York Bight, BOEM stated that high road labor standards, specific PLAs, may support the achievement of Outer Continental Shelf Lands Act factors "-including expeditious development and potentially more years of receipt of operating fees-by assuring labor stability."2 Plans to support utilization and growth of a domestic supply chain should be analyzed and evaluated to maximize U.S. employment for the projected life cycle of the project. A recent study by researchers at Princeton University found that increasing domestic content in renewable energy projects can create tens of thousands of American jobs without significantly increasing capital costs.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0001  
**Organization:** Climate Jobs New York  
**Commenter:** Mariah Dignan  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The only way to ensure the jobs created for offshore wind are high paying jobs with good benefits is by having project labor agreements and prevailing wages. The construction of Sunrise will be built under a PLA with local union labor, which will help launch family sustaining careers in this nascent industry for New Yorkers.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0002  
**Commenter:** Camden Ackerman  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The socioeconomic benefits of this project are mind-blowing to somebody who lives on Long Island. The workforce that we're going to be bringing in, the savings to electric, and our energy grid, are incredible.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055  
**Organization:** Students of University of San Francisco

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**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The project is forecasted to generate substantial job opportunities for the surrounding communities. Fabrication and assembly of wind turbines requires high-precision and thus requires highly skilled workers across logistics, construction, and maritime industry trades [12]. Already the economic impact is apparent after the pioneering farm in Rhode Island, which has created diverse and high-paying jobs. According to the Rhode Island Building and Construction Trades Council, more than 300 local and unionized workers were employed to assemble and install the facility, across 200 skilled construction and trades jobs and more than 100 logistics jobs [13]. Not only do these jobs pay well, they are secured by state government policy or executive order, which will only continue to increase the demand for tens of thousands of workers like those who built America's first offshore wind farm. It is advised that BOEM take additional development and funding actions to prepare skilled local workers for maritime work environments, such as training for vessel safety and marine firefighting.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Assess impacts to public services. Assess population, economy, and employment related impacts. Jobs analysis for New York and surrounding states. Assess impacts to housing and property values. Consider reliability of electric facilities. Consider public safety and facility compatibility with existing utility infrastructure.

**A-2.11.2. Recreation and Tourism**

**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Furthermore, both SELF and New Shoreham rely on tourism for funding, and impacts to historic resources on Block Island do indeed risk economic harm to both parties.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

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**Commenter:** Eileen Murphy  
**Commenter Type:** State Government

**Comment Excerpt Text:**

Potential limitations on public access or use of federal, state or municipal facilities and tourism-dependent businesses during construction and operation, given that cable landfall would entail occupation of the municipal-owned Smith Point County Park and work within the Fire Island National Seashore. BOEM should identify opportunities to maintain public access and avoid interference with public use and enjoyment.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Discuss measures to maintain public access and avoiding interference with coastal uses. Note: limitations or prohibitions on public access would be incompatible with New York State's efforts. Characterize potential use of nearshore coastal and beach areas for pipestring staging during construction. Evaluate alternative locations to minimize disturbance. Identify the potential for alienation of parkland associated with the municipally-owned Smith Point Park. Note: The Agencies continue to evaluate this topic in coordination with the developer; see also <https://parks.ny.gov/documents/publications/AlienationHandbook2017.pdf> Tourism and Recreational Activities: Avoid construction during peak summer tourism season from Memorial Day through Labor Day, especially summer holiday weekends. Evaluate impacts from temporary beach closures.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Recreational Diving Sites. Note: New York State Department of State (DOS) developed two datasets for offshore diving areas important to NY that are available on the NYS Geographic Information Gateway: Artificial reef diving: <http://opdgig.dos.ny.gov/geoportal/catalog/search/resource/detailsnoheader.page?uui d={A4A2BFE8-J 198-4624-9JB5-796F558E77B4J>. Wreck diving: <http://opdgig.dos.ny.gov/geoportal/catalog/search/resource/detailsnoheader.page?uui d={4990846B-A419-486B-AA9F-A7D770382832}> Surfing Areas. Note: DOS developed surfing areas along the Atlantic beaches of NYS that are available on the NYS Geographic Information Gateway:

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<http://opdgig.dos.ny.gov/geoportal/catalog/search/resource/detailsnoheader.page?uuid={A4A2BFE8-1198-4624-9JB5-796F558E77B4J}>.

## **A-2.12. Electromagnetic Fields**

**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

Potential impacts of electromagnetic fields (EMF) on fishery species are a concern to the fishing community. For example, studies have suggested that EMF can result in changes in behavior, movement, and migration for some demersal and pelagic fish and shellfish species<sup>10</sup>. The extent to which EMF may or may not impact marine species should be thoroughly described in the EIS. The EIS should acknowledge the limitations of the current scientific knowledge in this area and should provide justification, including supporting scientific studies, for all conclusions regarding EMF.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

Introduction of electromagnetic fields from numerous, and potentially gridded, OSW power cables may have impacts to not only benthic species, but migrating and other electric and magnetic field-sensitive species, including sea turtles, marine mammals, and elasmobranchs. Cables carrying electric current may disrupt migrations of fish and other marine animals reliant on magnetic cues for orientation and navigation, but research has only just begun on this topic.<sup>13</sup>

## **A-2.13. Environmental Justice**

**Comment Number:** BOEM-2021-0052-DRAFT-0064

**Organization:** Long Island Federation of Labor, AFL-CIO

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

Long Island's economically disadvantaged communities will have opportunities to work in the emerging offshore wind industries by gaining the advantages of apprenticeship training. The Long Island Federation of Labor and the Building and Construction Trades Council of Nassau and Suffolk Counties are committed to outreach to these communities through Opportunities Long Island, a very successful pre-apprenticeship program serving the workforce in this area

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**Comment Number:** BOEM-2021-0052-DRAFT-0076  
**Organization:** Business Network for Offshore Wind  
**Commenter:** Ross Gould  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As BOEM moves forward in assessing the impacts under the EIS, BOEM should ensure that it includes the full scope of benefits to environmental justice communities in the socio-economic analysis, including job creation and funding in communities that have experienced disproportionate levels of environmental degradation. If clean energy projects such as Sunrise Wind are not built, the result will be a higher capacity factor for existing fossil fuel plants, or perhaps construction of new facilities. New York currently generates about 37% of its electricity from natural gas, as well as importing power from neighboring states and Canada. Another 33% of the state's power comes from nuclear plants. Individuals who live near power plants have historically had incomes lower than the national average and have faced lower home values. Living in the vicinity of fossil fuel power generating facilities has a direct correlation to negative health outcomes for the communities. A policy brief in the journal of Nature Energy demonstrated a coal plant's closure reduces the use of emergency inhalers and other signs of poor lung-health in nearby communities. According to the National Association for the Advancement of Colored People (NAACP) report, "68 percent of African Americans live near a coal-fired power plant". Latinos are also disproportionately exposed to toxic chemicals emanating from fossil fuel plants. A 2016 report from the Clean Air Task Force states that "the air in many Latino communities violates air quality standards intended to protect human health" and Latino children are more likely to die from an asthma attack than white children. Numerous studies support the findings of racial and socio-economic disparities in impacts from fossil burning power plants. The final EIS for Sunrise Wind must incorporate these reports and data as part of its analysis in assessing the impacts of the Proposed Action and the No Action Alternatives. I

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**Comment Number:** BOEM-2021-0052-DRAFT-0066  
**Commenter:** John Hyland  
**Commenter Type:** Individual

**Comment Excerpt Text:**

I see the Sunrise Wind Project as a model opportunity to fuse environmental justice and economic development driven by and for good, skilled unionized workers. I realize there may be inconveniences for some (small in number), but these are outweighed by the exceptional environmental and economic benefits for the common good.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0002  
**Organization:** Mastic Beach Conservancy  
**Commenter:** Maura Sperry  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As you probably know, Mastic Beach, part of it is a low income community. We were qualified for the IRS opportunity zone. We have a lot of underserved population. We also have a lot of people here working in rehabs and halfway houses trying to get off the effects of drugs, and they can't really access the nature

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0005

**Organization:** Blue-Green Alliance

**Commenter:** Rebecca Newberry

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should analyze socioeconomic impacts associated with both Orsted's plans and state requirements for local hiring, union neutrality, collective bargaining agreements, diversity, equity and inclusion, and prevailing wage. The EIS should also evaluate programs necessary for training and domestic workforce with an emphasis on health, safety and alleviation of historic disparities and environmental justice in BIPOC communities. Related to this, these plans to support a domestic supply chain should be required and evaluated both to maximize US employment and to avoid and minimize and mitigate impacts to environmental justice and BIPOC communities who have historically faced the worst impacts from industrialization and energy production.

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Sunrise Wind can alleviate the need for fossil fuel power plants and especially peaker plants. This will lead to cleaner air in existing host communities of peaker plants, which are frequently communities of color. The replacement of these fossil fuel power plants will assist a just transition from fossil fuels to renewable energy and provide investments in frontline and environmental justice communities. This social justice impact should be included in the EIS.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0005

**Organization:** Citizens Campaign for the Environment

**Commenter:** Jordan Christensen

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We hope that there's a social justice impact that you can quantify in the EIS as well. If Sunrise Wind can alleviate the need for fossil fuel power plants, particularly peaker plants, it'll lead to cleaner air and existing host communities of peaker plants in Suffolk County, that regularly had an F for air quality. We've already seen a slew of health conditions that come from the poor air quality here, and we hope that that can be quantified somehow in the EIS. Not only, you know

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the economic benefits to communities from jobs, from community benefits agreements, but also from reduced health impacts from fossil fuels.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

One of the most significant consequences that the BOEM must explicitly address in the EIS is how the construction of Sunrise Farm will affect environmental justice issues. As the Commonwealth of Massachusetts demonstrated in their GIS project, most low-income households and black and latino communities were located near air polluters, including oil-fired, coal plants. Such a neighborhood directly affects respiratory and cardiovascular systems, causing premature death, by exposing residents to particulate matter 2.5, toxins such as mercury and sulfur dioxide [8]. A rapid but considerate shift to the best available renewable energy technologies, where offshore wind energy is of the greatest promise, will accelerate the cessation of conventional energy plants, returning to minorities and communities their right to clean air and a healthy environment. As NEPA requires agencies to submit propositions of alternatives to the project [4], we encourage the BOEM to analyze a "no action" scenario in the EIS to demonstrate that the region would not only miss opportunities of offshore wind discussed above, but that a "no action" scenarios would also contribute to exacerbation of Climate Change and retard our attempts to address environmental injustice.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In considering the environmental justice impacts, BOEM must look at how power plants are frequently located in or close to population centers and disproportionately located in or near communities of color, lower income communities, and Indigenous communities. The ability of offshore wind to displace fossil fuel generation thus has a potentially important environmental justice benefit. This displacement could be particularly pronounced, as offshore wind facilities' generation often coincides with afternoon peak demand.<sup>55</sup> Offshore wind may be especially helpful in displacing the dirtiest peaking units, providing especially large air quality benefits and benefits to environmental justice communities.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The NEPA document should address effects of the project on Environmental Justice, including those specific to fishing communities with minority and low-income populations. We anticipate Environmental Justice concerns will be included as required under Executive Order 12898 (E.O. 12898, 59 FR 7629; February 16, 1994) Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This E.O. requires that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories...” and take into account E.O. 13985 (86 FR 7009; January 20, 2021) On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. In addition, for coastal communities that include tribal nations who value the sea and fish to sustain Native American life, projects should also consider E.O. 13175 (65 FR 67249; November 6, 2000), which requires federal agencies to establish regular and meaningful consultation and collaboration with tribal officials where tribal implications may arise

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The Presidential Memorandum accompanying Executive Order 12898 emphasizes the importance of using the NEPA review process to promote environmental justice and directs Federal agencies to analyze the environmental effects, including human health, economic and social effects, of their proposed actions on minority and low-income communities. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental impacts of proposed Federal actions on minority communities and low-income communities. Environmental justice, as defined by EPA, means the fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws and policies, and their meaningful involvement in the decision-making process of the government. It appears that the installation and operation of offshore components of the Sunrise Wind project are unlikely to impact minority and low-income communities. However, we encourage BOEM to analyze whether noise, air and traffic impacts from onshore construction and associated project support operations within port areas may cause community impacts that should be considered in the environmental justice analysis for the DEIS. As a preliminary step we recommend that BOEM use EJSCREEN to help determine if there are communities with environmental justice concerns that may be affected by these types of impacts during construction or operation of the project.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

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**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We encourage BOEM to use the results of the screening to identify issues for analysis in the DEIS and to help focus outreach to affected communities. Outreach goals should include increased and meaningful public engagement and participation. EPA encourages Sunrise Wind and BOEM to provide notices of public meetings, notices of informational events, and/or other related resources at frequently visited community locations. These locations may include, but may not be limited to schools, faith centers, community centers, barbershops, salons, and medical centers. We also recommend the continuation of outreach and community dialogue after the project is constructed to monitor the potential for adverse impacts. The establishment of an EJ working group that includes community, business, and government participants should be considered to support this objective. Such a working group could meet on an intermittent frequency both during and following project construction. We also recommend that the DEIS identify mitigation measures to address project impacts to communities with EJ concerns. We encourage BOEM and Sunrise Wind to incorporate and support requirements for emission reduction best practices for ports such as vessel speed and idle reduction requirements, Tier 4 EPA certified equipment or retrofitting of older equipment, and/or the use of shore power systems for equipment and hoteling. More information regarding air emissions reduction methods at ports can be accessed at <https://www.epa.gov/ports-initiative>.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In section 4.7.6.1 –Affected Environment: “Potential environmental justice areas” were identified using >50% minority population and/or >23.59% low-income population. We note that this is a very simplified benchmark for identifying communities where EJ concerns related to the project may need to be addressed. We recommend that BOEM consider an expanded approach through consideration of EPA’s EJ Mapping tools to better understand factors beyond race/ethnicity and income levels in the EJ evaluation.

Section 4.7.6.2 –“Potential Impacts” highlights one community with potential EJ concerns (North Bellport, NY) in proximity to onshore construction/O&M activities. The text states,“...no effects [from construction] would be unique to minority or low-income populations.” An impact does not need to be unique to matter in the context of community impacts. We recommend that the DEIS analysis consider alternate ways to present project impacts so they can be understood by the impacted communities.

**A-2.14. Finfish, Invertebrates, and Essential Fish Habitat**

**Comment Number:** BOEM-2021-0052-EMAIL-093021-0003

**Government Agency:** Massachusetts Office of Coastal Zone Management

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**Commenter:** Lisa Berry Engler  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We understand that Sunrise Wind has been reaching out to and coordinating with other offshore wind developers in order to share data on species that move between and among lease areas. We encourage Sunrise Wind to continue to work with other research teams and expect that the EIS will detail how Sunrise Wind will coordinate with other developers to better understand and report on any regional effects upon fisheries species.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0001  
**Commenter:** Joseph Kommer  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

It's well documented that subsurface structures create essential fish habitat that can actually improve fisheries. I think that's a wonderful potential benefit for this.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Both state and federal fishery managers have identified habitats that support critical life history processes such as spawning, breeding, feeding, and growth to maturity. A complete EIS must include a detailed assessment of the effects of the project on these habitats, including EFH designated under the MSA and a range of alternatives to conserve these habitats and minimize the effects of the project on EFH and other marine habitats. Because the project is sited in federal waters and may have adverse effects on EFH, BOEM should consult with the relevant Fishery Management Council under the EFH provisions of the MSA that provides a clear mechanism for fisheries managers to comment on and make recommendations concerning any activity that may affect habitat including EFH.<sup>6</sup> Particular attention should be given to the effects of the project on areas that have been designated as Habitat Areas of Particular Concern (HAPC) under MSA because of their ecological importance, sensitivity to human-induced environmental degradation, the extent of threats posed by development, or the rarity of the habitat type.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071  
**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils  
**Commenter:** Dr. Christopher Moore  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We are also concerned that there seems to be a disconnect between complex seabed in an engineering and construction context vs. the level of complexity that provides shelter for fishery species, especially during their early life history. While features less than 0.5 meters in size may not constitute complex hazards from a cable or turbine installation standpoint, pebbles and cobbles on centimeter scales can offer refuge from flow and predation and provide feeding opportunities for juvenile fish. Reworking and removing epifauna from these sediments during cable and turbine installation will affect the fish that use these habitats. The New England Council has worked to protect complex habitats at these spatial scales from the impacts of fishing, for example, on Nantucket Shoals. The analyses prepared for the Council's Clam Dredge Exemption Framework articulate what we consider complex seabed in a fisheries context, and the types of areas we would seek avoidance of wind development

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Effects of cable installation through jet plowing generate both noise and sediment plumes, which may affect biological processes for fishes, for example Atlantic cod, an acoustically sensitive species that relies on particular spawning grounds, or squid, which lay their egg mops on the seabed and could be materially impacted by sediment deposition, which will occur along a broad geographic area along the 292 miles of cable routing. It will be important for the impacts analysis, including the EFH assessment, to consider how installation during different seasons will affect particular species and life stages during spawning, juvenile settlement, etc. The nature of these repeated effects over time should be accounted for in the analysis of impacts to habitats and fishes.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Water entrainment occurs during jet plowing as cables are installed, and also occurs at the AC/DC conversion station for the purposes of cooling the DC cable. Entrainment at the conversion station could have substantial and sustained impacts on important forage fish species like sand lance and on ichthyoplankton and zooplankton, including fish eggs and larval stage fish and invertebrates, with a discharge volume of 8.1 million gallons of water per day for the life of the project (Section 4-103). While "the total estimated losses of zooplankton and ichthyoplankton from jet plow entrainment were less than 0.001 percent of the total zooplankton and ichthyoplankton abundance present in the study area" and will be temporary during construction (Section 4-205), entrainment volumes at the AC/DC conversion station are larger and will continue for many years.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EPA finalized a rule in 2014 establishing a set of best technology available standards for entrainment for existing facilities that withdraw

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Atlantic Cod Stock Structure Working Group concluded there are more than two stocks of Atlantic cod, including a likely separate Southern New England stock, which overlaps with the Cox Ledge EFH Area (Peer Review of the Atlantic Cod Stock Structure Working Group Report 20207). This area could be greatly beneficial for stock rebuilding given this and other surrounding complex habitat areas are important for cod spawning and survival of juvenile cod. Because cod are shown to have high spawning site fidelity, if NEFMC delineates a separate Southern New England stock, there could be population level effects in the reasonably foreseeable future from impact pile driving noise that can result in injury up to 8.4 mi for large fish and 10.1 mi for small fish (Section 4-261).

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Overall, any potential positive effects (e.g., potential increased productivity of cod due to the reef effect) are not likely to outweigh the negative effects on juvenile and spawning cod (noise, potential for increase in removals if cod aggregate around artificial reefs); thus, it will be important to evaluate the impacts to these localized spawning aggregations when evaluating where turbines should be sited, and how and when construction activities should be allowed to occur.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

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**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In addition, piling driving activities and installation of the foundation and inter-array cables are all expected to have more than just "limited impacts on finfish...because they are not expected to be near the seafloor during work activities" (Section 4-259). Pelagic species will likely be impacted by the noise and vibrations generated from these activities and may change their behavior and/or feeding patterns to avoid the impacted area, as suggested in Section 4-262, which is not a negligible impact.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0006

**Organization:** Mystic Aquarium

**Commenter:** Katie Cubina

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts on marine mammals and how to best mitigate those impacts. We are also very inclined to look at the responsible development of this technology in the water as it relates to the marine ecosystem as our research scientists are critical in identifying critical habitat, critical essential fish habitat and other areas that are prime examples of green habitat and worthy of protection.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Use of closed loop cooling (Section III.D): Sunrise Wind should use a closed loop cooling system, rather than an open loop cooling system, to avoid impacts to marine life, including eggs, larvae, juvenile fish, and invertebrates. Given the proximity of Sunrise Wind to cod spawning areas and New York requirements for closed loop cooling in state waters, the use of an open loop cooling system for Sunrise Wind is especially inappropriate.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Because of the importance of complex, hard bottom habitats to Atlantic cod and other species, BOEM should require Sunrise Wind to avoid siting WTGs and the SRWEC in complex, hard bottom areas, to the greatest extent possible. Avoiding siting in complex habitats would result in fewer acres of complex habit disturbed by WTG construction and cable burial, which would decrease the overall impacts to EFH and benthic resources. Finally, impact levels to EFH may vary depending on the biological status of each EFH species and whether an EFH species is

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abundant in an area. In the Draft EIS, BOEM should discuss the biological status of each EFH species and which EFH species are abundant and non-abundant in the area of the Sunrise Wind Farm and the overall impact to these species' EFH.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Discuss current stock status for different species; migration routes; life history stages; egg and larval seasonality and abundance; forage species not just species with high economic value; seasonal distribution and abundance for the area in the vicinity of the Project. Discuss Essential Fish Habitat, including spawning areas; recruitment and nursery areas; and food web interactions.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Discuss impacts from construction, pile driving, vessel traffic, and CWIS operation (e.g., entrainment and impingement). Evaluate aggregation of fish around turbine bases. Discuss behavior and physiological impacts from noise, foundation lighting, thermal discharges, and EMF.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Specifically, measures to avoid and minimize impacts to complex habitats, cod spawning activity, squid spawning and egg development, as well as other vulnerable habitat features and life stages. Measures to avoid disrupting spawning activity (e.g. time of year restrictions, project placement) and settlement areas (e.g. avoiding complex habitats) should be fully evaluated.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

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**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

It will be particularly important to evaluate how construction timing overlaps with cod spawning activity in the project area and across Southern New England. Cod spawning in Southern New England occurs between November and April. Successful cod spawning relies on the presence of aggregations of cod and complex behavioral interactions that require the use of low frequency sound communication (“grunts”) by the males to attract females for “mating.” If this mating behavior is disrupted and the aggregations are dispersed, reproduction may not occur for the rest of the spawning season, or even in subsequent years if cod abandon spawning grounds that have been affected. The potential overlap of project construction and in-water activities should be fully evaluated in the EIS, as well as measures to avoid and minimize impacts to cod spawning. I

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The most up-to-date EFH and HAPC designations should be used in your evaluation of impacts to EFH. HAPCs are a subset of EFH that are especially important ecologically, particularly susceptible to human-induced degradation, vulnerable to developmental stressors, and/or rare. EFH and HAPC for species managed by the NEFMC have been modified under the Omnibus Amendment which was approved and implemented in 2018. The EFH mapper should be used to query, view, and download spatial data for the species managed by the New England, MidAtlantic, and South Atlantic Councils and for Highly Migratory Species. The EFH mapper can be accessed from our habitat website at <https://www.habitat.noaa.gov/protection/efh/efhmapper/>. You should also be aware that the Final Amendment 10 to the 2006 Consolidated Atlantic Highly Migratory Species (HMS) Fishery Management Plan (FMP) went into effect on September 1, 2017. This amendment contains several changes to the EFH designations for sharks and other highly migratory species. More information can be found on our website at <https://www.fisheries.noaa.gov/topic/atlantic-highly-migratory-species>.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

As currently described in the NOI, this facility (inclusive of the wind farm area, offshore and inshore export cables and corridors, and shoreside landing points) will be constructed, operated, and maintained in areas designated essential fish habitat (EFH) for various life stages of species

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managed by the New England Fishery Management Council (NEFMC), Mid-Atlantic Fishery Management Council (MAFMC), and NMFS. Species for which EFH has been designated in the project area include, but are not limited to, Atlantic cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), monkfish (*Lophius americanus*), ocean pout (*Zoarces americanus*), summer flounder (*Paralichthys dentatus*), pollock (*Pollachius virens*), silver hake (*Merluccius bilinearis*), winter flounder (*Pseudopleuronectes americanus*), Northern longfin squid (*Doryteuthis pealii*), winter skate (*Leucoraja ocellata*), little skate (*Leucoraja erinacea*), windowpane flounder (*Scophthalmus aquosus*), bluefish (*Pomatomus saltatrix*), black sea bass (*Centropristis striata*), red hake (*Urophycis chuss*), scup (*Stenotomus chrysops*), yellowtail flounder (*Limanda ferruginea*), Atlantic sea scallop (*Placopecten magellanicus*), Ocean quahog (*Arctica islandica*), and Atlantic surfclam (*Spisula solidissima*). The proposed project area is also designated EFH for several Atlantic highly migratory species, including, but not limited to albacore tuna (*Thunnus alalunga*), yellowfin tuna (*Thunnus albacares*), bluefin tuna (*Thunnus thynnus*), blue shark (*Prionace glauca*), sandbar shark (*Carcharhinus plumbeus*), white shark (*Carcharodon carcharias*), dusky shark (*Carcharhinus obscurus*), tiger shark (*Galeocerdo cuvier*), and sand tiger shark (*Carcharias taurus*). The sand tiger shark has been listed as a Species of Concern by NOAA.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

**Comment Excerpt Text:**

The NEPA document, and the EFH, benthic resources, finfish and invertebrates sections, in particular, should accurately describe the project area, including both the export cable corridor and lease area, and the resources that rely upon these habitats. The document should fully describe the distinct habitat features of the entire project area and the importance of different habitat types for providing structure and refuge, particularly for juvenile species and other sensitive life stages. The evaluation of project impacts should not only consider impacts of the project against the cumulative geographic scope (e.g. the OCS), but also clearly evaluate anticipated impacts of project construction and operation to the distinct habitat types found in the lease area, along the export cable route, and inshore landfall locations. The document should analyze the effects to the physical habitat features and the biological consequences of those effects. It will be important to consider impacts of the project on all life stages (adults, juveniles, larvae, eggs), and we recommend focusing on species and life stages that may be more vulnerable to impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The Sunrise Wind project is proposed to be constructed on the southern edge of Cox Ledge and overlaps with unique and complex habitats. Impacts to complex habitats are known to result in long recovery times and are potentially permanent. Loss of these important habitats may result in cascading long term to permanent effects to species that rely on this area for spawning and nursery grounds and the fisheries and communities that target such species. The evaluation of impacts from project construction and operation should evaluate the potential for recovery and the anticipated recovery times based on the habitat type and components that would be impacted. The analysis should fully consider the potential impacts of proposed action to complex habitats in the lease area and cable corridor. Complex habitats may be permanently impacted or take years to decades to recover from certain impacts and this variability in recovery times by habitat type and components should be fully discussed and analyzed in the document. The analysis should include a broad discussion of the potential effects of habitat alteration from construction and operation of the project using the best available scientific information. The analysis should address the potential impact of converting smaller-grained hard habitats (e.g. pebbles and cobbles) that support early life history stages of finfish to artificial reefs that may attract larger predator species. Within soft bottom habitats WTGs may create a reef effect, and the document should clearly distinguish the difference between man-made structures and the natural complex habitat present in the project area. Specifically, artificial habitats are only a component of the EFH designation for two managed fish species (black sea bass and red hake) in the region. The distinction between the natural and man-made structures should be incorporated into the analysis and should not be evaluated as equal in terms of habitat functions and values. The limitations of habitat value from scour and cable protection, and other man-made structures, should be clearly disclosed and analyzed.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Atlantic cod EFH for vulnerable early life history stages have been designated in the project area. Ongoing studies and the evaluation of historical data suggest that portions of the lease area are used by Atlantic cod for spawning. The southern New England spawning population represents the southernmost spawning contingent of this species along the Atlantic coast and contributes to the availability of the species throughout Southern New England waters. Recent information indicates these fish comprise a genetically distinct spawning population. The protection of this spawning population enhances genetic diversity and may increase the potential for the species as a whole to adapt to climate change. As discussed above, Atlantic cod spawn in southern New England between November and April. Spawning aggregations can be easily disturbed by in water activities and disruptions to spawning aggregations may affect reproductive success, which could result in significant long-term effects to the stock, particularly if construction activities occur during spawning periods over multiple seasons. The NEPA document should fully evaluate potential impacts of project construction and operation on Atlantic cod, including potential impacts to early life stages (e.g. habitats that support early stage juveniles after they

settle to the bottom) and spawning activity from pile driving and ground disturbing activities, as well as the cumulative population level effects that may occur as a result of construction timing over multiple seasons. Further, the proposed OCS will result in both entrainment and impingement impacts as well as heated effluent discharges that may adversely affect planktonic stage Atlantic cod eggs and larvae. Specific measures to avoid and minimize these impacts should also be analyzed and discussed in the NEPA document.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In addition to Atlantic cod, spawning activity and sensitive life stages (eggs, larvae and juveniles) of other managed species are present throughout both the lease area and export cable corridor. The EIS should discuss impacts to sensitive life stages that may be more vulnerable to impacts. For example, both winter flounder and longfin squid (two species with designated EFH in the project area) have demersal eggs found within the project area and export cable corridor that are particularly vulnerable to sedimentation and burial. The COP notes that nearly 5,300 acres may experience up to 10 mm of additional sediment build up following construction activities, which could result in mortality for demersal eggs such as those laid by longfin squid within the project area and along the export cable corridor. Similar to cod, squid demonstrate spawning migration to the same areas each year and elaborate spawning behavior that can be disrupted by noise and particle movement. As proposed, construction of cables is expected to occur in Quarters 2 and 4 during peak squid spawning season, while foundation installation is expected to occur during Quarters 3 and 4 and overlap with the peak cod spawning season. These activities would have detrimental impacts to these important species and should be thoroughly evaluated in the EIS, including measures to minimize impacts to these species and their habitats sessile shellfish species may also be more vulnerable to project impacts. Potential impacts of the project on vulnerable life stages, including potential impacts to recruitment, should be discussed in detail and specific measures for avoiding and minimizing impacts should be identified in the document.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The MSA requires federal agencies to consult with the Secretary of Commerce, through NMFS, with respect to “any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any essential fish habitat identified under this Act,” 16 U.S.C. § 1855(b)(2). This process is guided by the requirements of our EFH regulation at 50 CFR 600.905. Pursuant to the MSA, each FMP must identify and

describe EFH for the managed fishery, and the statute defines EFH as “those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity” 16 U.S.C. § 1853(a)(7) and § 1802(10). NOAA’s regulations further define EFH adding, “waters” include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; “substrate” includes sediment, hard bottom, structures underlying the waters, and associated biological communities; “necessary” means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and “spawning, breeding, feeding, or growth to maturity” covers a species' full life cycle.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EFH final rule published in the Federal Register on January 17, 2002, defines an adverse effect as: “any impact which reduces the quality and/or quantity of EFH.” The rule further states that: An adverse effect may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat and other ecosystems components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from action occurring within EFH or outside EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. As stated above, adverse impacts to EFH may result from actions occurring within or outside of areas designated as EFH. In addition, the EFH final rule also states that the loss of prey may have an adverse effect on EFH and managed species. As a result, actions that reduce the availability of prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat may also be considered adverse effects on EFH. The EFH regulations state that for any Federal action that may adversely affect EFH, Federal agencies must provide NMFS with a written assessment of the effects of that action on EFH (50 CFR 600.920(e)). This EFH Assessment should include analyses of all potential impacts, including temporary and permanent and direct and indirect individual, cumulative, and synergistic impacts of the proposed project.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EFH assessment must contain the following mandatory elements: (i) a description of the action, (ii) an analysis of the potential adverse effects of the action on EFH and the managed species, (iii) the federal agency’s conclusions regarding the effects of the action on EFH, and (iv) proposed mitigation, if applicable (50 CFR 600.920(e)(3)). Due to the potential for substantial

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adverse effects to EFH from the proposed project, an expanded EFH consultation as described in 50 CFR 600.920(f) is necessary for this project. As part of the expanded EFH consultation, the EFH Assessment for the proposed project, the assessment should also contain additional information, including: (i) the results of an on-site inspection to evaluate the habitat and the site specific effects of the project, (ii) the views of recognized experts on the habitat or species that may be affected, (iii) a review of pertinent literature and related information, (iv) an analysis of alternatives to the action, and (v) other relevant information.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We understand you permit the use of a Project Design Envelope (PDE) in the preparation of a COP, and the NEPA document will focus on analysis of the maximum impacts that would occur from the range of design parameters. However, for purposes of the EFH consultation, the EFH Assessment should be consistent with the EFH regulations under the MSA. Specifically, you are required to include in your assessment an analysis of the potential adverse effects on designated EFH, including the site-specific effects of the project, and measures that can be taken to avoid, minimize, or offset such effects (CFR 600.920(d-e)). You must assess the potential adverse impacts that would occur as a result of the range of design parameters under consideration in the PDE, rather than a maximum impact scenario. Of particular concern is the adequacy of the habitat information that will be provided in the EFH assessment. Accurate characterization and delineation of habitats within the project area is a critical component of the EFH assessment and a prerequisite for meaningful and appropriate EFH conservation recommendations to be developed for incorporation into the project. Should the EFH assessment provide insufficient details to assess impacts of the project, we may determine that the assessment is incomplete and that consultation under the MSA cannot be initiated, or we may provide precautionary conservation recommendations based upon the level of information and analysis available.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

To help ensure adequate information to initiate the EFH consultation, the expanded EFH Assessment should include full delineation, enumeration, and characterization of all habitat types in the project area including the lease areas, cable corridors and landing sites. Particular attention should be paid to HAPCs, sensitive life stages of species, ecologically sensitive habitats, and difficult-to-replace habitats such as natural hard bottom substrates, particularly substrates with attached macroalgae and epifauna (including corals), SAV, and shellfish habitat and reefs. The habitat mapping data should also be shared directly with us in usable GIS format for review,

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apart from the body of the EFH Assessment and maps and figures contained therein. To aid BOEM and project applicants in the development of comprehensive and complete EFH Assessments, we have published our Recommendations for Mapping Fish Habitat 11, dated March 2021. This document is an updated version, which was previously submitted to you on May 27, 2020. To further streamline the consultation process, we also shared a technical assistance document with you in January of 2021, titled Essential Fish Habitat (EFH) Information Needs for Offshore Wind Energy Projects in the Atlantic which provides a checklist of information that should be incorporated into the EFH Assessment.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

As stated in our habitat mapping recommendations, EFH checklist, and through regular communication with you, early coordination in the consultation process, particularly for projects at the size and scale of offshore wind development, is essential. We are concerned about the limited early coordination and communication for the Sunrise Wind project, particularly related to habitat mapping and data collection prior to initial benthic sampling in this unique habitat area. While some coordination has occurred subsequent to the initial sampling, there has been limited coordination and data sharing subsequent to follow-up surveys. As we have previously discussed, early coordination on proposed habitat mapping procedures, including: 1) data collection (sampling design and methodologies); 2) data processing and interpretation (including habitat characterization); and 3) the development of maps that accurately delineate fish habitat, benefits all parties and will help avoid unnecessary delays in project development and consultations. It is critical that the data being collected can be used to accurately characterize and delineate fish habitat within the lease area and cable corridors to ensure we can differentiate and distinguish between, and within, areas of sensitive and complex habitats to provide appropriate conservation recommendations. This is particularly important for an area such as Cox Ledge which is dominated by complex habitats and unique features. Accurate characterization of these complex habitats and features at a fine scale will be critical to ensure our recommendations are appropriate and feasible. As we have discussed previously, early coordination and sharing of collected data is critical to ensure we can provide constructive feedback and identify any concerns early in the process to help avoid delays in the review process. Moving forward with habitat mapping efforts without appropriate coordination may result in the need for additional field seasons/sampling to collect and interpret additional data to accurately map fish habitat for consultation purposes. Coordination with us prior to finalizing the delineations and characterization of the new data will streamline project review and allow us to provide the most appropriate EFH conservation recommendations. Continuing to move forward with habitat mapping efforts without appropriate coordination may result in the need for additional field seasons/sampling to collect and interpret additional data to accurately map fish habitat for consultation purposes.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In the absence of fine-scale and accurate fish habitat characterization and delineation, we must take a conservative approach to our assessment of project impacts and development of conservation recommendations for the project. Given the complexity of habitat in the project area and in consideration of the time necessary for reviewing such technical information, we request all data related to habitat mapping (acoustic survey results, seafloor sampling data, GIS data, figures/maps, etc.) be shared with us as soon as practicable (once it is processed), so we can begin reviewing and providing comments, which will allow for more streamlined project review and consultation.

**A-2.15. Marine Mammals**

**Comment Number:** BOEM-2021-0052-EMAIL-093021-0003

**Government Agency:** Massachusetts Office of Coastal Zone Management

**Commenter:** Lisa Berry Engler

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should describe the results of recent marine mammal surveys in relation to the project footprint and describe what actions will be taken to prevent vessel strikes during pre-construction surveys, construction activity, and operations. The EIS should also describe what techniques will be used to mitigate sound impacts to marine mammals during the installation of the wind turbine bases and monopiles. As with fisheries research, the EIS should describe how Sunrise Wind is working with other offshore wind developers and the broader research community to share information so that agencies and the public can better understand and mitigate for regional impacts to marine mammals that are associated with the construction or operation of offshore wind energy turbines

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0006

**Organization:** Mystic Aquarium

**Commenter:** Katie Cubina

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

One of our key research focused areas is on the impact of anthropogenic stressors on marine mammals and our research team is very eager to be engaged in the process of looking at preconstruction, construction and post construction, and the potential impacts on marine mammals and how to best mitigate those impacts.

**Comment Number:** BOEM-2021-0052-DRAFT-0061  
**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM's assessment of potential project specific and cumulative impacts to marine mammals, including the critically endangered North Atlantic Right Whale, must consider the most up-to-date information concerning the seasonal abundance and distribution of these animals.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-060  
**Organization:** Sierra Club  
**Commenter:** Manjula Menon  
**Commenter Type:** Individual

**Comment Excerpt Text:**

Please do ensure that our wildlife is not adversely impacted by this project..especially our marine wildlife as this project will be offshore

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The importance of the area south of the islands to NARWs should require strong consideration of whether these areas are appropriate for future offshore wind development.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Proposed offshore wind projects need to consider, avoid, and mitigate effects to protected species, particularly on the critically endangered NARW to ensure that wind development will not come at the expense of the species. NARWs spend the majority of the year in the waters of New England and Eastern Canada with mothers migrating south seasonally to have calves in the U.S. SE region. Wind development in persistent aggregation habitats and calving grounds pose the greatest concern and those areas where NARWs spend less time are likely more appropriate because of the reduced frequency, intensity, and duration of interactions with potential offshore wind development. As offshore wind is developed along the eastern seaboard, strong measures and regulations are needed to protect this critically endangered species.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

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**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The NARWs travel from Canada to Florida on a regular basis. The NARW calves are born in southern waters and they travel north to feed, aggregate, socialize and grow in seasonally important areas including Cape Cod Bay, the Great South Channel, and more recently the Gulf of St. Lawrence. Predicting NARW abundance and presence is the subject of considerable research but remains difficult. Regardless, the agencies must include alternatives in the EIS to avoid known or predicted NARW habitats, not just in seasonal construction mitigation but outright avoidance of the area.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In the years since the leasing process was completed for the MA/RI WEA, NARWs have shifted their aggregation and feeding areas. Because of this shift the region south of Nantucket and Martha's Vineyard is now considered a year-round "core habitat" for foraging NARWs where up to 100 whales have been seen during aerial surveys in recent years.<sup>9</sup> Additionally, new research has demonstrated that since 2017, NARWs have been sighted in wind energy development areas off Massachusetts and Rhode Island nearly every month, with sightings being most common between late winter and spring. In fact, model outputs suggest that around 23% of the entire species is present in these areas between late winter and spring.<sup>10</sup> The importance of this area cannot and should not be underestimated.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

High resolution geophysical (HRG) surveys are an essential part of offshore wind development but have noted environmental effects on the marine ecosystem. As such, the EIS should include a range of alternatives to prohibit HRG surveys during seasons when protected species are known to be present in the project area, in addition to any dynamic restrictions due to the presence of NARW or other endangered species. Additionally, the EIS should include alternatives that require clearance zones for NARWs that extend at least 1,000 meters with requirements for HRG survey vessels to use Protected Species Observers (PSOs) and Passive Acoustic Monitoring (PAM) to establish and monitor these zones and to cease surveys if a NARW enters the clearance zone. When safe to begin, HRG surveys should use a soft start, ramp-up procedure to encourage any nearby marine life to leave the area.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS must include alternatives to schedule and complete construction activities to minimize interactions with migratory species, spawning, feeding aggregations and breeding activity and specific seasonal and reactive restrictions on construction activity during times when NARWs and other protected species may be present.

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**Comment Number:** BOEM-2021-0052-DRAFT-0068  
**Organization:** Sakonnet Point Fisheries LLC  
**Commenter:** Greg Mataronas  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In addition, there has been very minimal concern for marine mammals and other protected species. Vineyard Wind's first project was granted 20 Level B "takes" for the North Atlantic Right Whale (NARW) during construction (and will be given as many as necessary for operation because there will be no choice once constructed). There is no actual, certain way to determine all of the Level B "takes" that will occur and therefore this number might as well be unlimited. What happens when construction alters the migratory routes of nearly all of the 368 NARWs, or the 200 that annually migrate in search of food? This is technically 368 Level B takes (or 200 depending on how many choose to migrate).

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**Comment Number:** BOEM-2021-0052-DRAFT-0068  
**Organization:** Sakonnet Point Fisheries LLC  
**Commenter:** Greg Mataronas  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Construction and the tremendous sound pressure are going to interfere with NARW communications, with their migratory routes, and feeding grounds. The level of sound impacts are known to be lethal to nearby zooplankton and therefore the copepods that NARWs seek for sustenance will no longer be present, which will result in much longer migrations in search of food. This will serve to further decline the health of each individual whale which reduces reproductive success. These will also be Level B "takes" that may be the precursor to Level A "takes". But there will most likely be no linkage of the detrimental effects of wind farms on NARWS and their survival so this will not be assigned to wind farms.

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**Comment Number:** BOEM-2021-0052-DRAFT-0068  
**Organization:** Sakonnet Point Fisheries LLC  
**Commenter:** Greg Mataronas

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The WEA that Sunrise Wind is in is critically important habitat to NARW (and many other protected species). This has not been fully taken into consideration at all. The fishing industry is under tremendous pressure and regulations to conserve NARWs and just received a closed area that encompasses the entire WEA. This is hypocritical at best; a death knell to NARWs at worst. It also makes no sense in terms of trying to conserve RWs. More research needs to be done on the impacts of Sunrise Wind to ALL species that use this area. Ecosystem based approaches should be used instead of the piece-meal approach that is currently used.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0001

**Organization:** OR Energy

**Commenter:** George Povall

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

we know that we have a tremendous problem right now with the loss of right whales. And it's absolutely imperative that this process takes into account protecting them as much as is completely possible. Having said that, we cannot save right whales from A minor offshore wind process when the things that have been killing off the right whales which are climate change and other unregulated industries, are not taken into consideration. And so I'm not advocating for no commitment to be made to protecting them. I'm actually saying the opposite. We need to fully protect them and we need to make sure all other industries are brought in and held to the same account that offshore wind is going to be held to to protect them.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Pile driving and other potential impacts to protected marine species. The potential project specific and cumulative impacts of offshore wind development on marine mammals (including but not limited to the critically endangered North Atlantic Right Whale) remains a top factor of concern. In addition to risk of collision at all phases of the project, much of the concern has so far centered on the potential impacts during the construction phase of the project from pile driving. It is disappointing that the Sunrise Team's Construction and Operation Plan does not include an option for non-pile driven foundations in their project design envelope. Noise generated from driving massive piles travels tens of kilometers with potential impacts to many taxa of marine life. It is thus incumbent upon BOEM to fully assess the potential project specific and cumulative impacts of driving large numbers of massive piles hundreds of feet into the seabed. Minimizing acute and cumulative pile driving noise impacts to the greatest extent possible using the best technology available is of critical importance for the successful buildout of all the offshore wind energy projects proposed to date. BOEM and developers should invest in

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monitoring and public dissemination of results of noise and noise mitigation monitoring from the first projects in the construction pipeline and apply lessons learned to improve the effectiveness of mitigation as subsequent projects, including Sunrise Wind, progress.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts to marine mammals (Section III.F): BOEM must consider the full range of potential impacts on all fourteen marine mammal species that occur regularly in the Project Area and to protect the critically endangered North Atlantic right whale from additional harmful impacts of human activities. ○ BOEM’s impact analyses must account for year-round presence of North Atlantic right whales in the Project Area, which represents important habitat for socializing (including mating behavior) and feeding North Atlantic right whales. ○ BOEM should work with the National Marine Fisheries Service and other relevant agencies, experts, and stakeholders towards developing a robust and effective near real-time monitoring and mitigation system for North Atlantic right whales and other endangered and protected species. ○ BOEM should prohibit pile driving during times of highest risk for North Atlantic right whales, set diel restrictions on pile driving, require protective clearance zones and shutdown requirements, and require all vessels to adhere to a 10-knot speed restriction (see Section III.F.4.a for more detailed recommendations). ○ BOEM’s cumulative impacts assessment for marine mammals should include the risk to marine mammals of increased vessel activity associated with offshore wind development, analyze large-scale habitat displacement for North Atlantic right whales, and consider how large-scale build out of offshore wind could affect the marine mammal prey base.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Project Area represents important habitat for socializing and feeding right whales. Protection of North Atlantic right whale foraging and mating habitat is essential, and further research to determine whether North Atlantic right whales are currently engaging in these behaviors should be undertaken during site assessment. Elevated numbers of humpback whales have also been found stranded along the Atlantic Coast since January 2016 and, in a little over five years, 152 humpback whale mortalities have been recorded (data through 20 September 2021) with strandings occurring in every state along the East Coast.<sup>211</sup> Partial or full necropsy examinations have been conducted on approximately half of the stranded animals and a significant portion showed evidence of pre-mortem vessel strikes. Harbor porpoises also require special attention during offshore wind energy development because of their extreme sensitivity to noise. Harbor porpoises are substantially more susceptible to temporary threshold shift (i.e., hearing loss) from low-frequency pulsed sound than are other cetacean species that have thus far been tested. High-amplitude pile driving noise may also negatively affect harbor porpoise foraging by decreasing

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their catch success rate and increasing the termination rate of their fish-catching attempts. Considering the elevated threat to federally protected large whale species and populations in the Atlantic, emerging evidence of dynamic shifts in the distribution of large whale habitat, and acoustic sensitivity of the harbor porpoise, BOEM must ensure that any potential stressors posed by site assessment activities on affected species and stocks are avoided, minimized, mitigated, and monitored to the full extent possible. Vessel strikes are one of the two main factors driving the North Atlantic right whale to extinction. Offshore wind development will result in a marked increase in vessel activity. Data are readily available (e.g., on the Northeast Ocean Data Portal<sup>265</sup>) to undertake a quantitative analysis of additional vessel strike risk posed by vessels associated with the offshore wind industry, locations of the primary route between ports and WEAs, and marine mammal occurrence and density). We encourage BOEM to undertake this quantitative analysis to provide a more robust analysis in its future environmental impact statements.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Discuss seasonal distribution, abundance, and migration routes, incorporating recent research such as aerial and acoustic monitoring.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate impacts from construction, pile driving and vessel traffic (i.e., vessel strikes and alteration of migratory patterns). Discuss behavior and physiological impacts from noise and EMF. SEA TURTLES Discuss behavior and physiological impacts from vessel traffic, noise, foundation lighting and EMF.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

As the EIS is developed, specificity between species groups (e.g., low frequency vs. mid frequency cetaceans) of marine mammals and sea turtles should be incorporated. A broad grouping approach (e.g., all marine mammals) creates uncertainty and gaps in the analysis and does not fully represent the variability of impacts amongst different taxa. As species within these taxa have different life histories, biology, hearing capabilities, behavioral and habitat use patterns, distribution, etc., project effects may not have the same degree of impact across all species. Thus, the impact conclusions (e.g., minor, moderate, major) are clearer and better supported if the document describes the degree of impacts to each species (e.g., green sea turtle vs. hawksbill) or groups of species (e.g., mysticetes, odontocetes, pinnipeds).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Additionally, for some marine mammal species (e.g., harbor porpoise), data from European wind farms can be used to support each determination. This approach also allows the analysis to better identify the ability of those species or groups to compensate when exposed to stressors and better identify the benefit from mitigation and monitoring measures. This approach would ensure the analysis reduces uncertainty and reflects the best available scientific information. Also, wherever possible, we encourage you to identify effects to individuals (e.g., injury, behavioral disturbance, disrupted foraging), as well as impacts at the population level.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

All relevant impact producing factors affecting marine resources should be evaluated, including, but not limited to, elevated noise levels, increased vessel traffic, turbidity and sedimentation, electromagnetic fields (EMF), habitat alteration, presence of structures (WTGs, substations, and cables), and localized changes in currents.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Note that nothing but the most stringent protective measures will be adequate to prevent the Critically Endangered North Atlantic right whale from certain extinction. NARW cannot withstand even a single vessel strike or a single entanglement per year if it is to survive.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Marine mammals have important roles in marine ecosystems both as predators and as prey sources for larger marine mammals and sharks. Members of three of the four taxonomic groups of marine mammals are found in the northeast and mid-Atlantic marine environments: cetaceans (whales, dolphins, and porpoises), pinnipeds (seals), and sirenians (manatees). These species “exhibit a wide range of behaviors, varying social structures, and differences in social information use. Human impacts on marine mammals and their environments are ubiquitous; from chemical and noise pollution, to marine debris, prey depletion, and ocean acidification.”<sup>81</sup> Now they face yet another new threat in the form of massive offshore wind energy projects being installed within their migratory routes and which also impact nearshore, coastal and surrounding terrestrial environments. “As a result, no marine mammal populations remain entirely unaffected by human activities. Conservation may be hindered by an inadequate understanding of the behavioral ecology of some of these species.”<sup>82</sup> The EIS must consider the full range of potential impacts of SW project activities, cumulatively with those of all regional and coast-wide OSW projects, and climate crisis impacts on marine mammals all which are protected by the MMPA. Further consideration must be given to the conservation of ESA-listed species by developing and implementing the most robust strategies to avoid, minimize, and mitigate all potential adverse impacts, and monitoring the efficacy of these strategies throughout the life of the project. An integrated comprehensive ecosystem approach is needed and must be required to protect all resident and migratory species whose spatiotemporal presence in SW area do not overlap with each other. Numerous marine mammal species are known to be present in SW area at variable frequencies with differing spatiotemporal profiles.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

the EIS must:

- incorporate all available data including aerial survey records<sup>85</sup> available through sightings databases (e.g. NMFS Right Whale Sighting Advisory System;<sup>86</sup> Northeast Fisheries Science Center Monthly Dynamic Management Areas (DMA) analysis<sup>87</sup>) and passive acoustic monitoring data (e.g. Robots4Whales detections,<sup>88</sup> Acoustic Right Whale Occurrence,<sup>89</sup> large whale acoustics<sup>90</sup>) for accurate estimation of population densities and seasonal presence.
- consider the use of all emerging and established monitoring technologies (e.g. unmanned acoustic gliders<sup>91</sup>, Robots4Whales<sup>92</sup>) that allow near real-time detection of protected species and share the data with experts (e.g. “Mysticetus”<sup>93</sup>) to inform adaptive management and near real-time mitigation action.
- include a quantitative analysis of vessel strike risk posed by OSW vessels (i.e. total number of vessels, proportion of vessels associated with reasonably foreseeable OSW activities, locations of the primary route between ports and OSW project areas, and marine

mammal occurrence and density) using all available data (e.g. on the Mid-Atlantic Data Portal<sup>94</sup>). • include a comprehensive quantitative analysis of cumulative impacts on listed marine mammals expected from SW and other OSW projects/activities in the region, relative to the baseline level. The analysis must quantify the percentage of NARW population potentially exposed to conceivable impacts from OSW development on an annual basis<sup>95</sup> and, as a worse-case scenario, the potential impact on population viability from a permanent loss of foraging and other habitat within SW area. • evaluate the potential risk of habitat displacement all along the East Coast in terms of extinction risk of listed migratory mammals like NARW. The cumulative analysis must also examine the large-scale habitat displacement and the additional energy expenditure by NARW if it were to avoid all lease areas expected to be developed during their migration. This is particularly important in light of new data indicating the need for NARW to undertake efficient and uninterrupted foraging to maintain their energy budget.<sup>96</sup> The energetic implications of displacement of pregnant females during their southern migration (e.g. offshore into the Gulf Stream) must also be taken into consideration. Since 2010, North Atlantic right whale distribution and habitat use has shifted in response to climate change-driven shifts in prey availability.<sup>97</sup> Best available scientific information, including regional shipboard and aerial surveys,<sup>98,99</sup> acoustic detections,<sup>100,101,102</sup> photo-identification data,<sup>103</sup> stranding data,<sup>104</sup> a series of DMAs declared by NMFS pursuant to ship strike rule,<sup>105</sup> and prey data,<sup>106</sup> indicate that NARW now rely heavily on the waters of SW area nearly all year-round. Foraging areas with suitable prey density are limited relative to the overall distribution of the 356 North Atlantic right whales, and an ever decreasing amount of habitat is available for resting, pregnant, and lactating females.<sup>107</sup>

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The impact producing factors (IPFs) of SW project activities arise from the use of marine vessels, vehicles, aircraft, and heavy equipment, high resolution geophysical (HRG) and geotechnical surveys (to characterize benthic and subsurface conditions), seafloor preparation (clearing, grading, trenching), scour protection, protection of cables, installation of foundations for wind turbine generators (WTGs) and offshore substations or electrical service platforms (ESPs), foundation pile driving, vessel anchoring, cable routing, foundation removal, and WTG disassembly. The threats to marine species posed by these IPFs include: vessel and vehicle collisions which can cause injury and death, underwater noise, seafloor/land disturbance, and new electromagnetic fields (EMFs) which cause stress, behavioral changes, habitat avoidance secondary entanglement of predatory species on submarine cables, habitat alteration (new underwater and above water structures, altered seafloor topography through permanent conversion of existing soft-bottom habitat to hard substrate habitat, changing hydrodynamics, electromagnetic fields (EMFs), operational noise of WTGs, etc.) resulting in displacement/avoidance, and changes in prey distribution/availability. Water pollution (sediment suspension and deposition, discharges/releases of chemicals, trash, and debris, etc.) potentially resulting in starvation and death.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

focus on the actual risk to the animals and not on “relative risk” when analyzing impacts to marine mammals from vessel strikes • require SW and all OSW developers as part of the permitting process to reduce speed of all project-associated vessels of all sizes to  $\leq 10$  knots at all times and locations (i.e., transiting to/from the project area) except in those circumstances where the best available scientific information demonstrates that NARW and other marine mammals do not use the area. Vessel stationed PSOs could provide additional benefit in reliably detecting whales but only if the vessel is traveling at slow speeds (i.e.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

require training of all personnel working offshore on observing and identifying NARW and other large marine mammals. • require vessels to maintain a separation distances of 500 meters (m) for NARW, maintain a vigilant watch for NARW and other large marine mammals, and slow down or maneuver their vessels as appropriate to avoid potential collision with any large marine wildlife • require all service operating vessels to carry automated thermal detection systems. Underwater noise reduction

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Monitoring requirements • partner with NMFS, other relevant agencies, and science and technology experts to develop a robust and effective a long-term scientific plan: a. to understand baseline environmental conditions prior to utility-scale OSW development off any US coast, b. for continued monitoring of environmental conditions in project area, c. for continued real-time monitoring of NARW and other marine mammals, d. to formulate avoidance/mitigation strategies based on scientific recommendations.<sup>118</sup> These strategies are essential to adaptive management of NARW and other protected species while affording operational flexibility to OSW developers. The SW project could set a precedent for the most protective mitigation measures to be used for future OSW development. use scientifically valid real-time monitoring system and mitigation protocol for NARW and other large marine mammals to dynamically manage the timing of pile driving and other construction activities to ensure those activities are undertaken during times of lowest risk

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

extend seasonal restrictions to those times of the year when at-risk species other than NARW are present and schedule construction activities around the presence of these species. The best available scientific information validates the use of seasonal restrictions to temporally suspend OSW activity when NARW are likely present, but it is becoming increasingly clear that there may not be a time of “low risk” for this species. Climate-driven changes in oceanographic conditions and resulting shifts in prey distribution are rapidly changing the spatial and temporal patterns of habitat use of NARW and other large whale species.119 BOEM/NMF’s seasonal restrictions in NARW foraging areas (e.g. off southern New England including SW area) might afford them some protection but as discussed in Section 5.2, there are other endangered species (other mammals and sea turtles) that are present in SW area when NARW are not.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

prohibit pile driving: — during periods of highest risk (to NARW and other listed marine mammals) defined as times of highest relative density of individuals during their migration, and times when mother-calf pairs, pregnant females, surface active groups (indicative of breeding or social behavior), or aggregations of three or more individuals (indicative of feeding or social behavior) are present or expected to be present as indicated by the best available science at the time of the activity. — from being initiated within 1.5 hours of civil sunset or in times of low visibility when visual clearance and exclusion zones cannot be visually monitored by PSOs, if there is acoustic detection within the acoustic clearance zone or visual detection within the visual clearance zone of NARW • require shut down of pile driving activities if there is visual detection of NARW within the visual exclusion zone or acoustic detection within the acoustic exclusion zone, or sighting by PSOs at any distance from the pile • allow paused pile driving to resume only after the lead PSO confirms no NARW have been detected within the acoustic and visual clearance zones or to continue after dark only if the activity commenced during daylight hours and must proceed for human safety or installation feasibility reasons.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

set a visual clearance zone and an exclusion zone extending at least 5,000 m in all directions from the location of the driven pile. • require monitoring of the visual clearance and exclusion

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zone by vessel-based PSOs stationed at the pile driving site and on additional vessels, as appropriate, during pre-clearance monitoring period and during pile driving activity • require the presence of at least 4 vessel-based NOAA-certified PSOs following a two-on, two-off rotation, each responsible for scanning no more than 180° of the horizon per pile driving location. Additional vessels must survey the clearance and exclusion zones at speeds of ≤10 knots. Consider deployment of additional observers and monitoring technologies (e.g. infrared, drones, hydrophones) to ensure comprehensive monitoring of clearance zones.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

As part of our review, we must also determine if your EIS meets the requirements of 40 CFR Part 1500-1508, specifically basic requirements for an EIS as described in 40 CFR 1502. Therefore, the EIS must contain an adequate evaluation of the impacts on all marine mammals that may be present in the project area. In order to take a requisite “hard look” at environmental impacts, the analysis should consider the affected environment and degree of impact on each resource which involves an evaluation of direct and indirect effects, as well cumulative effects; the duration of the impact; whether it is beneficial or adverse and the geographic scale in which the action is occurring (e.g., local, regional). Specifically, the EIS must include an analysis of the impacts of elevated underwater noise on marine mammals resulting from pile driving, site characterization surveys, and other project-related activities; the risk of vessel strike due to increases in vessel traffic and/or changes in vessel traffic patterns; any activities that may increase the risk of entanglement; any activities that may result in the displacement of individuals or changes to migratory behavior; any activities that may result in altered prey assemblages or changes in feeding behavior; and any other activities that may result in harassment, injury, or mortality to marine mammals. For specific marine mammal issues, we refer you to the discussion on marine mammals in the ESA section above. We note because all marine mammals are protected under the MMPA, those comments apply to all marine mammal species. We specifically recommend that the analysis of impacts on marine mammals and corresponding significance determinations be separated by species group (i.e., mysticetes, odontocetes, and pinnipeds). For the noise impacts analysis, we recommend a similar approach using the hearing groups identified in NMFS’ Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (NMFS, 2018).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Through the EIS, you should consider requiring the development of minimization and monitoring measures that minimize the risk of exposure to potentially harassing or injurious levels of noise to marine mammals, sea turtles, and Atlantic sturgeon. Mitigation measures should be required during pile driving that will act to reduce the intensity and extent of underwater noise and avoid exposure of listed species to noise that could result in injury or behavioral disturbance. The use of protected species observers to establish and monitor clearance zones prior to pile driving is essential and project scheduling should take into account the need for adequate visibility during the pre-pile driving clearance period, as well as for the duration of pile driving activities. Real-time and archival passive acoustic monitoring should also be used as a secondary detection/monitoring system during construction, to increase situational awareness in vessel corridors and around the project area, and to monitor the distribution of marine mammals in the lease area during construction and operations. We encourage you to work with Sunrise Wind to develop a project schedule that minimizes potential impacts to North Atlantic right whales. Specifically, you should consider time of year restrictions for pile driving that would avoid pile driving during the months when the density of North Atlantic right whales is highest in the lease area and the development of robust measures for other times of year that would minimize the exposure of right whales to noise that could result in behavioral disturbance (e.g., requirements for use of best available sound reduction technology, consideration of reduced hammer energy, etc.). You will also need to carefully consider recent information on the use of the MA/RI and MA Wind Energy Areas by North Atlantic right whales and the increased seasonal use of these areas documented in recent years. This includes recent analyses which identify areas overlapping the Sunrise Wind lease area as hotspots for right whales during the spring season, with records of feeding and social behavior (Quintana-Rizzo et al. 2021).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Marine mammal responses to sound can be highly variable, depending on the individual hearing sensitivity of the animal, the behavioral or motivational state at the time of exposure, past exposure to the noise which may have caused habituation or sensitization, demographic factors, habitat characteristics, environmental factors that affect sound transmission, and non-acoustic characteristics of the sound source, such as whether it is stationary or moving (NRC 2003)7. While BOEM and Sunrise Wind will need to consider effects to all listed species, given the imperiled status of North Atlantic right whales, implementing measures to ensure that no right whales are injured or killed as a result of the Sunrise Wind project is critical. We note that given the rapid pace of development of the lease blocks adjacent to the Sunrise Wind project and continued uncertainty surrounding construction schedules, consideration of the potential for overlapping construction periods (e.g., construction in multiple, adjacent leases in the same season) will be essential. Mitigation measures should also be included that minimize the risk of vessel strike for whales, sea turtles, and Atlantic sturgeon, including consideration of vessel speed restrictions regardless of vessel size and robust measures to monitor vessel transit routes for North Atlantic right whales, including requirements for use of lookouts, reduced speeds, and

use of PAM and other tools to increase the ability to detect and avoid whales along vessel transit routes. We strongly encourage you to require that vessels of all sizes reduce speeds to 10 knots or less in all Seasonal Management Areas and Slow Zones, including Slow Zones triggered by acoustic detections of North Atlantic right whales. Recent events and new information (see, <https://doi.org/10.1111/mms.12745>) demonstrate that large whales are susceptible to lethal vessel strikes from vessels of all sizes. Any surveys or monitoring that are carried out related to the project (e.g., gillnet or trap surveys to document fisheries resources) must carefully consider the effects to North Atlantic right whales and other ESA-listed species, and mitigation measures should be considered to eliminate the potential for entanglement of whales and to minimize risk to sea turtles and Atlantic sturgeon during such activities.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The section describing the “Affected Environment” for protected species should include information on the seasonal abundance and distribution of marine mammals, sea turtles, ESA-listed marine fish, anticipated habitat uses (e.g., foraging, migrating), threats, and the habitats and prey these species depend on throughout the area that may be directly or indirectly impacted by the project. The status of marine mammal stocks (see our stock status reports<sup>1</sup>), population trends, and threats should also be identified. Similar information should also be provided for all ESA listed species (see relevant status reviews on our ESA Species Directory, <https://www.fisheries.noaa.gov/species-directory/threatened-endangered>).<sup>2</sup>

## **A-2.16. Mitigation and Monitoring**

**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM should require applicants to provide detailed plans and commitment to pre- and post-construction monitoring of vulnerable marine and avian life. Such plans should include consideration of the merits and efficacy of establishing an applicant sourced mitigation fund as a measure to provide appropriate compensation for potential adverse environment impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The project scope should maintain a level of flexibility that allows for subsequent local input to be factored into plans for avoiding, minimizing and/or mitigating potential impacts to natural resources stemming from cable landing and nearshore/onshore activities within state and local jurisdictions.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM should establish an adaptive management process that enables decisions concerning later phases of this project and future projects to be readily informed and or revisited when the best available science changes based to yet to be completed research and monitoring programs, when offshore wind or monitoring technology advances warrant, and/or when the status of vulnerable species, populations, or habitat materially change.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Constructing an industrial facility in public federal waters will have effects on the marine environment. Some of these effects can be forecast and others are uncertain. To ensure effective oversight and administration of this project, the EIS must include a monitoring and research plan conducted transparently by NOAA or an independent party to assess and report the effects of the project on the ocean ecosystem including marine habitats, wildlife, fishery resources and protected species and changes compared to the baseline study. Types of monitoring The monitoring program included in the EIS should include, but should not be limited to, chemical and sonic monitoring, assessment of physical alteration of the seafloor, currents and winds, visual and acoustic surveys for protected species, and biological/ecological surveys for plankton abundance and marine wildlife presence and abundance.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS must also include a detailed plan to respond to unintended and unforeseen effects on the marine environment and marine wildlife. This response plan must include thresholds for modification of the project's scope and duration if these conditions are met. There must also be a threshold for possible decommissioning if the project has unexpected effects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

When SMAs or persistent DMAs cannot be avoided, the most stringent mitigation measures will be required.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

If and when piling installation is permitted the EIS must include alternatives to require both acoustic and visual clearance zones to ensure protected species are not in the affected area. Oceana suggests that the EIS include an acoustic clearance zone that extends at least 5,000m in all directions from the location of the driven pile, including a visual clearance zone that extend at least 5,000m in all directions from the location of the driven pile and an acoustic exclusion zone of at least 2,000 meters from the location of the driven pile. The EIS should include alternatives to specify the means by which these zones will be monitored and enforced

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Acoustic monitoring Acoustic monitoring should be undertaken using near real-time PAM, assuming a detection range of at least 10,000m, should be undertaken from a vessel other than the pile driving vessel, or from a stationary unit, to avoid the hydrophone being masked by construction related noise. PAM should be used during impact pile driving, vibratory pile driving installation of the cofferdam, and HRG surveys. Visual monitoring Visual monitoring should use PSOs stationed at the pile driving site and on additional vessels, as appropriate, to enable monitoring of the entire clearance zone. Each vessel should have a minimum of four PSOs following a two-on, two-off rotation, each responsible for scanning no more than 180 degrees of the horizon per pile driving locations. Similar to the requirements for vessel monitoring, the EIS should also explore requirements to supplement human observer with IR technology and drones, where appropriate. Timing and Prohibitions on Pile Driving Acoustic and visual monitoring should begin at least 60 minutes prior to the commencement or resumption of pile driving and should be conducted throughout the duration of pile driving activity. Visual observation of the Visual Clearance Zone should continue until 30 minutes after pile driving

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana

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**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Because avoidance of protected species is critical, the EIS should include a prohibition on initiating pile driving within 1.5 hours of civil sunset or in times of low visibility when the visual clearance zone cannot be monitored. Oceana understands that in rare circumstances pile driving must proceed after dark for safety reasons. If this occurs the project must notify NMFS with reasons and explanation for exemption and a summary of the frequency of these exceptions must be publicly available to ensure that these are the exception rather than the norm for the project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Despite the best information informing seasonal restriction on construction, it is likely interactions with NARWs will occur in and around the project site. The EIS must include alternatives to use effective reactive restrictions on construction that are triggered by visual or acoustic presence or other means of detection for protected species before or during piling installation. These alternatives should include: - A prohibition on initiating pile driving if a NARW or other protected species is detected by visual or acoustic surveys within the acoustic or visual clearance zones. - A shutdown requirement if a NARW or other protected species is detected in the clearance zones, unless continued pile driving are necessary for safety. If and when this exemption occurs the project must immediately notify NMFS with reasons and explanation for exemption and a summary of the frequency of these exceptions must be publicly available to ensure that these are the exception rather than the norm for the project. - Pile driving may resume after the lead PSO confirms that no NARW or other protected species have been detected within the acoustical and visual clearance zones.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmnt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In addition, we recommend time of year construction restrictions as mitigation measures to reduce impacts to fishery species. Offshore, pile driving restrictions between November and January would help minimize impacts on spawning Atlantic cod. Nearshore, activities that result in sedimentation, including cable laying, should be avoided in times and areas when vulnerable life history stages are present on or near the seabed. For winter flounder, considering eggs, larvae, and early juveniles, times of greatest vulnerability occur between January and May. Longfin squid spawn in the project area during between May and August, and their eggs are vulnerable to as little as 3-4 mm of sedimentation. Overall, the habitat conservation

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recommendations provided by NMFS in June 2021 for South Fork Wind are appropriate to consider for Sunrise Wind as well.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

For all alternatives, the EIS should be clear on which measures to avoid, minimize, or mitigate negative impacts will be required as opposed to discretionary. Only required measures should influence the impacts conclusions in the EIS. Monitoring studies should not be considered environmental protection measures (Section 4-227) as monitoring is not equivalent to mitigation. Avoidance, minimization, and compensation for negative impacts should all be considered, with compensation thoroughly planned for, but used only as a last resort if avoidance or mitigation are not possible or are not achieved. Avoidance should be the first priority.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Neither the COP nor any of the appendices, including the Fisheries Communication Plan (Appendix B), specify the availability of mitigation funds if impacts such as fishing gear loss occur. Mitigation funds must be available to all affected vessels and ocean users who rely on this project area for revenue. The availability of such funds and their influence on impacts determinations should be explained in detail in the EIS.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0001

**Commenter:** Joseph Kommer

**Commenter Type:** Individual

**Comment Excerpt Text:**

It also has to do it sustainably and that most especially because it must achieve a model for the expansion of wind and ocean resources as sources of energy. It is incumbent on both and all the agencies involved to educate the public, to clarify the mission that's involved, and to make sure that it identifies for the public, in as many ways as possible, the costs and sustainability of the project, and to make it clear, of the work that's being done to protect bird species and vital habitats and offshore resources, as well.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0004

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**Organization:** Sea Services North America  
**Commenter:** Gordon Videll  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The reasonable thing for the good of our communities would be to find a way to work together and expect reasonable compensation for commercial fishing clients.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055  
**Organization:** Students of University of San Francisco  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Today, though many large-scale projects of more than 800 MW are on the way, there are still many uncertainties in scientific and technical literature regarding the direct impact of extensive offshore wind farms on the marine environment, avian migration, and wave behaviour. A massive amount of the offshore territory will be under construction roughly at the same time: nearly 760 wind turbines will be drilled into the seafloor. There is no room for doubt about the importance of implementing the Sunrise project. BOEM must commit to driving the frontier of scientific knowledge in the offshore wind energy field, leading other agencies in monitoring, data collection, and data analysis. We maintain the idea that BOEM should account for potential technological changes within the preparation, construction, operation, and decommission time frame. Such actions can be addressed in the EIS through plans on how monitoring and data collection will be conducted, analyzed, disclosed, and distributed, and who will be involved. Perhaps, expanding the already existing U.S. Wind Turbine Database, created by the USGS, beyond location and technical specifics would significantly facilitate data collection and disclosure making the process more transparent [24]. Likewise, BOEM must describe specific actions on how management practices and operation plans will be modified as more insights and comprehension emerge. Adaptive management approach will ensure concerned stakeholders that BOEM can flexibly and promptly react to events that lead to unanticipated environmental impact.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061  
**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As the first set of offshore wind projects proceed and as project specific and regional research and monitoring results become available, BOEM must create a process to appropriately update guidance and even change issued permit conditions based on significant changes in the best available science using an adaptive management approach. While it is possible that adaptive management of this type could result in new requirements or conditions, it is equally likely that new information could result in changing or relaxing of requirements or conditions on later projects based on what is learned from monitoring done as part of the early projects. Results of

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pre-, during-, and post-construction monitoring of early projects could foreseeably begin to inform guidance for projects later in the project pipeline, projects in other regions and/or decommissioning requirements. Thus, standardization of data collection and transparent and timely sharing of research and monitoring results must be a requirement for all mandatory, developer-led research and monitoring efforts, as well as for all research and monitoring supported in part or in whole with federal funding. While there may be an up-front coordination burden of such provisions, these requirements will undoubtedly save time and money by avoiding unnecessarily repeating or duplicating activities and reducing uncertainty that is inherent in comparing the results of studies performed using different methods. As part of its 2020 State of the Science Workshop on Wildlife and Offshore Wind Energy NYSERDA supported seven workgroups that focused on identifying near-term research and monitoring priorities concerning development of fixed foundation offshore wind along the Atlantic outer continental shelf. The seven focal areas were Environmental Change, Fishes and Mobile Invertebrates, Birds, Bats, Sea turtles, Marine Mammals, and Benthos. Reports produced by these workgroups were recently posted at <https://www.nyetwg.com/2020-workgroups>. We strongly encourage BOEM's continued collaboration with the Regional Wildlife Science Entity (RWSE) and the Responsible Offshore Science Alliance (ROSA) for data sharing/hosting/standardization, as well as for prioritization and administration of regional and cumulative impacts research and monitoring that goes beyond and is complimentary to project-specific efforts that may be required as part of permit conditions for Empire Wind and the other project proposals under review. These working group reports represent a strong starting point for BOEM as well as RWSE and ROSA to identify near-term research and monitoring priorities aimed at providing information to inform adaptive management of BOEM's wind farm permitting process.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Sunrise Wind project area is part of the contiguous RI/MA offshore wind area expected to see proposals for full, or near full build out before the end of the decade. Much remains unknown regarding the realization of impacts of this extent of offshore wind energy development on avian species in the United States, and therefore we recommend that BOEM require and participate in pre- and post-construction monitoring of all the projects in this region with standardized protocols and timely dissemination of results. As new information is learned it should be utilized in an adaptive management approach that allows for modification of monitoring plans, conditions on activities, and/or mitigation requirements for latter phases of this project, as well as for projects further behind in the project pipeline.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

In reference to any potential project impacts to fish and invertebrates, or to existing complex fish habitat, we encourage BOEM to evaluate the application of Nature-Based Design of foundation scour protection and cable mattresses as an alternative, as a means of mitigating impacts through intentional habitat enhancement at or adjacent to the potentially impacted sites. We direct BOEM and the Sunrise Wind team to a soon to-be-released report and vendor catalog that The Conservancy is developing with INSPIRE Environmental featuring a description, rationale, and list of U.S. vendors that can provide resources for incorporating Nature-Based Design into scour protection and cable mattresses. This approach intentionally creates habitat for particular assemblages of fish and invertebrates by incorporating their habitat preferences into upfront plans for scour protection design and scour protection materials.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impact Fees Once avoidance, minimization, and mitigation measures have been exhausted through project design, impact fees to compensate for residual damage to regional seafood production must be required as a condition of any future permit. Fishing industry requests and positions regarding impact fees are well documented: RODA and our members have repeatedly urged BOEM for years to coordinate, or at least require development of, an appropriate regional-scale fisheries compensatory mitigation plan. Only very recently has BOEM indicated for the first time that it intends to engage the fishing community in dialogue regarding compensation on a project-specific or cumulative scale. BOEM has an ethical and scientific obligation to recognize a process for developing an impact fees framework only if it is driven by the fishing industry and fisheries science experts in a transparent and participatory manner. As a reminder, compensatory mitigation alone is not sufficient to meet NEPA requirements of avoiding, minimizing, and mitigating impacts to fisheries, nor does its implementation assure that an OSW project has been designed in a way that does not unreasonably interfere with fishing operations. However, customary practice supports compensatory mitigation for fisheries impacts after efforts to minimize and mitigate impacts have been fully employed. From an equity perspective, fishermen are by far the most impacted group with respect to OSW development. Despite this, financial offsets offered to fishermen pale in comparison to those invested by OSW developers, investors, and supporters to other interests. Approaches to impact fees must be developed by an independent party that is not able to be influenced by OSW advocates.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The COP and Fisheries Mitigation Plan (FMP) for Sunrise Wind perpetuate these shortcomings in the following ways. No Definition of Mitigation, Nor Commitments to Its Achievement There

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are no firm commitments in the FMP overall. "Mitigation" is not defined in the FMP, and the activities proposed by Ørsted do not include any actual mitigation measures. Rather, all of the activities in the COP are simply following permitting requirements and BOEM's guidelines. The following do not constitute mitigation measures, although they are often held forth as such: • Adherence to relevant safety or environmental laws; • Simple data collection; and • Communicating project plans to fishermen. There do not appear to be any elements of the Sunrise Wind COP that in fact reduce impacts to fisheries. If Ørsted plans only to follow BOEM's bare minimum requirements and proceed with all of its projects identically, there is no reason for the fishing industry to engage at all. If any mitigation measures are in fact identified and adopted, they must be a condition of permitting to ensure they continue throughout the life of the project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Specific plans for fisheries monitoring must be reviewable and enforceable, both for methodology and study selection. If monitoring studies are not designed around testable hypotheses they hold little to no scientific value. Developers should commit to following advice received from NMFS and state/industry fisheries science experts. They should also commit to following the ROSA guidance on project monitoring, and BOEM must require coordination between lease holders in a region. Sunrise Wind's monitoring plan to date does not indicate that any hypotheses, objectives, and species of interest have been determined. Therefore, no research activity should be considered initiated and there is no benefit in reviewing monitoring plans until objectives are agreed upon. Gear Loss Procedures This topic must be addressed at a regional level under independent authority; it is inappropriate to be handled unilaterally by OSW developers. B.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We take to heart recent requests from BOEM and OSW developers to include specific, actionable requests for fisheries mitigation measures to be included for consideration. Thus RODA recommends, at a minimum, the following alternatives for inclusion in the EIS and anticipate requesting additional specific measures as project plans and permitting develop: • Transit lanes of 4 nm to allow safe transit of all mariners especially in inclement weather • Available technologies and practices for the safety of all mariners operating in the vicinity of the WEA and for minimizing environmental impacts in the following areas: o De-icing o Cable mattressing o Scour protection o Cooling station o Communication at sea o Radar interference o Vessel traffic • Range of cable burial depths • Performing "micrositing" of turbines, cables, substation(s), and CWIS with fishermen • Monitoring fisheries impacts for the life or projects,

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especially changes in larval populations put at risk by the CWIS • Requirements that would minimize the environmental impacts of project decommissioning • No-surface occupancy areas with the lease area, if robust scientific analysis indicates the presence of important spawning and/or habitat areas • Time of year restrictions during construction, operations, and decommissioning • No-build setbacks from any important spawning/habitat areas

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM must ensure that Sunrise Wind undertakes robust monitoring in order to assess impacts and enable adaptive management. As previously noted, offshore wind remains a new technology in the United States and, as such, BOEM must closely monitor the impact of offshore wind construction and operations on marine wildlife and the ocean ecosystem to guide its adaptive management and future development. It is necessary to understand baseline environmental conditions prior to large-scale offshore wind development in the United States so that offshore wind impacts can be clearly understood with relation to pre-development environments. To this end, BOEM must ensure the creation of a robust, long-term scientific plan to monitor the effects of offshore wind development on marine mammals, sea turtles, fish, bats, birds, and other species and their habitats before, during, and after the first large-scale commercial projects are constructed. This monitoring data must be made readily available to stakeholders and the public to help inform future decisions in the growing offshore wind industry and minimize risks associated with offshore development. Without strong monitoring in place, it will not be possible to detect and understand potential impacts and there will be a significant risk of setting an under-protective precedent for offshore wind development. Monitoring must inform and drive future project siting, design, implementation, and mitigation as well as potential changes to existing operations to avoid or minimize negative impacts to wildlife and other natural resources. BOEM must collaborate with state efforts and agencies (e.g., New York State Department of Public Service, New York State Department of Environmental Conservation, New York State Department of State Division of Coastal Resources, Rhode Island Coastal Resources Management Council, and Massachusetts Coastal Zone Management), scientists, non-governmental organizations, the wind industry, and other stakeholders to use information from monitoring and other research and evolving practices and technology to inform cumulative impacts analyses moving forward. Likewise, the Draft EIS must include more specific information related to how monitoring impacts of offshore wind development and operation on wildlife and their habitats will inform management practices as new information becomes available. As monitoring should inform management practices, BOEM must require continued monitoring and employment of adaptive management practices in the Draft EIS as a condition of continued operation and maintenance by Sunrise Wind. This will ensure that BOEM can swiftly minimize damages of unintended or unanticipated impacts to coastal ecosystems or wildlife, as well as inform strategies for future wind projects to avoid potential impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A near real-time monitoring and mitigation approach would also minimize risks posed by North Atlantic right whale seasonal restrictions to other protected species that may be present at high densities at times when North Atlantic right whales are expected to be present in lower numbers (e.g., fin whale foraging that occurs in the summer months east of Montauk Point when North Atlantic right whale presence may be relatively low). It is also of paramount importance that BOEM encourages and promotes adaptive management and robust long-term monitoring to assess impacts as offshore wind energy is developed and operational. This is imperative considering the effects of a changing climate on large whale species and other cumulative anthropogenic stressors.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079  
**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation  
**Commenter:** Eileen Murphy  
**Commenter Type:** State Government

**Comment Excerpt Text:**

Implementing an adaptive management plan and on-going citizen participation throughout construction, operation, and decommissioning, including comprehensive mariner and fishing industry communication plans.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079  
**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation  
**Commenter:** Eileen Murphy  
**Commenter Type:** State Government

**Comment Excerpt Text:**

Site Design and Layout: Evaluate site design and layout considerations to avoid, minimize and mitigate impacts to fishing, vessel traffic, fisheries, benthic resources, etc. Seasonal Construction Windows: Consider time of year and time of day restrictions for protected species. Short Term Construction Related Measures • Discuss measures taken to avoid, minimize and mitigate environmental impacts from short term construction related activities, including but not limited to noise, traffic, etc. • Review proposed Horizontal Directional Drilling (HDD) installation methods, including the potential for inadvertent returns.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079  
**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

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**Commenter:** Eileen Murphy  
**Commenter Type:** State Government

**Comment Excerpt Text:**

Mobilization of the Seabed Resulting in Buried Cable Exposure: • Include a robust siting analysis to avoid dynamic areas with known high seabed mobility. • Discuss mariner notifications of shallow-buried and exposed cables. • Discuss methods to expeditiously repair/rebury cable(s). • Discuss adaptive management if repeated cable exposures occur. Submarine Cable System Burial Plan and Risk Assessment: • Include draft assessment as a COP update prior to Final EIS and BOEM's decision. • Evaluate existing and emerging cable installation techniques to achieve target burial depth for the maximum possible distance. • Discuss secondary cable protection measures and including how impacts have been avoided and minimized to the greatest extent possible. Electromagnetic Fields Reduction Measures: Evaluate methods for reducing EMF to background levels for areas where cable burial is not feasible. Coordination with Mariners: • Develop a Comprehensive Mariner Communications and Notification Plan that addresses all phases of development (Surveys, Construction, Operations, Decommissioning). Note: robust and targeted outreach will be needed to reach the diverse users in the Project area, including commercial fishermen, for-hire/charter fishermen, recreational fishermen, recreational boaters, divers, etc. • Routine check-ins with the NY/NJ Harbor Safety, Navigation, and Operations Committee and appropriate Subcommittees. • Discuss US Coast Guard Training and Exercises. • Identify opportunities to address liability to vessel operators in the case of accidental incidents (e.g., anchor strike, allision). • Discuss best practices to minimize disruption to fishing from boulder relocation.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Benthic Disturbance • Quantify cable and scour protection disturbance areas. • Discuss pre- and post-construction monitoring. • Evaluate nature-inclusive designs. For example, selecting alternative materials that minimize or avoid the use of traditional concrete mattresses. These designs have co benefits to fishing and shipping industries, as concrete mattresses introduce hazards to manners. • Discuss avoidance of impacts to hard bottom habitats and minimize impacts to other benthic habitats. • Require a vessel anchoring plan to protect sensitive habitats or other areas to be avoided and to minimize benthic habitat disturbance. Climate Mitigation Measures: Discuss mitigation measures to reduce or eliminate identified climate impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Impacts to Saltmarshes: Evaluate potential impacts from development to saltmarshes and discuss avoidance, minimization and mitigation measures. Note: Saltmarshes are one of the most important and notable habitats of New York State's marine district, particularly along the south shore of Long Island. They provide significant ecological and socio-economic benefits, including water quality improvement, aquatic productivity, habitat, flood protection and stormwater treatment, and form the basis for designating different State- and federally recognized Significant Coastal Fish and Wildlife Habitat (SCFWH) sites located in Long Island. Saltmarshes are critical for many recreationally and commercially important fish, shellfish, and waterfowl species, and are substantially responsible for the high biological and economic productivity of Long Island's South Shore. New York has invested significant resources in restoring and protecting salt marsh habitats. Rare, Threatened and Endangered (RTE) Species: Avoidance, minimization and mitigation of state and federal threatened and endangered species should be evaluated using the latest guidance available.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Consider requiring the following air emission controls: • Diesel generators shall be Tier 4F and fire 15 ppm sulfur diesel. • Vessels shall use fuels in the hierarchy of 15 ppm sulfur diesel, low sulfur diesel, marine distillate, and marine residual instead of allowing any of those fuels to be utilized. • Vessels shall be the newest available, preferably meeting International Maritime Organization (IMO) Tier III emission standards. • Boilers that are installed on the offshore converter station shall fire the cleanest fuel available. Operational and Maintenance Measures: Discuss measures taken to avoid, minimize and mitigate environmental impacts from operational and maintenance activities, including but not limited to noise, traffic, etc. Decommissioning Measures, Including Site Restoration: Discuss measures taken to avoid, minimize and mitigate environmental impacts from site restoration and decommissioning activities, including but not limited to noise, traffic, etc.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

BOEM should consider requiring an adaptive management plan, whereby if environmental impacts are substantially different than anticipated, operational modifications can be evaluated and executed. BOEM should consider whether this should include stakeholder (non-fishing) or community liaison board or individual that would relay information between the Project developer and the affected public. A comprehensive mariner communication plan that is routinely re-visited and refined based upon feedback and evolving needs of the maritime and fishing industries as they adapt to economic drivers, regulatory environments, and climate change, among others.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS must clearly identify which mitigation measures are included as part of the proposed action and thus, evaluated in the analysis, which measures are proposed as required, and measures that are optional and could be implemented by the developer to potentially reduce impacts. The document should provide information on how mitigation measures are considered in the context of the definition of effects levels (e.g. negligible, minor, moderate, major), and how mitigation would offset those levels of effect. Mitigation measures must be relevant to the impact to be mitigated and capable of actually reducing impacts (e.g., as proposed in the COP, a monitoring study alone is not an effective mitigation measure). An analysis of the effectiveness of any proposed mitigation should also be evaluated in the EIS.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Compensating for unavoidable adverse impacts through development of compensatory mitigation measures should be viewed as mitigation of last resort. Avoidance and minimization must be considered and fully and fairly evaluated through the alternatives development process before reaching that point.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

While the project should be planned and developed to avoid and minimize adverse effects to marine resources and existing uses (i.e. fisheries habitat, fishing and NMFS scientific survey operations) to the greatest extent practicable, compensatory mitigation should be proposed to offset unavoidable permanent and temporary impacts. This should include discussion and evaluation of potential compensatory mitigation for unavoidable adverse impacts to fisheries habitats and the lost functions and values resulting from those impacts. Compensatory mitigation for both ecological losses as well as social and economic losses should be discussed in the EIS, and incorporate all affected entities. Compensatory mitigation for social and economic impacts from this and other projects should consider any increased operational costs (i.e., increased steaming time to search for fish or transiting around turbines) or loss of fisheries revenue (i.e., lower catch) resulting from the construction and operation of the project. Compensatory mitigation should also consider more conservative quotas set in response to reduced scientific survey access and associated increased uncertainty in stock assessments along with any potential proposed measures to compensate for such losses.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Finally, mitigation necessary to offset negative impacts to longstanding marine scientific survey operations (e.g., loss of access to project areas, changes to sampling design, habitat alterations, and reduced sampling due to increased transit time) and fisheries dependent data collections must also be considered and evaluated in the document (see description of scientific survey impacts below).

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**Comment Number:** BOEM-2021-0052-DRAFT-0092  
**Organization:** Defenders of Wildlife  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

develop and implement a continued monitoring program to ensure that there is no significant deterioration of the environmental conditions or the existing natural resources from construction through the decommissioning phases

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**Comment Number:** BOEM-2021-0052-DRAFT-0092  
**Organization:** Defenders of Wildlife  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A comprehensive regional fisheries and benthic resources monitoring plan must be developed and implemented in collaboration and consultation with state fishery managers and scientists.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

restrict vessel speed to 10 knots for all vessels all year within SW area regardless of whether vessels are transiting or are on site. Slowing to 4 knots from June 1 through November 30 while transiting through areas of visible jellyfish aggregations or floating vegetation lines or mats will improve protection for sea turtles. Slowing down to well below 10 knots improves the ability of vessels to maneuver and adjust speeds to avoid collision with not only sea turtles but also other marine wildlife. This is the same concept that is applied to automobile speed limits on roads to allow for reaction time to avoid crashes and accidents. We require a minimum of four NOAA-certified Protected Species Observers (PSOs) solely focused on monitoring for protected species to monitor all exclusion zones for sea turtles during impact pile-driving, High Resolution Geophysical (HRG) and Geotechnical surveys, and during vibratory driving.<sup>33</sup> To effectively monitor the full exclusion zone, multiple PSOs must be stationed at several vantage points to allow for continuous scanning of each section of the exclusion zone. Monitoring reports must be made publicly available in real time. Training vessel crew members to watch along with the PSOs is beneficial but they must not be substituted for PSOs. Prior to the commencement of construction activities, PSOs must scan and monitor the area for the presence of sea turtles. If turtles are detected prior to or during construction activities, activities must be paused and recommence only after the observers confirm that the turtles have cleared the area. These strategies are similar to those employed to protect marine mammals (see Section 5.5). We use NMFS's most recent pile driving calculator to obtain an accurate injury and behavioral radii for sea turtles during impact and vibratory pile driving.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

invest in and support: satellite tagging and tracking,<sup>34</sup> and real-time monitoring studies to complement aerial survey data and provide a precise and accurate spatiotemporal estimates of sea turtle populations, their movements, dive patterns, surface times, and habitat use in the North Atlantic. We realize this effort would be a collaborative effort with BOEM, other federal agencies as well as other OSW facilities. Most satellite tagging of sea turtles in the Northeast US, except for leatherback sea turtles, has been initiated in the Mid-Atlantic and does not capture New England habitat use or surface behaviors. These baseline data are essential in accurately estimating sea turtle takes in SW project activities and in developing avoidance, minimization, and mitigation strategies. Acoustic telemetry arrays (which are already in use in wind energy areas to track highly migratory fish species) and take advantage of the opportunity for cost-effective data collection on sea turtles. A combination of satellite tags (to collect data on surface availability to parameterize density models) and acoustic telemetry will improve understanding

of sea turtle habitat. \_ research to cover the fundamental gaps in our knowledge of the sensory (hearing and navigation) ecology of sea turtles. Current BOEM standard for operating conditions of activities such as pile driving is based on a 180 dB (RMS) re 1 uPa exclusion zone which is the original generic acoustic threshold for assessing permanent threshold shift onset for cetaceans<sup>35</sup> and not for sea turtles. Research is needed to determine the temporary and permanent acoustic threshold shifts so that accurate limits for cumulative anthropogenic sound sources can be identified. Experiments are also needed to: a. spatially separate acoustic pressure and intensity to determine which of these sound component sea turtles detect and whether hearing sensitivity changes under pressure,<sup>36</sup> and b. conduct underwater audiograms of sea turtle species of all age classes since hearing sensitivity is known to change with age.<sup>37</sup>

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

commitment to address unforeseen impacts through compensatory mitigation to offset potential long-term adverse impacts from SW project. Migratory birds pose huge conservation challenges since their lifecycle spans multiple regions/countries requiring significant investment of resources to restore equivalent quality habitats at multiple sites. The large number of migratory species potentially affected by SW will require directed environmental compensatory mitigation for meaningful beneficial outcomes, e.g. the \$63 million compensation mitigation package for migratory seabirds in Mexico helped in the recovery and delisting of Pacific Brown Pelican. Mitigation more effectively compensates for impacts when conducted on a project- and population-specific basis. If a project-specific approach is not feasible, then a compensatory mitigation fund should be set up by OSW developers (funding amounts to be based on likely or actual impacts) which would be administered by trustees of federal agencies.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

pursuit of studies to verify CRM utility in the offshore environment and its integration into viable collision detection requirements for SW and future OSW projects • requirement of schedules/activities modification to protect breeding ESA-listed species from potential onshore impacts of SW project. The developers must hire trained spotters to prevent any harm to nesting chicks (e.g. the Endangered piping plover which nests on the beach) within 100 m of onshore construction activities. No construction activities may be allowed on the beach or intertidal zone within 100 m of the chicks or nests, as this would starve breeding adults of necessary foraging habitat.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

develop a plan to implement and report on the efficacy of the avoidance, minimization, and mitigation measures which must include: \_ both species-specific and holistic ecosystem-wide approaches that factor in spatiotemporal presence in the project area of various resident and migrating fauna \_ adaptive management strategies to reduce adverse impacts to all species, with particular emphasis on those already at risk of extinction \_ use of deterrent technologies to reduce collision risks to bats and birds \_ restriction of vessel speeds of all sizes to less than 10 knots at all times to avoid collisions with marine megafauna \_ deployment of a combination of noise abatement technologies, seasonal and diel restrictions of construction activities to minimize impacts, curtailment of site assessment and characterization activities during times of highest risk \_ strategies to minimize potential entanglement of marine mammals and other megafauna on export cables, weather buoys, and ghost fishing gear \_ visual and acoustic clearance and exclusion zones and monitoring methods

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Given the extent of potential offshore wind development on the OCS and in this region in particular, the cumulative effects analysis will be a critical component of the EIS. Establishing a regional monitoring program will be important to help understand potential impacts of wind energy projects and identify potential mitigation measures for any future projects. As you are aware, we have been working with state agencies, developers, and research institutions through the Responsible Offshore Science Alliance to develop a regional scientific research and monitoring framework, including project-specific monitoring plan/study guidance to better identify and understand cumulative impacts and interactions between marine resources, fisheries, and offshore wind energy. Similarly, we are engaged in the development of the Regional Wildlife Science Entity in an effort to address regional science and monitoring of impacts to wildlife and protected species. It is imperative that project-specific monitoring efforts are integrated into existing regional monitoring programs throughout the outer continental shelf, unless there is a project or location specific research question explicit to characteristics and dynamics unique to the site and relevant to trust resources management. Monitoring at multiple scales and which takes an ecosystem-based approach to assessing monitoring needs of fisheries, habitat, and protected species should be required. This will be important to not only assess the cumulative impacts of project development; it will also help inform any future development. You should also coordinate with our agency early in the process related to any potential effects of monitoring activities on NOAA trust resources; we note that survey or monitoring activities may require permits or authorizations from us.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Measures to avoid and minimize impacts such as speed restrictions for project vessels, soft start procedures, noise dampening technologies, construction time of year restrictions, anchoring plans, or micro-siting should be discussed in detail, including what resources would benefit from such mitigative measures and how/when such benefits (or impact reductions) would occur. We strongly encourage BOEM to require measures that reduce noise levels during construction to the maximum extent practicable where data suggests technology is more effective (e.g., if bubble curtains are proposed, requiring a double bubble curtain vs. single bubble curtain). The EIS should analyze temporary effects and anticipated recovery times for marine resources within the impacts analysis.

**A-2.17. Navigation and Vessel Traffic**

**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Expanded industrial activities in and around the project area will undoubtedly increase the amount of vessel traffic in the area. The EIS must include alternatives for a vessel traffic plan to minimize the effects of all vessels associated with the wind energy project on marine wildlife. These alternatives should include requirements for all vessels associated with the project, regardless of function, ownership or operator

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Vessels should be required to carry and use protected species observers at all times when under way. Additionally, because visual sighting of whales, including NARWs is difficult, particularly in low light conditions, the EIS should include alternatives to require service vessels to complement observer coverage with additional monitoring technologies such as, infrared (IR) detection devices for whales and other protected species.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Due to the risk of ship strikes to NARWs in the project area, the EIS must include alternatives to limit vessels of all sizes associated with the offshore wind project to speeds less than 10 knots at all times.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Consistent with NOAA regulations under the ESA for all vessels, aircraft, the EIS should include requirements that all vessels must maintain a separation distance of at least 500m from NARWs at all times with clear requirements to safely move away from NARWs that are detected within this range.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

To support oversight and enforcement of the conditions on the project the EIS should include alternatives requiring all vessels to be equipped with and using a Class A Automatic Identification System (AIS) device at all times while on the water. This should apply to all vessels, regardless of size, associated with the offshore wind siting, development, and operations of the project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS must include alternatives to specify and require all vessels associated with the project, at all phases of development, follow the vessel plan and rules including vessels owned by the developer, contractors, employees, and others regardless of ownership, operator, contract. Exceptions and exemptions will create enforcement uncertainty and incentives to evade regulations through reclassification and redesignation. BOEM can simplify this by requiring all vessels to abide by the same requirements, regardless of size, function, or other specifics.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

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**Comment Excerpt Text:**

The EIS must also include an alternative to specify that developers are explicitly liable for behavior of all employees, contractors, subcontractors, consultants, and associated vessels and machinery.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0004

**Organization:** Sea Services North America

**Commenter:** Gordon Videll

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The lease area where Sunrise Wind will be located was developed and refined by BOEM with significant stakeholder input. We have over a decade of data showing the grids much smaller than 1X1 nautical miles are very safe.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA, and our members, have repeatedly raised concerns regarding the ability of vessels to safely navigate throughout the multiple areas identified and sold to offshore wind developers by BOEM. The EIS must include an alternative for reasonable transit lanes as consistently requested by fisheries operators since long before the submission of this COP, and BOEM must fully evaluate such transit lanes cumulatively across the Southern New England OSW lease areas. As the agency in charge of offshore wind permitting, leasing, and sales, BOEM has the authority, and responsibility, to fulfill this mandate and ensure the safety of all vessels operating in and around the WEAs. For the commercial fishing gear types found in the Vineyard Wind project area, 1x1 nautical mile (nm) spacing between turbines is too narrowly spaced for most fishing operations. Thus, if spacing remains prohibitive, resulting in full (or even majority) functional fishing closures, access to viable and safe transit options becomes the single most important mitigating factor to the project design. BOEM's responsibility does not end once the sale is completed or a COP is approved, and it must consider a developer's proposed layout as only that - a proposal. To be clear, fisheries operators and experts neither requested nor agreed to the New England developers' proposed 1x1 nm turbine spacing without additional transit corridors laid out in the joint developer's "agreement" for the entire MA/RI lease block.<sup>12</sup> And to repeat, BOEM and USCG's analyses of fishing vessel transit in the New England lease areas to date have been replete with missing information, unfounded conclusions, lack of cumulative-scale analysis, and absent or incorrectly referenced citations. The need for safe transit lanes of 4 nm has been raised time and again by fishermen and other fisheries experts, and the proposal RODA submitted to BOEM on behalf of our members in January 2019 remains urgent. The full history of these requests is detailed in RODA's comments to BOEM on the Vineyard Wind SEIS and South Fork DEIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Recent statements from USCG to our members have also indicated that MARIPARS was not intended to predict all downstream maritime traffic effects of OSW development, that analyses would be conducted anew for each project, and that cumulative effects analyses are currently insufficient to understand full build-out. Despite this, in both the EIS and Record of Decision for the Vineyard Wind project, BOEM relied solely on the MARIPARS study to assert that the layout preferred by the developer would provide sufficient navigational safety "cumulatively" across the New England lease areas. Previous BOEM EISs have contained no analyses of the impacts of transit lanes to the following crucial topics: fishing economics, product quality, markets, fisheries management, and living marine resources that may benefit from migration corridors. They also fail to identify the history of collaboration and negotiation that led to the transit lane proposal. These topics must be given full due consideration in any EIS for future projects. BOEM must adequately analyze navigational safety in all EISs. This includes alternative turbine spacings beyond the uniform 1x1 nm spacing design supported by OSW developers for other WEAs. The MARIPARS is insufficient, as outlined above, and should not be solely relied upon for the determination of safety and navigation measures. The 1x1 nm supported by BOEM and the USCG was proposed by offshore wind developers and suggests a clear bias to the developers. The absence of any defensible analysis of layouts proposed by the fishing industry based on expertise in fishing operations (vessel turning capabilities, gear functions, etc.) further supports this appearance and raises serious conflict of interest concerns about whether BOEM can maintain objectivity in OSW permitting decisions.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The lack of transit lanes increases the risk of fishing vessel accidents. The only mitigation methods listed for fishing vessel accidents are communication related. It remains unclear how communication will help a vessel avoid collision with a turbine during adverse weather conditions. A much more reliable method to mitigate this risk would be to include transit lanes. Fishermen are the experts that should be consulted on any issue related to their safety. RODA has repeatedly raised this issue and worked extensively with federal and state agencies, OSW developers, recreational fishermen, and others to develop recommendations for transit lanes at a regional level in New England and the NY Bight. Navigational Safety Risk Assessments are of no value unless performed cumulatively with other adjacent and geographically relevant projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Potential impacts to vessel traffic, effective commercial and for-hire fishing activities, finfish and shellfish stocks, and related habitat that may be harmed or inaccessible to fishing due to the proposed development. BOEM should analyze these concerns in light of the current Project and through a focused cumulative impacts analysis that considers planned offshore wind development in the same geographic region, including the final New York Bight Wind Energy Areas (WEAs). BOEM should evaluate a range of cable burial depths and the potential for interactions due to anchor strikes and fishing gear.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate establishing fishing transit lanes in a configuration similar to "Proposal for New England wind energy project layout with transit lanes for safe passage of vessels" dated January 3, 2020. Source: [https://rodafisheries.org/wp-content/uploads/2020/01/200103-MA\\_RI-layout-proposal.pdf](https://rodafisheries.org/wp-content/uploads/2020/01/200103-MA_RI-layout-proposal.pdf)

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate impacts to radar. Evaluate risk from vessel allisions, collisions and groundings. Assess impacts from potential displacement of vessel traffic and alteration of the movement of vessels in and around New York, including:

- Commercial vessels using the navigation traffic lanes established by the International Maritime Organization and appearing on official nautical charts. Note: analysis should incorporate US Coast Guard Port Access Route Studies and proposed rulemakings.
- Commercial vessels using established but not officially designated trade routes.
- Commercial vessels using designated and undesignated anchorages.
- Commercial and recreational fishing vessels, and general recreational vessels departing from or arriving at ports or marinas along Long Island's south shore and Long Island Sound. Note: the Northeast Recreational Boating Survey is a good source for recreational information, and data can be accessed on the Mid-Atlantic and Northeast Data Portals. DOS developed offshore recreational

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fishing areas that are available on the NYS Geographic Information Gateway:

<http://opdgig.dos.ny.gov/geoportal/catalog/search/resource/detailsnoheader.page?uuid={3B5083DA-2060-4F5D-8416-201A0A2B962B}>.

Analysis of risk to smaller vessels during construction and evaluation of how the USCG-mandated construction safety zone mitigates this risk. Assess conflicts with concrete mattresses. Assess potential impacts of uncovering of buried cables over time and following storm events.

## **A-2.18. NEPA/Public Involvement Process**

**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

We believe it is essential to point out that the EIS must be conducted in concordance with the CEQ guidance of August 2016 [5] that requires federal agencies to quantify the direct and indirect GHG emission impact and effects of the action on climate, and, where quantification is not reasonably available, provide a qualitative assessment. One of the most frequent concerns in public comments to similar projects and, perhaps, one of the reasons why the Cape Project was not launched, which slowed down the development of the US offshore wind industry, is onshore residents' apprehension that numerous turbines will spoil the ocean view, depreciate properties, and repulse tourist flow [6]. The Sunrise Farm's turbines will be located further from the shore; according to Orsted's COP, within 40 miles radius, the farm will have relatively small visibility [7]. Nevertheless, the project can still be challenged. Therefore, we insist on emphasizing the cumulative salubrious benefit of the project in the EIS. That includes a drastic decrease in CO2 emissions of 65 million tonnes over the course of 25 years [7] and other insidious pollutants as PM2.5, nitrogen oxides, sulfur dioxide, lead, mercury, since the region will continue retirement of traditional power plants; in the last 9 years approximately 5 GW are considered to be rolled off, and 5 more GW will be shut down in following years [27]

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**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

CCE urges that in addition to the thorough monitoring of birds, fisheries, and marine mammals that is anticipated to be included in the EIS, that BOEM also ensures that this environmental monitoring is made public and provided to the community and stakeholder meetings and on websites. CCE requests wildlife monitoring data be available to the public and that BOEM holds public meetings during both the 3 year period before construction and the 3 year period after construction to update residents and stakeholders on the ongoing efforts to mitigate wildlife impacts. Any environmental monitoring performed for and during this process will provide important data for stakeholder groups dedicated to the protection of marine and avian species. It will also provide a transparent monitoring process.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

Finally, BOEM must make all relevant documents available to consulting parties. As it currently stands, the COP has several appendices, including the Historic Resources Visual Effects Analysis (HRVEA), that are unavailable to consulting parties. It is impossible for SELF or New Shoreham to give comprehensive and thorough comments without all the relevant information. For this reason, we request that BOEM make available any document that references the Southeast Lighthouse or any other historic resource on Block Island.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Fire Island National Seashore should be identified on all the project maps that show the study area. The boundary of the National Seashore, as well as Smith Point County Park, should be outlined and labeled, including boundaries as they extend into ocean and bayside waters. In addition, the Otis Pike Fire Island High Dune Wilderness within Fire Island should be clearly mapped. This should be done for maps relating to either sea or land proposed actions. We also request that point locations are included for all NHL locations across the entire project area. Currently, the National Seashore and the NHLs are not identified on the project maps. We can assist in providing location data to fulfill this request.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0002

**Organization:** Citizens Campaign for the Environment

**Commenter:** Adrienne Esposito

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

When you do the stakeholder engagement, it's not just the town. There are villages that should not be ignored such as BellPort village, Patchogue Village, and there are a variety of stakeholders in the town of Brookhaven that are worth engaging. People, you know, feel very strongly about Smiths Point Park. They feel very strongly about converting from fossil fuels to wind. And the more we engage the public, I think the better we are going to be in the long run.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0002  
**Commenter:** Camden Ackerman  
**Commenter Type:** Individual

**Comment Excerpt Text:**

Sunrise Wind has done an incredible job of reaching out to the community.

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**Comment Number:** BOEM-2021-0052-DRAFT-0012  
**Commenter:** Chris Bowers  
**Commenter Type:** Individual

**Comment Excerpt Text:**

In addition, the proposed expansions of multiple businesses surrounding Lake Montauk must be paused until a comprehensive, exhaustive study performed by a respected, independent civic body determines the impact of each proposal on the immediate natural environment, local traffic and public infrastructure and our community in general.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

To ensure that the Sunrise Wind project is developed in a responsible manner BOEM must confirm that the project complies with existing laws including NEPA, the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Oceana appreciates the urgency that the administration has expressed to get projects like this under way quickly, but that cannot come at the expense of a full review and assessment. Oceana expects that some of the reviews and permitting may be concurrent, but offshore wind development must adhere to the rigorous review process that uses best available science to consider immediate and cumulative impacts to ocean wildlife.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Oceana notes that while the Vineyard Wind permitting in a nearby site may serve as an example, separate new analysis must be completed for each project with improvements and additions as necessary. While it may be attractive to simply replicate the Vineyard Wind analyses and conclusions in its EIS and associated reviews for the current project, that approach must be avoided.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The project will be a private enterprise conducted on shared public waters and as such, the EIS must include alternatives to require all phases of the project to subscribe to the highest level of transparency, including frequent reporting to federal agencies, requirements to report all visual and acoustic detections of NARWs and any dead, injured, or entangled marine mammals to NMFS or the Coast Guard as soon as possible and no later than the end of the Protected Species Observer shift. To foster stakeholder relationships and allow public engagement and oversight of the permitting, construction, and operation of the project the EIS must include alternatives to require all reports and data related to the project and its monitoring programs to be accessible on a publicly available website.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The pace and number of offshore wind projects in development in our region pose challenges for thorough analysis of potential impacts, informed public input, and adopting lessons learned from each project. There are currently 14 lease areas in the COP development and review phase, 3 lease areas in the site assessment phase, and multiple additional areas in the New York Bight are planned to be leased<sup>2</sup>. Eight projects, including this one, entered the DEIS development phase through issuance of NOIs between March and September, and one additional NOI is expected later this year. Consulting and coordinating on these projects are already taxing available resources in the fishing, fishery management, and fishery science communities, and we expect at BOEM as well. Consistency in approaches and adopting lessons learned from one project to the next will benefit stakeholders who engage in the review process for these complex projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As the impacts analysis is developed, clear terminology will be important for readers to understand the complexity of the alternatives considered and the large number of impact producing factors and environmental resources evaluated. In addition, both magnitude and direction of impacts should be specified when characterizing impacts and the EIS should define short and long term in the context of impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071  
**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils  
**Commenter:** Dr. Christopher Moore  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We understand that the BOEM regulations allow offshore wind project developers to revise their COPs throughout the environmental review process. This poses significant challenges for stakeholders and partner agencies to understand and provide input on the likely impacts of the project. We understand that the final project design must fall within the analyzed project design envelope. The project design envelope approach is logical given the time needed to complete environmental review and continuous advances in technology. However, we are concerned that the desire to allow flexibility in final project design can result in too wide of a design envelope and uncertainty in the actual impacts of the project. To help address this concern, we request that BOEM announce to the public whenever a COP has been revised and include a list of the specific changes. Along these lines, we appreciate any steps that BOEM can take to make this COP and future COPs easier to navigate.

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**Comment Number:** BOEM-2021-0052-DRAFT-0073  
**Organization:** Climate Jobs NY  
**Commenter:** Mariah Dignan  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

To responsibly develop offshore wind projects, developers must have early and frequent communication with key stakeholders like labor, environmentalists, fishermen, mariners, and residents.

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**Comment Number:** BOEM-2021-0052-DRAFT-0089  
**Organization:** BlueGreen Alliance  
**Commenter:** Jason Walsh  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In undertaking an DEIS for the Sunrise Wind project, BOEM should ensure it is fulfilling that policy by taking efforts to create a high road offshore wind industry that: \_ Maximizes the creation of quality, family-sustaining, union jobs; \_ Expands domestic manufacturing along a robust domestic supply chain; \_ Delivers community benefits with attention to improving access to displaced energy workers as well as low-income and Black, Brown, Indigenous, and People of Color ("BIPOC"); and \_ Protects marine ecosystems by avoiding, minimizing, mitigating and monitoring environmental impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0089

**Organization:** BlueGreen Alliance

**Commenter:** Jason Walsh

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

To comply with state and federal policies and achieve all necessary permits, all offshore wind energy must be developed in an environmentally responsible manner that avoids, minimizes, and mitigates impacts to ocean wildlife and habitat and traditional ocean uses, meaningfully engages stakeholders from the start, and uses the best available science and data to ensure science-based and stakeholder-informed decision making. This includes analysis of cumulative impacts and adaptive management strategies, obtaining all necessary and relevant data, and requires BOEM to identify all methodologies, and indicate when information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate intermediate adverse impacts based on approaches or methods generally accepted in the scientific community.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0001

**Organization:** OR Energy

**Commenter:** George Povall

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

One of the other things I would like to put onto the radar for you is in the landing site, we would like to be sure that the entire outreach focus is not predicated on just the township where the landing is coming into or the municipalities involved, but that you reach out to the local organizations, civic associations, other environmental justice groups should all be involved and should all be brought in as stakeholders as early as possible. They have a lot of knowledge to give, and they have a lot of right to be heard.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0002

**Organization:** Citizens Campaign for the Environment

**Commenter:** Adrienne Esposito

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We are calling for that data to be publicly available, not just to BOEM and not just to federal agencies, but to other agencies and to stakeholders and academia. The more we understand whether it's wildlife or fin fish or benthic region, the better we can site these particular wind farms in the future and the better we can assess the health of our ocean waters and our marine environment.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0003

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**Organization:** Long Island Traditions  
**Commenter:** Nancy Solomon  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

I was surprised to hear earlier in this presentation that there was no direct stakeholder engagement with New York fishermen, which I understand may not be correct, but I wanted to alert you that that was presented

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**Comment Number:** BOEM-2021-0052-DRAFT-0055  
**Organization:** Students of University of San Francisco  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The goal of environmental impact assessment (EIS) is straightforward but momentous. This policy tool is used to assure all stakeholders that the governmental agencies make a considerable effort to prevent, eliminate, or minimize the proposed project's impact on the biosphere, promote people's health and welfare and "enrich the understanding of the ecological systems and natural resources" [4]. Behind the simple objective, the BOEM can encounter an exhaustive, time-consuming process, which can be facilitated by engaging in the assessment process agencies like NMFS, NRDC, NOAA, USGS, FEMA, NYSERDA, and others who can provide relevant necessary data and consultations. Besides keeping the overall goal of the EIS in mind, preparers must also understand that EIS is not supposed to address specifically adverse impacts and ways of their mitigation. It is also essential to provide information on the positive impact of the proposed project and, perhaps, to persuasively demonstrate that the benefits of the project outweigh some residences' concerns like aesthetic view. Prior to the Sunrise Wind Farm Project, BOEM submitted several NOI to prepare EIS and EIS themselves for similar projects, like Empire Wind I

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**Comment Number:** BOEM-2021-0052-DRAFT-0061  
**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As a nation we are relying on BOEM and its consultive federal agencies to assure that proper siting, monitoring, mitigation, and environmental protections are put in place so that offshore wind energy projects can be developed in a sustainable manner that future administrations and future generations do not regret. The development of the Environmental Impact Statement (EIS) for Sunrise Wind and other projects are critically important to assuring that wind farm construction and operations proceed in places and using methods that avoid, minimize, and where necessary mitigate environmental impacts to species, communities, and habitats.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

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**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM, like most OSW developers, is taking an unpredictable approach to minimizing conflicts between offshore wind energy (OSW) and fisheries and has not offered a plan for ongoing collaboration with the fishing industry. BOEM has announced new "public comment periods" almost daily for the past several months without sufficiently addressing the collective requests it has already received through the public process. This approach creates confusion, makes authentic engagement impossible, and exacerbates a growing divide between the select few who will financially benefit from OSW development and the overwhelming majority of coastal citizens who will suffer direct negative environmental and economic impacts, which are disproportionate to the minor global benefits these OSW projects offer toward mitigating climate change. The "divide and conquer" approach, in lieu of furnishing factual and accessible information, inflicts further harm to the social fabric of our fishing communities. These communities can-and want to-work together with BOEM to solve important and tangible problems but only if those in positions of power afford them the ability to do so authentically. RODA has repeatedly stated that BOEM's current approach of flooding the public with comment periods, while ignoring requests for transparency and authentic inclusion, prevents meaningful engagement thereby putting at risk the achievement of sustainable and environmentally conscious renewable energy production. RODA has consistently, for years, offered specific requests to BOEM to improve communication, safety, transmission planning, research, cumulative effects analyses, seafood business longevity, and environmental impacts. These requests are available on the RODA website<sup>2</sup> and BOEM should address them and forge working relationships with this constituency that provides food security to our nation throughout the development of this EIS and other actions. One clear indicator of the ineffectiveness of this approach is that fundamental Sunrise Wind project decisions are already being made and discussed at the local, state, and business levels, which entirely narrow the range of alternatives that BOEM will consider in this EIS. Yet, reading the NOI, most members of the public would incorrectly assume that the project is still in a high-level planning phase with the COP being a mere proposal for which BOEM would consider many options to modify. Regardless of the private plans being made by the project applicant, we again urge BOEM to develop a comprehensive planning process, remove segmentation that serves to marginalize fisheries, and consider OSW planning options from an impartial standpoint.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Thank you for publishing this NOI in the Federal Register. It is imperative for BOEM to publish all matters of public interest in this way, in accordance with its own past practice (until recently), standard practice at other agencies, and the law. This is especially important given BOEM's decision to conduct stand-alone NEPA reviews for the large number of OSW projects undergoing permitting rather than adopt a programmatic approach. It is extremely difficult for

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impacted parties and other members of the public to follow an individual project through its evolution, and consistent dockets within the Federal Register are a minimum necessary tool toward that end.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA again calls upon BOEM to develop suitable Programmatic Environmental Impact Statements by region, with tiered analyses for individual projects or contiguous lease areas. This is the only approach that will both meet NEPA's requirements and allow for effective public comment opportunity. Fishermen, scientists, managers, and other non-OSW professionals simply cannot provide meaningful comments on each individual project BOEM plans to review in the near term. Without the ability to provide consolidated reviews and comments, the quality of decision making and project planning and the ability to find suitable mitigation measures will be strongly jeopardized.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Finally, while Orsted, like other developers, has merged its Fisheries Communication Plans, Notices to Mariners, and fisheries monitoring plans for multiple New England projects, the NEPA process to date has treated its proposed projects as though they are entirely unrelated. Even within individual projects, the segmentation of BOEM's NEPA review means that their environmental impacts are not considered cumulatively across the entire project cycle from surveys to construction and operations to decommissioning. The only effective remedy for this segmentation and unpredictability of the environmental review process would be to conduct a Programmatic EIS. BOEM has extensive experience with this approach through its oil and gas leasing program, and it is difficult to understand why it diverged from this effective and efficient approach in OSW permitting.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA has strong concerns over BOEM's approach to impacts analyses to date, incorporates all previous comments regarding this topic by reference, and looks forward to revisions by BOEM going forward. Using such improved analyses, the following alternatives should be considered and analyzed in the environmental review for Sunrise Wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

OSW-related activities, which have not undergone mandatory environmental review, are already occurring in the lease area where the Sunrise Wind project and others are proposed. These activities must be considered, analyzed, and authorized under appropriate NEPA practices including a Programmatic EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA and its members are extremely concerned about ongoing impacts to fishing and the marine environment from the significant number of OSW survey activities in the U.S. Atlantic occurring over the past several years. To be clear, this is an enormous amount of activity, occurring round the clock, across a huge range of the Atlantic Outer Continental Shelf and inshore environments. BOEM must take immediate action to address ongoing impacts from unregulated OSW surveys, and complete a Programmatic Environmental Impact Statement evaluating the cumulative impacts of all reasonably foreseeable OSW survey effort prior to additional activity. Project-specific Environmental Assessments have not analyzed the readily conspicuous size and scale of these surveys' environmental, economic, and cumulative impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The FCP was submitted to BOEM with the COP and not made publicly available until this comment period. All fisheries plans should be public and developed transparently with the fishing industry not unilaterally by the developer. This should be common sense. Ørsted deliberately chose not to include transit routes in its proposed layout and, to our knowledge, has not modified any project designs based on suggestions from fishing experts. Therefore, it should not make assertions regarding its outreach to fishermen nor state that information received from them has influenced its project layouts, including transit routes. Moreover, it has stated that it "participated" in the MARIPARS study, which is a (supposedly) independent study conducted by a federal agency in which private entities are not legally authorized to "participate" except through the public comment process. This statement should be investigated.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093  
**Organization:** National Wildlife Federation et al.  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

However, to ensure BOEM can perform a sufficient NEPA review of a project, a project’s COP must provide enough specifics on each possible configuration covered by the proposed envelope to enable evaluation of impacts on affected species and to fully evaluate the proposal. For example, it would be insufficient to simply identify the total number of turbines that might be built, because the timing of pile driving is also critical to evaluating noise-related impacts to marine mammals and other species. Additionally, to encompass the full range of reasonably foreseeable impacts, BOEM’s analysis must include an alternative that combines the most disruptive components for each option included in the envelope. The design envelope alternative also cannot be conceived or analyzed so broadly that it

However, to ensure BOEM can perform a sufficient NEPA review of a project, a project’s COP must provide enough specifics on each possible configuration covered by the proposed envelope to enable evaluation of impacts on affected species and to fully evaluate the proposal. For example, it would be insufficient to simply identify the total number of turbines that might be built, because the timing of pile driving is also critical to evaluating noise-related impacts to marine mammals and other species. Additionally, to encompass the full range of reasonably foreseeable impacts, BOEM’s analysis must include an alternative that combines the most disruptive components for each option included in the envelope. The design envelope alternative also cannot be conceived or analyzed so broadly that it impairs BOEM’s duty to effectively “inform decision makers and the public of the reasonable alternatives which would avoid or minimize impacts,” as NEPA requires.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093  
**Organization:** National Wildlife Federation et al.  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Here, there is nothing to suggest that, in the event that Sunrise Wind decides to install the additional 376 MW of capacity, it would deviate from the proposed schedule of completing all construction by 2025. However, if Sunrise Wind were to seek to install this additional capacity after 2025, under BOEM’s regulations it would need to submit a revised schedule, which may require BOEM to conduct a revised NEPA analysis. The need for additional NEPA analysis would depend on the extent to which the new schedule deviated from the original schedule and the extent to which our understanding of the impacts from offshore wind development has changed. For example, if a delayed schedule were to occur after several offshore wind projects currently in the early stage of development were constructed and operated, such projects could give us new and significant information regarding how offshore wind projects impact a variety of resources and communities. Ocean conditions may have significantly changed, as well as the conservation status or behavior patterns of key species. New technologies may develop that could significantly impact construction, turbine size, turbine foundations, layout, or other significant factors, including impact minimization strategies. In such circumstances, additional

NEPA analysis could be necessary before Sunrise Wind could proceed with a delayed construction schedule.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Draft EIS should not use value-laden terms (e.g., “beneficial”) to describe changes in ecosystems or species. It should instead be objectively described as ecosystem change. While we agree that some offshore wind activities may result in a change in the ecosystem and, in some cases, an increase in the abundance of certain species or in overall diversity, we caution against the Sunrise Wind Draft EIS representing these changes as “beneficial.” This is especially the case because it is unclear what implications these changes may have on the wider ecosystem. We recommend that the Sunrise Wind Draft EIS remain objective in language used in its impact analysis (e.g., by using terminology such as “increase,” “decrease,” and “change”).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In order to issue these permits, the NPS will be relying on and would tier to the BOEM draft and final EISs for the information and analysis necessary to inform our decision making. To that end, the DEIS and FEIS need to address the following activities and potential impacts in detail:

- Cable landing construction, including jet plow and other equipment use in offshore waters, and the seasonal timing and duration of the cable vessel anchored offshore
- Additional cable landing locations identified and the reasons for their dismissal from further consideration
- The use of horizontal directional drilling (HDD), including the exact location of these activities, equipment and supply storage and the seasonal timing and duration of any beach, parking or other area closures
- The plan to build and utilize a barge to ferry equipment across the Intercoastal Waterway to Fire Island, including the size and scope of this operation, how and where the barge would be constructed, including details such as the depth and location of “dead mans” / anchors to secure the barge on each side of the waterway, and the seasonal timing and duration of this operation.
- The onshore cable pathway to the substation and any impacts construction and burial would have on area roadways, road closures and access to Fire Island
- The spatial relationship between all of the above activities and the Otis Pike Fire Island High Dune Wilderness within Fire Island, including potential visual, night sky and auditory impacts on the Wilderness

There are likely other activities and impacts that will become apparent as the project is analyzed.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

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**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

To ensure meaningful involvement, the Agencies urge BOEM to consult with local communities and organizations on inclusive methods to share information and receive community feedback. The EIS should address increasing public participation in agency activities and subsequent activities.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In addition to coordination with affected states and local communities, we recommend that BOEM continue to work closely with federal agencies and tribes with relevant air, water and natural resource responsibilities and interests during the development of the DEIS. We also encourage BOEM to continue to expand on past coordination with the fishing industry and state and federal agencies charged with protecting fishing and marine mammal resources. We strongly encourage BOEM to take the necessary time to develop and present complete information in the DEIS that fully describes existing conditions and supports a discussion of the likely impacts of each alternative. The discussion should present sufficient information to allow the reader to understand how the project is designed to avoid or minimize impacts associated with the installation and operation of WTGs and associated cables. A full assessment of key impacts for the entire project should be presented in the DEIS, not later, as the analysis will help inform state and federal permitting for the project

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We understand that during the NEPA process, applicants are permitted to make modifications and updates to their COPs. We request, however, that if the COP is updated or changed at any time during the regulatory process, you notify the agencies immediately and make the most updated COP available to the agencies and the public. In addition, it is critical that you describe which sections and information in the COP have been updated so we may focus our efforts and provide an efficient review.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In preparation of the NEPA document for Sunrise Wind, we strongly recommend you review and incorporate comments we have made on previous BOEM documents to ensure a robust and sufficient analysis of NOAA trust resources

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

To facilitate efficient review of the alternatives, we recommend the EIS discussion of the alternatives and comprehensive analyses associated with each be grouped into the three corresponding elements of the proposed project: (1) wind farm area; (2) offshore export cable routes and associated corridors; and (3) inshore export cable routes and associated corridors and landfall points. The proposed project should have multiple alternatives for each element that could be “mixed and matched” in the final selection of the single and complete project.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The “Affected Environment” section of the EIS should cover a sufficient geographic area to fully examine the impacts of the proposed project and support an analysis of the cumulative effects. It is important that the geographic area encompass all project related activities, including the lease area, cable corridors, landing sites, and the use of ports outside of the immediate project area. This analysis should also include any necessary landside facilities and the staging locations of materials to be used in construction. You should ensure that findings for each effect/species are supported by references where possible and in context of the proposed project to allow for a well-reasoned and defensible document.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The “Environmental Consequences” section of the EIS must consider impacts resulting from the construction, operation and maintenance, and decommissioning of the proposed facility, including survey and monitoring activities that are anticipated to occur following approval of a COP. Impact descriptions should include both magnitude (negligible, minor, moderate, major) and direction (beneficial or adverse) of impacts and, where applicable, duration (temporary, long-term, permanent). This section should consider all of the individual, direct, and indirect effects of the project, including those impacts that may occur offsite as a result of the proposed project, such as construction of landside facilities necessary to construct and support operations of the Sunrise Wind project.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Impact producing factors from each phase of development should be considered, including site exploration, construction, operation and maintenance, and decommissioning. All activities included in construction of the project should be considered, including the deposition of fill material, dredging, water withdrawals and associated egg/larval entrainment/impingement, pile driving, increased vessel traffic, anchoring, high-resolution geophysical surveys, seafloor preparation including handling of any unexploded ordnance detected in the area and boulder relocation, and transmission cable installation.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The assessment of these impacts should be completed at scales relevant to each impact type to enable meaningful comparisons between alternatives. It is important that the analysis provides a sufficient evaluation of baseline conditions and uses the best available information to evaluate the alternatives and support the analysis of effects. Any conclusions related to the level and direction of project impacts should be fully supported by the analysis in the EIS and be consistent with impact definitions identified in the EIS.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Importantly, the significance criteria definitions identifying the level of impacts from the project (e.g., negligible, minor, moderate, major) should not embed terms defined by other statutes (e.g., the definition of minor should not refer to the MMPA definition of "level A harassment") or apply other statute definitions to the impact criteria used for NEPA purposes. Rather, these definitions should be written in a way that it is clear to a reader how these impact determinations consider the spectrum of effects to individual animals (e.g., temporary behavioral disturbance, injury). We also encourage you to use definitions that are appropriate for the resource being considered (e.g., benthic habitat vs. marine mammals). As you know, we recently worked with you on the South Fork EIS to develop significance criteria definitions for impacts to NOAA trust resources (i.e. marine mammals, and benthic habitat, EFH, finfish and invertebrates). That collaborative work should be carried forward for this and future NEPA documents.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Temporary, long-term, and permanent direct and indirect impacts to water quality, protected species, habitats, and fisheries (ecological and economic) throughout construction, operation, and decommissioning should be addressed in the EIS. The temporal classification (e.g., temporary, long-term, or permanent) should be appropriate for the species, habitat types and impacts considered and should be clearly and consistently defined. The time of year that construction activities occur is also an important factor in evaluating potential biological, economic, and social impacts of the project and should be clearly specified for each project activity to the extent possible.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Because activities associated with the construction of Sunrise Wind have the potential to result in the harassment<sup>8</sup> of marine mammals, we anticipate that a request for an ITA pursuant to section 101(a)(5) of the MMPA may be submitted to us by the project proponent. NMFS' proposal to issue an ITA that would allow for the taking of marine mammals, consistent with provisions under the MMPA and incidental to an applicant's lawful activities, is a major federal action under 40 CFR 1508.1(q)<sup>9</sup>, requiring NEPA review. Rather than prepare a separate NEPA document, NMFS, consistent with the CEQ regulations at 40 CFR 1506.3, intends to adopt BOEM's Final EIS to support its decision to grant or deny Sunrise Wind's request for an ITA pursuant to section 101(a)(5)(A) or (D) of the MMPA. NOAA may adopt all or portions (e.g., specific analyses, appendices, or specific sections) of a NEPA document prepared by another

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federal agency if the action addressed in the adopted document (or portion) is substantially the same as that being considered or proposed by NOAA, and NOAA determines the document (or portion) satisfies 40 CFR 1506.3. When we serve as a Cooperating Agency and we are adopting another agency's EIS, we ensure all resources under our jurisdiction by law and over which we have special expertise are properly described and the effects sufficiently evaluated, documented, and considered by the lead agency EIS. Of particular importance is that the Draft and Final EIS address comments and incorporate edits NMFS provides during document development and Cooperating Agency review. As a Cooperating Agency per 40 CFR 1501.8, we must determine that the Final EIS properly addresses our comments and input in order for NMFS to determine the EIS is suitable and legally defensible for adoption, per 40 CFR 1506.3 and NOAA's NEPA procedures<sup>10</sup>, and subsequent issuance of an ITA. As such, the document body must contain the following items: the purpose and need of NMFS' action, a clear description of NMFS' roles and responsibilities as both a cooperating and adopting agency (language we previously provided to BOEM for the South Fork Draft EIS), and a range of alternatives which incorporate a description of NMFS' action, to include the No Action alternative. A summarized list of NOAA's adoption requirements is below, and more information can be found in NOAA's NEPA Companion Manual available at <https://www.nepa.noaa.gov/docs/NOAA-NAO-216-6A-Companion-Manual-01132017.pdf>.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Under section 7(a)(2) of the ESA, each Federal agency is required to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species. Because the activities that are reasonably certain to occur following the proposed approval of the Sunrise Wind COP (including surveys, construction, operation, and decommissioning) may affect ESA-listed species and/or designated critical habitat, section 7 consultation is required. It is our understanding BOEM will be the lead Federal agency for this consultation, and that you will coordinate with any other Federal agencies that may be issuing permits or authorizations for this project, as necessary, so that we can carry out one consultation that considers the effects of all relevant Federal actions (e.g., issuance of permits by the U.S. Army Corps of Engineers and/or the U.S. Environmental Protection Agency and issuance of any MMPA take authorization by NOAA's National Marine Fisheries Service (NMFS)) regarding any wind energy facility proposed in the lease area.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We expect that any environmental documentation regarding a proposed wind facility in the lease area will fully examine all potential impacts to our listed species, the ecosystems on which they depend, and any designated critical habitat within the action area. We have developed a checklist (ESA Information Needs document) to identify information needs for considering effects of wind projects on ESA-listed species and critical habitats and we strongly encourage you to use that as you develop the EIS. We also strongly urge you to carefully consider the information we have provided for the Vineyard Wind and South Fork NEPA documents and to incorporate that into this EIS as appropriate.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

It is our understanding BOEM will develop a Biological Assessment (BA) to support your eventual request for ESA section 7 consultation. While we understand that you intend to prepare the BA as a stand-alone document (i.e., you are not planning for the EIS to serve as the BA), we anticipate and expect that the BA will be an appendix to the EIS. We are not opposed to an approach whereby the EIS would serve as the BA, provided sufficient detail and analyses are included. We understand the BA and the NEPA document are likely to evaluate effects of activities consistent with a design envelope and are likely to take a “maximum impact scenario” approach to assessing impacts to listed species that may occur. We encourage early coordination with us to determine which impact-producing factors should be analyzed based on a “worst case” or “maximum impact” scenario and which parts of the design envelope would need to be narrowed to carry out a reasonable analysis that would support your request for section 7 consultation.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

NPDES permits issued by EPA must comply with the procedures and implementing regulations of a number of applicable federal laws. For the SRWF, applicable federal laws include the National Historic Preservation Act, the Endangered Species Act, the Magnuson-Stevens Act, the Marine Mammals Protection Act, and the Coastal Zone Management Act. 40 CFR § 122.49. Consultations in accordance with the applicable provisions of each Act conducted by BOEM (as described in Part 1.4.1 of the COP) may also fulfill EPA’s obligations for consultation in connection with the NPDES permit if the consultations consider the potential impacts from the water withdrawals and discharges resulting from operation of the OCS-DC.

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## **A-2.19. Planned Activities Scenario/Cumulative Impacts**

**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

### **Comment Excerpt Text:**

Evaluate cumulative impacts in geographic area from Massachusetts to North Carolina including:

- Economic impacts on commercial fishing and shipping, including both displacement of effort and stress on commercially valuable fish and shellfish stocks; and impacts to migratory patterns of protected avian and marine mammal species, by the Project and reasonably foreseeable activities, including at a minimum, currently leased areas and proposed leasing in the New York Bight (BOEM-2021-0033), particularly survey activities and/or planned development.
- Economic impacts on commercial fishing from the Project and potential sand mining. Note: New York State has signed agreements with BOEM to evaluate sand resources.
- Growth-inducing effects from use of ports and new O&M facility. Identify details on all utility crossings. Consider as-built survey to identify cable protection area and all cables in the area. Consider capacity of the onshore cable for accepting additional power. Note: If additional energy capacity is included as part of the proposed onshore Cable corridor, then the possibility of potential future build-out and expansion should be made clear and any related, planned expansion should be discussed.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

In July 2020, the Council of Environmental Quality (CEQ) published a final rule revising long-standing NEPA regulations. These regulations went into effect on September 14, 2020 under the Trump administration.<sup>21</sup> Pursuant to President Biden's Executive Order 13990, however, these rules are being reviewed for possible repeal or replacement. They have also been challenged in court by several groups, including groups that have signed these comments.<sup>22</sup> Additionally, Department of the Interior Secretary Haaland recently issued a Secretarial Order stating that the 2020 rule will not be applied "in a manner that would change the application level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020."<sup>23</sup>

Thus, consistent with Secretary Haaland's order, BOEM should ignore the Trump Administration's repeal of 40 C.F.R. §1508.7, and include a cumulative impacts analysis in the Draft EIS that is consistent with the former 40 C.F.R. §1508.7:

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

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**Comment Number:** BOEM-2021-0052-DRAFT-0069

**Organization:** Save The Bay

**Commenter:** Michael Jarbeau

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Save The Bay supports the development of offshore wind infrastructure that is properly cited, built to minimize impacts to offshore species and habitat, and carefully weighs the benefits of renewable energy against negative environmental impacts that cannot be avoided. With that in mind, we submit that the Bureau of Ocean Energy Management's (BOEM's) EIS should examine project alternatives that do not involve the use of an open loop cooling system, and include a thorough analysis of the cumulative impacts of regional wind energy development.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

BOEM must properly take into account cumulative impacts of this Project. BOEM also must consider the significant cumulative impacts involved in permitting this Project. In specifically requiring cumulative impacts analyses, NEPA and NHPA recognize the significant effects that projects can have on the surrounding landscape beyond the scope of a single development. Several wind farms are in development off the coast of Block Island both the South Fork Wind Farm and Revolution Wind Farm. These offshore wind projects will have both separate and cumulative adverse visual impacts upon historic properties, sites, and districts listed or eligible for listing in the National Register of Historic Places.

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**Comment Number:** BOEM-2021-0052-DRAFT-0091

**Organization:** Save the Sound

**Commenter:** Charles Rothenberger

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Accordingly, a sustained monitoring and research effort that informs necessary course-corrections to the operation of the project and environmental mitigation efforts is essential. We

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also support the need for stakeholder engagement and input throughout each stage of the project. Any and all mitigation plans developed must be transparent and subject to independent review. Any proposed changes to established mitigation plans should be made publicly available and subject to stakeholder input prior to adoption. Likewise, all research and results of ongoing monitoring efforts should be published to ensure adequate transparency and to inform the development and operation of other offshore wind installations. Essential elements to be evaluated within the scope of the project should include: \_ The establishment of an ecological mitigation fund to guarantee the ability to successfully mitigate environmental harm and economic impact to commercial fisheries. \_ Plans for assessing alternatives to, and alternative approaches for, decommissioning the project. The impact of decommissioning on the surrounding ecosystem should be the first and highest consideration. \_ A commitment to habitat restoration, and a requirement for funding such restoration through an environmental mitigation and restoration fund, if needed to return the area to pre-built ecological function. \_ Plans for a cumulative impact analysis that considers the impacts of the project in conjunction with pending and anticipated projects in other offshore lease areas.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0005

**Organization:** Blue-Green Alliance

**Commenter:** Rebecca Newberry

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Blue-Green believes that all offshore wind energy must be developed in an environmentally responsible manner that avoids, minimizes, and mitigates impacts to ocean wildlife habitat and traditional ocean uses, meaningfully engages stakeholders and uses the best available science and data to ensure science based stakeholder informed decision making. This includes analysis of cumulative impacts and adaptive management strategies, obtaining all necessary and relevant data, and requires BOEM to identify all mythologies and indicate when information is incomplete or unavailable, acknowledge scientific disagreement and data gaps and evaluate immediate adverse impacts based upon approaches or methods that's generally accepted in the science community.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Draft EIS should consider and assess potential cumulative impacts beyond the footprint of this particular project. Specifically, the to consider the full build-out potential of all wind farms in the established offshore wind energy lease areas on the Atlantic coast, as well as the new pending lease areas, particularly those in the New York Bight and south Atlantic.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

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**Organization:** The Nature Conservancy  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Conservancy has been consistent in our assertion that anticipated project specific effects and impacts be viewed in the context of thorough analyses of potential cumulative impacts of offshore wind development along the U.S. east coast, as well as through a lens that compares unavoidable impacts to the climate change mitigation tradeoffs of failing to achieve our collective decarbonization goals. We have consistently asserted that analyses of potential cumulative impacts must be updated as new scientific information becomes available, as new technology becomes available, and as circumstances change (such as the anticipated addition of eight lease areas in the New York Bight later this year and/or if there are appreciable changes to populations of particularly vulnerable habitats and/or species).

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Additionally, it is critically important that the analysis in the EIS consider the cumulative effects of the Sunrise Wind project in the context of all U.S. Atlantic wind development and the full development of the Massachusetts Wind Energy Area.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053  
**Organization:** Oceana  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The project must include current, robust analysis of the effects of the project on species listed under the ESA and MMPA. This analysis must include a complete evaluation of the immediate and cumulative effects of the proposed project as well as the effects of all proposed and potential wind development in the region. Separating the effects of a group of actions that have significant effects into a series of smaller discrete actions that may individually not be significant is unacceptable and the government must recognize the cumulative effects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0068  
**Organization:** Sakonnet Point Fisheries LLC  
**Commenter:** Greg Mataronas  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Also, the cumulative impacts and the impacts to the surrounding areas **MUST** be taken into consideration. It seems that the permitting process only takes into consideration the little box

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drawn around each lease. There will undoubtedly be effects that reach far beyond (sound, sound pressure, and particle motion travel well beyond the borders of the lease) the lease boundaries and these NEED to be analyzed in a holistic approach on an ecosystem level.

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**Comment Number:** BOEM-2021-0052-DRAFT-0069

**Organization:** Save The Bay

**Commenter:** Michael Jarbeau

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The offshore wind industry in the United States is expanding rapidly. The Block Island Wind Farm and its five turbines provided a proof of concept when it went online in 2016. Since then, BOEM's competitive leasing program has exploded in the northeastern United States offshore environment. Hundreds of turbines and the thousands of megawatts of energy they are estimated to generate must be considered in their cumulative effect on the unique habitats and species that exist in the Northeast and Mid-Atlantic. It is equally important that science and analysis keeps up with the pace of planned development and construction.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The likely extent of impacts to all types of fishing will be important to understand in the context of developing mitigation agreements for affected fishing industry members. Fishing effort can change based on management actions such as a change in access areas, changes in quota allocations, and other management changes. It is important to account for the dynamic nature of fishing effort over time when evaluating impacts to fishermen and fishing communities. This is an area of the EIS where cumulative considerations are especially critical and this project cannot be considered in a vacuum; many other wind farms are proposed within the Massachusetts, Rhode Island, and New York wind energy areas, and fishing will be affected over a large area if all these projects are installed. The impacts of the project will not be felt only by fishermen from nearby ports, and the EIS should consider commercial and recreational fisheries over a wide geographic area that may be impacted by the project.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

In a cumulative effects context, the magnitude of entrainment impacts will likely increase as additional lease areas are developed further offshore, using DC transmission cables, and requiring AC/DC conversion stations. The cumulative effects from loss of zooplankton include the potential loss of food source for the endangered North Atlantic Right Whale. The EIS should estimate the numbers of eggs, larvae, and zooplankton that may be entrained annually due to the conversion station.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS must include a meaningful cumulative impacts assessment. We supported the criteria used in the Vineyard Wind 1 EIS for defining the scope of reasonably foreseeable future wind development; however, that scope should now be expanded to include the anticipated New York Bight lease areas. The cumulative effects of the adjacent wind projects should be thoroughly evaluated, especially due to the 106-mile-long export cable corridor and 186-mile inter-array cables of the Sunrise Wind farm. In addition, it will be important to consider that many lease areas are not proposed to be developed through a single project, but rather will be developed in stages through multiple projects. The cumulative effects analysis should also consider the impacts of cables from many planned projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

To help stakeholders better understand the potential cumulative impacts of the offshore export cables planned for all projects, we recommend the creation of information products to show the planned locations of all export cables (e.g., through the Northeast and MidAtlantic Ocean Data Portals). We recognize that the final precise cable routes have not been determined for most projects and this should be noted in the information products. Earlier dissemination of draft proposals via these platforms would promote better understanding of these projects in relation to each other and to other activities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils

**Commenter:** Dr. Christopher Moore

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Cumulative impacts and risks need to be evaluated for species that are widely distributed on the coast. Species such as bluefish, flounders, and others that migrate along the coast could be affected by multiple offshore wind projects, as well as other types of coastal development, at both the individual and population level. Climate change will also be an essential consideration in the cumulative effects analysis as the distributions and abundance of many species are changing (some increasing, some decreasing) due to climate change and other factors.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Supplemental Environmental Impact Statement (SEIS) completed in 2020 for the Vineyard Wind I project was intended to serve as a cumulative impacts analysis for multiple projects in the region. However, the SEIS was only incorporated into the record of that project as BOEM used an entirely different-and grossly insufficient-approach for the South Fork project just weeks later. It is unclear what, if any, approach BOEM plans to use going forward. Politics must not interfere with scientific integrity or transparency. BOEM must clarify its intent to present the public with an understanding of the cumulative impact of a potential 3,000 turbines, of which the agency is "streamlining" installation into the seabed between MA and VA in the next nine years (with another 5,000 thereafter). It must provide explicit information as to how it will approach cumulative impacts reviews for this and future projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM and OSW developers provide inconsistent approaches to whether projects should be considered on an individual or cumulative level, seemingly based on whichever is more beneficial for the developer and the issue in question. It is unclear how BOEM decides which projects are included in an EIS. For the earliest projects (Vineyard Wind 1, South Fork, and Ocean Wind 1) BOEM's NEPA review focused on a single proposed project with a Power Purchase Agreement (PPA) in place and defined the range of alternatives by the terms of the PPA. More recently, BOEM has stated it will prepare an EIS for the Coastal Virginia Offshore Wind- C without the project having a PPA, and it will conduct one analysis for Phase 1 and 2 (both with PPAs) of Empire Wind. For this Sunrise Wind NOI and that for Vineyard Wind South, BOEM has combined EISs for one phase with a PPA and a later phase that will, ambiguously, provide some more energy. There is evidently no standard protocol for when BOEM will conduct a project's EIS, and inconsistency is increased when analyses are conducted piecemeal for each phase versus across an entire lease area. The current approach makes it nearly impossible to conduct any cumulative analysis as there is no appropriate time in the federal process to do so.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA, other fishing industry representatives, marine scientists, fishery management councils, the environmental community, and others have consistently requested BOEM take a cumulative approach to offshore wind leasing. BOEM is doing the public and the environment a disservice by failing to adequately assess the cumulative impacts from large scale build out along the entire coast. Cumulative impacts need to be thoroughly evaluated to consider the changes in fishing activity that will be forced on the industry. The alteration of benthic habitat, predator/prey interactions, increased pressure and conflicts from recreational users, relocation of the fishing activity to other productive areas will realize an increase in gear loss due to strike from shipping traffic from the concentration of vessel traffic and the cumulative effects of increased effort. The expected impacts under NEPA review should include any cumulative measures, such as species that will interact with various build outs along the eastern seaboard due to migration patterns, vessel traffic and navigation considerations along the coast, long-standing scientific surveys and environmental monitoring, and job opportunities-both potentially lost employment in one industry and limitations of permanent jobs in another. It is difficult to imagine that it would not also benefit developers, transmission interests, and the public for BOEM to clarify its approach to cumulative effects review and at a minimum implement regional planning processes as robust as those it employs for oil and gas leasing. Solely “fast tracking” the large number of projects based on existing (arbitrary) OSW energy production targets may leave us with no recourse to reverse any biological or ecological impacts and a hollow offshore construction industry without longevity.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Cumulative impact assessment (Section II.E): ○ BOEM should conduct a comprehensive cumulative impacts analysis which should include an expanded scope of reasonably foreseeable offshore wind development (discussed further in section II.E.1) which is informed by robust, baseline data.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As such, state capacity planned commitment should be re-evaluated to consider a larger role for pledged commitments in cumulative impacts assessment. We urge BOEM to further expand the

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scope of considered offshore wind development in Sunrise Wind’s Draft EIS to include the Administration’s goal of building 30 GW of offshore wind within the next nine years, future development in the newly identified Wind Energy Areas (WEAs) in the New York Bight, and North Carolina’s new commitment for 8 GW of offshore wind by 2040.<sup>33</sup> Moreover, turbine technology and spacing needs are rapidly evolving and technical resource potential should be reexamined to ensure that the cumulative impacts evaluation is keeping pace with technology and political needs.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Overall, as the marine environment is built out by several proposed offshore wind projects in the vicinity of the Sunrise Wind Project, the potential cumulative impacts to marine mammals and sea turtles are currently unknown. Many of the potentially affected species do not occur in areas where utility-scale offshore wind exists today (e.g., Europe), and so there is no parallel data from which to draw conclusions. Due to U.S. Coast Guard regulations, the bases of the turbines will be lit and could become an attractant that alters current navigation patterns. Similarly, the turbines may disrupt the marine acoustic environment for acoustic sensitive species, such as whales, which in turn may inhibit communication or change patterns of behavior; little is known about the potential impacts of other potential disruptions to the marine environment, such as vibrations and electromagnetic fields, associated with wind turbines and cables. These animals are already experiencing changes in migratory patterns related to climate change (e.g., changes in water temperatures and food source availability), which have potentially led to stranding and cold stunning events occurring more regularly in the Atlantic and an expansion of turtle nesting north of previously recognized nesting sites. Given the number of currently proposed projects in the vicinity of Sunrise Wind, and reasonably foreseeable future projects in the same area, the analysis should carefully consider cumulative impacts to protected species and their habitats. Short- and long-term monitoring strategies will be necessary to better understand how various species are affected by the development of offshore wind.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate cumulative impacts in geographic area from Massachusetts to North Carolina including: • Economic impacts on commercial fishing and shipping, including both displacement of effort and stress on commercially valuable fish and shellfish stocks; and impacts to migratory patterns of protected avian and marine mammal species, by the Project and reasonably

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foreseeable activities, including at a minimum, currently leased areas and proposed leasing in the New York Bight (BOEM-2021-0033), particularly survey activities and/or planned development.

- Economic impacts on commercial fishing from the Project and potential sand mining. Note: New York State has signed agreements with BOEM to evaluate sand resources.
- Growth-inducing effects from use of ports and new O

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate cumulative impacts in geographic area from Massachusetts to North Carolina including:

- Economic impacts on commercial fishing and shipping, including both displacement of effort and stress on commercially valuable fish and shellfish stocks; and impacts to migratory patterns of protected avian and marine mammal species, by the Project and reasonably foreseeable activities, including at a minimum, currently leased areas and proposed leasing in the New York Bight (BOEM-2021-0033), particularly survey activities and/or planned development.
- Economic impacts on commercial fishing from the Project and potential sand mining. Note: New York State has signed agreements with BOEM to evaluate sand resources.
- Growth-inducing effects from use of ports and new O

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should include a complete analysis of the cumulative impacts of the project. This analysis should describe the effects of the proposed project, which in combination with any past, present, and reasonably foreseeable future actions, may result in cumulative impacts on the ecosystem and human environment. This analysis should include a broad view of all reasonably foreseeable activities, including but not limited to, energy infrastructure (including future wind energy projects), sand mining, aquaculture, vessel activity, fisheries management actions, disposal sites, and other development projects.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Consistent with efforts to evaluate the cumulative effects for both the Vineyard Wind and South Fork Wind projects, offshore wind development projects that have been approved and those in the leasing or site assessment phase should also be evaluated. Specifically, the cumulative effects analysis should consider all 16 COPs BOEM recently announced it plans to process by 2025. We encourage you to use the final cumulative impact analysis from the Vineyard Wind project to help inform discussions of cumulative effects on marine resources from other offshore wind development projects for this EIS. However, for this project, additional focus on cumulative impacts of multiple projects potentially impacting marine resources in the area at the same time and over consecutive seasons should also be incorporated. Although lease auctions for the New York Bight have not yet been conducted, consideration of the impacts from potential projects in the New York Bight Wind Energy Areas are warranted, particularly if the lease areas are defined and auctions completed before the EIS for this project has been finalized.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should evaluate cumulative impacts of project construction, operation, and decommissioning. Consideration of impacts from multiple projects throughout the region and outside the Rhode Island/Massachusetts Wind Energy Area is particularly important for migrating species of marine mammals, sea turtles, fish, and invertebrates that may use or transit multiple proposed project areas. The potential cumulative impacts on the migration and movements of these species resulting from changes to benthic and pelagic habitats and potential food sources due to the presence of multiple projects should be evaluated in the cumulative effects analysis.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In particular, the EIS should contain a robust assessment of the potential effects of both the Sunrise Wind project and the full build-out scenario on prey resources for critically endangered North Atlantic right whales and other species. Potential impacts to plankton distribution should be clearly discussed as their distribution, aggregation, and possible abundance may shift, and this could have a significant impact on North Atlantic right whales, along with other large whales and numerous species of planktivorous pelagic fish, as zooplankton are the primary source of prey for many higher trophic level organisms.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005  
**Government Agency:** NOAA Fisheries  
**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Given the consideration of including an offshore converter station that will withdraw large amounts of water, consideration of impingement and entrainment of plankton must be factored into this analysis. In addition, consideration of impacts to species recruitment and larval distribution due to changes to ocean stratification and circulatory patterns resulting from the development of wind projects should be discussed in this section.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092  
**Organization:** Defenders of Wildlife  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

conduct a cumulative impacts analysis that evaluates the adverse long-term and short-term impacts of SW project and other OSW projects being planned off the Atlantic coast (which will be sited directly within the migratory corridor of mammals, reptiles, and birds and could result in large-scale habitat fragmentation/displacement of these species), of climate change-induced physical oceanographic processes (e.g. changes in acidity, salinity, oxygen content, and thermal expansion that could result in shifts in prey distribution, and of migration routes and times), and of non-OSW activities along Atlantic coast and in the maritime region ? in the cumulative impacts analysis, account for gaps in currently available scientific data on species? population densities, species? physiology, behavior, and habitat uses, interactions of species assemblages, and the functioning of complex marine and coastal ecosystems, and lack of adequate avoidance/minimization/mitigation/monitoring technologies to adopt a precautionary approach

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**Comment Number:** BOEM-2021-0052-DRAFT-0092  
**Organization:** Defenders of Wildlife  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Because of the large number of impact-producing factors from the different phases of SW project and the broad range of biological resources potentially impacted, BOEM must adopt a programmatic ecosystem-wide approach in conducting a cumulative impacts analysis. This analysis must include impacts not only from the current SW project but those from other OCS projects in the region, from current and reasonably foreseeable non-SW project activities offshore, near-shore, and onshore, as well as climate change impacts to identify and design effective avoidance and mitigation strategies. The EIS must include a thorough project-specific impacts analysis and the analysis of cumulative impacts on species of every taxon and their habitats within the marine (pelagic and benthic), nearshore, coastal, and terrestrial environments

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of SW project area. These analyzes must inform the development and implementation of avoidance and mitigation strategies based on best available current science and utilizing the latest state-of-the-art as well as emerging technologies

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Over the ~3 decade life of the SW project, other impacts such as those from climate change, multiple ongoing and proposed OSW projects in the region, non-OSW activities offshore, near shore, and coastal activities will combine to pose unprecedented risks to ecosystems in the region which include habitats of Endangered species in every taxon with rapidly declining populations. Because of the large number of impact-producing factors from the different phases of SW project and the broad range of biological resources potentially impacted, BOEM must adopt a programmatic ecosystem-wide approach in conducting a cumulative impacts analysis. This analysis must include impacts not only from the current SW project but those from other OCS projects in the region, from current and reasonably foreseeable non-SW project activities offshore, near-shore, and onshore, as well as climate change impacts to identify and design effective avoidance and mitigation strategies.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS must provide a comprehensive cumulative impacts assessment, based on current scientific data, of EFH, pelagic, and benthic resources from the impacts of SW project construction, operation, maintenance, repowering, and decommissioning. Without a comprehensive evaluation of the types of habitat present and the cumulative impacts to those habitats, the SW impacts assessment in the COP is incomplete and potentially inaccurate. The EIS must also consider the Block Island study in its evaluation of the accuracy of the estimates of impacts to complex habitats in the SW COP. In the EIS, BOEM must evaluate all reasonable alternatives to current COP activities and adopt that alternative which has the least/minimal impact to EFH.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Since all current OSW areas occur within migratory pathways of trans-Atlantic songbirds and shorebirds, BOEM must conduct a quantitative assessment of the cumulative effects including

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population viability analyses from OSW build out in the Atlantic OCS to mitigate the increased likelihood of large-scale migratory collision events or displacement events as the total OSW footprint increases.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

detailed adaptive ecosystem-wide management plan, based on above analyses, describing how all conservation obligations afforded to impacted avian species by multiple statutes, conservation policies, agreements, and treaties<sup>43</sup> will be met. This comprehensive plan must include methods and standards for monitoring, avoidance, and mitigation, informed by current science and best available technologies, in ecosystem-wide approaches. The best management practices defined by this plan could be extended to other OSW projects within the region and all along the Atlantic coast which encompass important habitats for birds migrating along the Atlantic Flyway. • application of Collision Risk Models (CRMs) in analyzing potential collision impacts on at-risk species in the offshore environment which may occur within 20 km of the SW area footprint. CRMs provide a mechanism for testing outcomes against model predictions (e.g. observed vs expected collision rates). The collision risk analysis in the EIS must be complete and transparent as CRMs are extremely sensitive to input parameters such as avoidance behavior, flight height, flight activity, flux rate, corpse detection rate, rotor speed, bird speed, and collision risk. CRMs should also consider differences in daytime and nighttime flight patterns.<sup>44</sup> • mortality data and displacement data in cumulative impacts analyses and adaptive management strategies, to validate CRMs, and to measure long-term impacts on at-risk species. • analysis of migration timing, variations in flight height, and the distance from shore at which nocturnal migrants reach maximum migration height, using a combination of radar, telemetry, aerial surveys, and acoustic monitoring technologies.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

full annual and life cycle approach to address cumulative impacts on population levels of impacted species. • consideration of SW activities beyond the onshore and offshore project footprint on species like the migrating red knots and other shorebirds which rely on mudflats along the coast to rest and refuel during their fall migration, and the common and roseate terns which rely on them to stage before migrating.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

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**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Scientific data on NARW functional ecology also shows that the species employs a “high-drag” but energetically expensive foraging strategy that enables them to selectively target high-density prey patches.<sup>108</sup> If access to prey is limited in any way, the ability of the whale to offset its energy expenditure during foraging is jeopardized. “Right whales acquire their energy in a relatively short period of intense foraging; even moderate changes in their feeding behavior or their prey energy density are likely to negatively impact their yearly energy budgets and therefore reduce fitness substantially.”<sup>109</sup> NARW is already experiencing significant food-stress with juveniles, adults, and lactating females having significantly poorer body condition relative to southern right whales and the poor condition of lactating females may cause a reduction in calf growth rates.<sup>110</sup> Unrestricted access to suitable areas, wherever they exist, and minimization of disturbance are thus essential for the species to maintain their energy budget,<sup>111</sup> especially during their energetically expensive migration. This analysis must inform avoidance and mitigation strategies in a programmatic ecosystem-wide approach to protect NARW and all other species using the same habitats from the common threats of OSW projects which will be installed along the east coast which overlaps the NARW/marine mammal migratory corridors and foraging/calving habitats. • use the cumulative impact analysis to ensure that any potential shifts in habitat usage by NARW and other large whale species and stocks are reflected in sound exposure modeling associated with OSW development. Because of the long-term cumulative effects of various stressors, NARW “body lengths have been decreasing since 1981” and this reduction in physical size “may lead to reduced reproductive success and increased probability of lethal gear entanglements”, according to a just published study.<sup>112</sup>

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should evaluate, in detail, the cumulative impacts on protected species and fisheries resources associated with overlapping construction activity of adjacent projects, including elevated noise levels, displaced fishing effort, cable routing and burial, and changes in species abundance, among other impacts. Specific information related to the timing of the construction activity and the expected number of proposed construction seasons is important, particularly for evaluating cumulative impacts to marine mammals, sea turtles, and spawning activity of fish and invertebrates. Vessel strikes are a documented threat to a number of protected species including Atlantic sturgeon, sea turtles, and large whales, including critically endangered North Atlantic right whales.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The EIS should evaluate, in detail, the cumulative effects of increased vessel traffic during all phases of the project. The EIS should fully evaluate the cumulative effects of overlapping acoustic and benthic disturbance impacts on cod spawning aggregations across multiple spawning seasons. As discussed above, the project area overlaps with known spawning grounds for Atlantic cod. Because cod stocks region-wide are depleted in part due to low recruitment in recent years, adverse impacts to the spawning and recruitment of Atlantic cod associated with this project may result in significant long-term cumulative impacts to the southern New England spawning component of the Georges Bank stock. Cod that spawn in southern New England may soon be designated as a separate stock by the New England Fishery Management Council based on previously peer reviewed research. Overall, regional cod stocks are in poor condition and additional impacts to their discrete spawning aggregations and future recruitment, including cumulative impacts from multiple offshore wind development projects, may be detrimental to their recovery and result in significant long-term cumulative impacts to this distinct stock component and the species at large. The EIS must evaluate the potential cumulative effects of construction activity from this project and adjacent projects occurring during periods of cod spawning over multiple years, including the potential for population level effects should construction be permitted during periods of spawning activity. In addition, an assessment of cumulative impacts of existing and proposed transmission cables should also be considered. Based on the proposed wind development projects in this region, there is the potential for substantial additive impacts associated with the number of required cables. As part of the cumulative effects analysis, measures to minimize the additive impacts should be considered, including the evaluation of designated cable routes and coordination and consolidation with adjacent projects to minimize cumulative impacts.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We encourage BOEM to continue to expand and refine the Cumulative Activities Scenario originally developed for the Vineyard Wind project. The discussion in the scenario provides an appropriate avenue for BOEM to consider interrelated impacts of the various projects within a geographic region over time and whether additional mitigation or impact reduction measures need to be considered. The Sunrise Wind project is one of several that could be under construction concurrently with other projects in the same general area. We continue to recommend a strong focus on cumulative impacts to complex bottom habitat, endangered species and marine related commerce including commercial fishing. The analysis should also consider impacts to navigation as additional offshore wind projects are approved and constructed over time. We also recommend that the activities scenario examine landside effects of the potential for increased noise, traffic, and air impacts from port activity to support the development and operation of offshore wind facilities over time.

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## **A-2.20. Proposed Action/Project Design Envelope**

**Comment Number:** BOEM-2021-0052-DRAFT-0091

**Organization:** Save the Sound

**Commenter:** Charles Rothenberger

**Commenter Type:** Non-Governmental Organization

### **Comment Excerpt Text:**

With respect to the "project design envelope" approach to permitting offshore wind projects, we would recommend a slight modification to that process. We understand that the offshore wind industry is evolving rapidly and appreciate that utilizing a design envelope approach provides the project developer the flexibility to take advantage of industry advancement and innovative technologies as the project progresses. Save the Sound would like to see an emphasis, however, on ensuring that the design envelope approach ensures maximum environmental and natural resource protection. While we appreciate that under the project design envelope approach a "maximum design scenario" is presented within the scope of various proposed construction parameters and, indeed, may be "approved" within the scope of such design envelope, we believe that the project developer should bear a burden of proof in deciding to move forward with any design alternative within that design envelope that does not present, among the alternatives, the minimum adverse impacts to natural resources and wildlife. That is, if an alternative design within the "design envelope" that is not most protective of natural resources is ultimately chosen for adoption, then BOEM and other permitting agencies should be permitted to evaluate whether the applicant has met a burden of proof that a more environmentally protective design alternative with the "design envelope" is not feasible prior to giving final approval for construction activities

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

### **Comment Excerpt Text:**

While we understand and support the PDE approach, we note that it is critical to ensure that the range of design parameters are reasonable. A PDE that is too broad would impact your ability to provide a meaningful effects analysis in both the NEPA document and your consultation documents (BA and EFH Assessment). An analysis based on an overly broad PDE may grossly overestimate the effects of the action on protected species and habitat, which would likely result in very conservative mitigation measures.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

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**Commenter:** Michael Petony  
**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The NEPA document should evaluate a reasonable PDE, with a proposed action that is consistent between the NEPA document and the consultation documents.

**A-2.21. Purpose and Need**

**Comment Number:** BOEM-2021-0052-0007  
**Government Agency:** Rhode Island Coastal Resources Management Council  
**Commenter:** James Boyd  
**Commenter Type:** State Government

**Comment Excerpt Text:**

Purpose and Need The purpose and need statement as provided by BOEM for the proposed Sunrise Wind project is to construct and operate a commercial-scale, offshore wind energy facility with a maximum of 122 turbine foundations within Lease Area OCS-A 0487. The project design envelope (PDE) for the project as specified within the COP is based on a maximum operating capacity ranging between 880 megawatts (MW) and 1,300 MW of renewable energy. The project developer (Orsted and Eversource), however, has apparently entered into a modified power and purchase agreement (PPA) contract with NYSERDA or has the ability to deliver 924 MW of renewable energy under the PPA. The original 2019 PPA was for 880 MW. Accordingly, the lower range of the PDE should be 924 MW rather than 880 MW given the available information concerning the PPA with NYSERDA. Orsted and Eversource specify within the PDE that the project will plan to use 8-15 MW wind turbine generators, but offshore wind industry technology is rapidly changing and larger wind turbine generators (WTG) are being planned for other projects. It is likely that Orsted and Eversource will use the upper range of the WTGs for its project, perhaps as large as 15 MW. Therefore, by using the larger 15 MW units for the Sunrise Wind project the developer has a feasible alternative to further reduce impacts to marine habitat within the project area by reducing the overall number of turbine foundations from the proposed maximum of 122 to 62 turbine locations to meet its existing PPA with NYSERDA. Using the 15 MW WTG the number of turbine foundations necessary to meet the PDE is between 59 (for 880 MW) and 87 (for 1300 MW). Nevertheless, the purpose and need for this project only requires 924 MW resulting in a maximum of 62 turbine foundations using the 15 MW WTGs.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088  
**Organization:** RODA  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

An appropriate purpose and need statement for this action would lead BOEM to prioritize OCSLA and NEPA's focus on environmental safeguards and eliminating damage to the environment. It would not be based on achieving states' OSW goals or the profit goals of a utility

company determined outside of the NEPA process, as those would predispose the outcome of environmental review. The NEPA environmental analysis should inform OSW planning and decision making, not the inverse.<sup>8</sup> Regardless, an agency cannot circumvent its NEPA obligations "by adopting private interests to draft a narrow purpose and need statement that excludes alternatives that fail to meet specific private objectives" nor can it "craft a purpose and need statement so narrowly drawn as to foreordain approval of" a project proposed by a private party.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

BOEM's purpose and need statement and screening criteria cannot be so narrowly focused to eliminate from full consideration reasonable alternatives that also minimize and avoid adverse effects.

## **A-2.22. Scenic and Visual Resources**

**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

As consulting parties, we expect BOEM to actively seek, discuss, and consider our views in permitting and mitigating this Project. According to the COP, Block Island has some of the most severe visual impacts to historic resources in the Project Area, and we therefore urge and expect BOEM to work closely with SELF and New Shoreham to ensure the setting and character of our historic resources are not unreasonably compromised

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

The Visual Impacts Assessment and the corresponding visualizations do not adequately evaluate the impacts to all of the historic resources on Block Island. We therefore request that the COP be amended to assess accurately adverse impacts avoidance, minimization, or mitigation measures

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from additional vantage points. points should include all historic districts, sites, and landscapes and to determine appropriate These vantage identified by BOEM and the consulting parties. Furthermore, the impacts. COP does not discuss how BOEM will adequately address potential lighting Section 106 of the NHPA also requires federal agencies to reduce, minimize, and mitigate any effects on historic resources. We are especially concerned about lighting impact night sky both during and after construction, s to the dark which, according to the COP, will be fully visible from several points on Block Island, including the Southeast Lighthouse NHL. BOEM to take a hard look at these impacts and mand We therefore urge ate Automatic Detection Lighting Systems (ADLS). In addition, BOEM should also consider visual impacts of lighting at each proposed turbine's base. Due to the potential for the Project to adversely impact cultural sites, historic properties, and the views hed, BOEM should conduct additional visual assessments and provide consulting parties and the public with adequate and easily accessible information that informs all parties of potential impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

The COP should be amended to reflect - and the DEIS should include - a complete assessment of all impacts to historic and cultural properties and include additional visual simulations for the Project area.

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**Comment Number:** BOEM-2021-0052-DRAFT-0090

**Government Agency:** Town of New Shoreham and the Southeast Lighthouse Foundation

**Commenter:** Will Cook

**Commenter Type:** Local Government

**Comment Excerpt Text:**

As the COP describes, this Project will have immediate and long New Shoreham, which term visual impacts to SELF and hold that views of an undeveloped ocean are integral to the character, setting, feeling, and association of Block Island's historic properties and cultural heritage.

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**Comment Number:** BOEM-2021-0052-DRAFT-0050-A1-091

**Organization:** Sierra Club

**Commenter:** Abby Rosenberg

**Commenter Type:** Individual

**Comment Excerpt Text:**

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These are the beaches near me, and I am not concerned about the appearance of the wind farm. In complete honesty, I think it will be equally satisfying to watch the windmills as it is to watch the waves roll and crash.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Based on the information to date, the NPS visual concerns at the Seashore are limited to short-term construction visual impacts, and the possibility of changes to the project such as the addition of a booster station, should another one be proposed, located within view of National Park System lands. As to construction visual impacts, NPS is interested in discussing ways to reduce these visual impacts. Visual Impacts to NHLs As mentioned above, once the APE for the wind farm development area is established and potentially impacted NHLs are identified, the NPS will assist in identifying locations for additional KOPs to determine potential visual impacts. The seascape and landscape impact assessment analyzes and evaluates impacts on both the physical elements and features that make up a landscape or seascape as well as the aesthetic, perceptual, and experiential aspects of the seascape or landscape that make it distinctive as viewed from the KOPs. In the meantime, we recommend the following NHLs listed in the section “Overview of Area National Historic Landmarks” above be included in the VIA. At this time, “Appendix T - Historic Resources Visual Effects Assessment” has not been released for review; the NPS looks forward to its completion. We expect that the new VIA will be developed according to the BOEM Seascape/Landscape and Visual Impact Assessment (SLVIA), published in April 2021. Moreover, we recommend that BOEM’s NEPA documentation include an analysis of the cumulative impacts to NHLs. Numerous offshore wind projects are proposed or reasonably foreseeable to be constructed in the vicinity of Sunrise Wind. While potential mitigation measures such as interpretative displays at some NHL locations may be installed to offset impacts to the first constructed projects in this area, subsequent projects will have to consider different and more creative solutions to meet any mitigation requirements. The NPS recommends this discussion take place in the immediate future so that a comprehensive strategy can be developed.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

In general, the COP considered nighttime lighting as part of the visual impact. The COP mentions several points, which NPS supports: • Construction and operational lighting will be limited to the minimum necessary to ensure safety and compliance with applicable regulations. • Sunrise Wind will utilize an aircraft detection lighting system (ADLS) or related means (e.g.,

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dimming or shielding) to limit visual impact. Other factors that NPS requests to be considered include: • Other important lighting principles such as: 1. Control -- lights should be off when not needed. This applies to both the construction phase and operation phase. 2. Warm color-temperature light -- use amber lights, when possible, instead of white light. • The lighting plans. For the onshore stations, the NPS requests the lighting plans for both construction and operation phases to be included in the EIS. • Identification of the nighttime visibility threshold distances. In COP section 4.5.1.1 Affected Environment under Visual Study Area and Zone of Visual Influence heading, the written information indicates the Sunrise Wind Farm Visual Study Area is determined based on previous studies and published literature. However, it is not clear whether these studies considered the visibility threshold at night with the blinking red lights. The NPS suggests identifying the nighttime visibility threshold distances, and the KOPs for nighttime visual simulations should be selected with the consideration of the nighttime visibility threshold accordingly. • Public access of all the visual simulated images and videos. At Fire Island National Seashore, the night sky, looking south from the Seashore's wilderness has always been one of the more stunning and important aspects related to wilderness character. The WTG night lighting will be too far away to impact the Seashore. However, any additional booster stations that would be proposed would likely have an impact on the wilderness characteristics of Natural, Undeveloped, and Outstanding Opportunities at the Fire Island Wilderness area. Analysis of dark night skies impacts should consider potential impacts under the Wilderness Act.

### **A-2.23. Sea Turtles**

**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Impacts to sea turtles (Section III.G): ○ BOEM should update their injury and behavioral radii for acoustic impacts to sea turtles from pile driving activity. ○ BOEM should require all vessels to adhere to a 10-knot speed restriction, and to further slow to 4 knots when a turtle is sighted or when transiting through areas of likely offshore feeding habitats from June 1 to November 30.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Turtles Given that the ability to detect sea turtles during aerial surveys is highly variable, increased investment in tagging and tracking studies<sup>293</sup> would complement data collected via aerial surveys and provide a more complete picture of sea turtle occurrence and habitat use in the region. Increased sea turtle tagging and tracking studies are needed to better understand movement, dive patterns and surface time, and habitat use which can, among other uses, help advise monitoring and avoidance, minimization, and mitigation strategies and generate more accurate estimates of sea turtle takes. Satellite telemetry data are available from rehabilitated and released Kemp's ridley and green turtles<sup>294</sup> that suggest rehabilitated turtles are a good proxy

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for wild-caught turtles. Mitigation measures for sea turtles should include a speed restriction of 10 knots for all vessels associated with the Project at all times, regardless of whether vessels are transiting or on site. No fewer than four PSOs should be available to monitor all exclusion zones for sea turtles – for vibratory driving and impact pile-driving, as well as any necessary high resolution geophysical and geotechnical survey activities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Discuss seasonal distribution, abundance, and migration routes.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Current scientific data on sea turtle-OSW interactions is extremely limited. Development of avoidance and mitigation strategies must be based on accurate estimates of sea turtle populations, their precise seasonal location, and a comprehensive assessment of cumulative impacts of all human activities in the region and of climate change. Multiple corroborating approaches are needed to acquire spatiotemporal profiles of different sea turtle species in the project area since the ability to detect sea turtles through visual sightings and aerial surveys is highly variable. The presence in/relative use of nearshore areas by sea turtle species must be accounted for in models of species density to inform impact analysis since some of SW activities would take place in coastal waters. The EIS must include cumulative analysis of impacts on sea turtles for all impact producing factors from SW, other OSW and non-OSW activities offshore, nearshore, and onshore. As NOAA acknowledged, "(w)e do not understand how noise impacts populations, survivorship or fecundity, nor do we understand the cumulative impacts of noise on individuals or populations when combined with other stresses (bycatch, climate change, etc.)." It is essential that the EIS thoroughly account for all impacts in developing avoidance/ mitigation measures to save the sea turtles from sliding into extinction.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Among the numerous threats faced by sea turtles both in marine waters and on coastal lands, the major ones are vessel strikes, fishing gear entanglements, underwater noise, loss of nesting

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habitats to development; destruction of nests by predators and poachers; harvest of turtles for eggs, meat, leather, and tortoiseshell; and accidental killing by commercial fishing operations.<sup>29</sup> USFWS and NMFS have joint federal jurisdiction of sea turtles, with the former having lead responsibility in protecting their nesting beaches and the latter for their marine environment.<sup>30</sup> Therefore, inter-agency collaboration and coordination is essential to sea turtle protection and recovery. Data on sea turtle movements, distributions, and habitat use patterns, and interactions with OSW facilities is scarce. However, paucity of data on OSW impacts on sea turtles must not be construed as OSW activities having no impact, and as such BOEM must adopt a conservative precautionary approach in its EIS so as not to further endanger the sea turtles whose populations have been declining for several decades.

#### **A-2.24. Water Quality**

**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Consider New York State Water Quality Standards, if contaminants of concern are identified in the sediment. Conduct evaluation in accordance with the New York State Department of Environmental Conservation's Division of Water Technical & Operational Guidance Series (TOGS) 5.1.9. Prediction modeling depicting the extent and duration of turbidity plumes from resuspension of sediment. Investigation of potential resuspension during each of the proposed installation activities. Evaluate changes to dissolved oxygen or nutrients in the overlying water column resulting from construction related activities. Evaluate impacts of cooling water intake structures (CWIS) on circulation and temperature.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0003

**Government Agency:** Massachusetts Office of Coastal Zone Management

**Commenter:** Lisa Berry Engler

**Commenter Type:** State Government

**Comment Excerpt Text:**

Because of the distance from the Sunrise Wind lease area to the project's landfall, Sunrise Wind is proposing to transmit power via DC cables, which necessitates the construction and operation of a DC converter station within the lease area. The COP identifies that 8.1 million gallons per day (MGD) of seawater would be withdrawn from the lease area to cool the converter station. The COP further describes how the intake velocity for the seawater cooling system will be kept to 0.5 feet per second (fps). The EIS should detail how Sunrise Wind intends to prevent the entrainment of ichthyoplankton, eggs, and juvenile organisms over the life span of the project. This should include a description of regular operational procedures to inspect the cooling water

intake system, its screens and other entrainment prevention apparatus, and remediation measures that will be taken if intake velocity is found to be in excess of 0.5 fps or if impacts to target species are observed.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Open loop cooling systems of this kind have long been shown to harm aquatic life and valuable commercial and recreational species from entrainment and impingement of particularly zooplankton, eggs, larvae, and juvenile fish and invertebrates. Entrainment losses can be significant for certain species and represent an adverse impact under the Clean Water Act. The intake velocity for the cooling water that will be utilized is of particular concern because of the relative uncertainty of whether important foraging species, ichthyoplankton, copepods, and larvae can escape the proposed intake flow. Because of these impacts, combined with the impacts of thermal pollution, regulatory agencies in states like Rhode Island, Massachusetts and New York have imposed restrictions on construction of new open loop cooling systems, instead requiring Best Technology Available<sup>1</sup>. Given the proximity of this proposed converter station to known cod spawning areas, and given the emphasis that state and federal agencies have placed on rebuilding cod populations, the proposed open loop cooling system is inconsistent with long standing goals of NOAA and the New England Fishery Management Council. Permitting under the National Pollution Discharge Elimination System program for the technology used at this converter station will be managed by EPA Region I and permitting staff will undoubtedly be looking to the draft EIS for data, analyses and reports to allow for the proper evaluation of Sunrise Wind's proposed use of once through cooling. Not only should BOEM require that the project proponent provide species specific entrainment and impingement to be evaluated as part of the EIS review, BOEM should evaluate the environmental impact of a closed loop cooling alternative as a more protective approach, in the same way as previous EIS's have added new alternatives for Fisheries Habitat layouts and other project aspects. For the open loop cooling the project proponent should provide a baseline pelagic ichthyoplankton characterization report, a comprehensive fishery impact assessment that examines species life histories (such as larval stage duration, longevity, fecundity, mortality at various larval stages, etc.), a net present value of projected entrainment losses associated with the use of the proposed technology, and a monitoring and reporting plan specific to the impacts related to the use of an open cycling cooling technology.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

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Provide water quality baseline levels (i.e., turbidity, nutrients, dissolved oxygen, and contaminants, especially where Class C contamination is known or has been detected in the sediment, etc.).

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Sediment Suspension and Deposition: Estimate levels and time of year (these may impact benthic species and egg and larval survival). Model the extent, distance of total suspended solids (TSS) concentration, and quantity of deposition. Model Class C contaminant concentration in the water column at 500 feet from the activity, if applicable. Consider actual monitoring data from installed offshore wind turbines during and after installation, including measured deposition rates/distances and extent of generated turbidity plumes. Assess impacts from cofferdam excavation. Assess impacts from seafloor leveling techniques. Avoid side-casting when undertaking construction and maintenance activities to minimize impacts to water quality and benthic species.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Consider New York State Water Quality Standards, if contaminants of concern are identified in the sediment. Conduct evaluation in accordance with the New York State Department of Environmental Conservation's Division of Water Technical

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Consider New York State Water Quality Standards, if contaminants of concern are identified in the sediment. Conduct evaluation in accordance with the New York State Department of Environmental Conservation's Division of Water Technical

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Consider New York State Water Quality Standards, if contaminants of concern are identified in the sediment. Conduct evaluation in accordance with the New York State Department of Environmental Conservation's Division of Water Technical

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The document should also evaluate the potential impacts of chemical emission, including the release of chemical residues from wind farm operating materials and corrosion protection systems.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We recommend three options to cool the offshore wind HVDC transformer platforms: 1. use air-cooling instead of sea water cooling 2. use sustainable closed-loop sea water cooling systems to reduce environmental impact 3. evaluate emergent technologies such as the ?EU-funded COOLWIND project that does not require seawater pumps, filters, heat exchangers or expensive salt water piping, nor chlorination of seawater. Instead of pumping cold seawater to the transformer platform, heated water from the converters is circulated and chilled in a subsea mounted cooler? with less environmental pollution, less power consumption and less emissions.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The regulations governing EPA's NPDES permit program are generally found in 40 CFR §§ 122, 124, 125, and 136. EPA Region 1 is the permitting authority for facilities located in

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Massachusetts and New Hampshire as well as for projects discharging to federal waters offshore of the New England States. The COP (Part 1.4.2.3) correctly identifies that the cooling water withdrawals and discharges at the offshore converter station (OCS-DC) will require a NPDES permit issued by EPA Region 1 before discharges begin.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The OCS-DC will discharge cooling water. The DEIS should evaluate the impacts from the discharge of pollutants to the receiving water, including the thermal discharge and any chemicals or other additives to the facility's effluent. Discharges of pollutants from a point source to the territorial seas, the contiguous zone, and ocean must satisfy CWA Section 403(c) (Ocean Discharge Criteria) and implementing regulations at 40 CFR Part 125 Subpart M. The DEIS should evaluate the impacts of the discharges on the marine environment consistent with determining whether the discharge will cause unreasonable degradation of the marine environment. 40 CFR § 125.122. This evaluation should estimate the quantities and composition of pollutants to be discharged, their potential to bioaccumulate in the environment, and their potential to be transported to areas beyond the immediate point of discharge. In addition, the evaluation should assess the composition and vulnerability of the biological communities which may be exposed to such pollutants, as well as the presence of spawning sites, nursery/forage areas, migratory pathways, or other types of habitat necessary for survival and propagation of critical life stages of the organisms comprising the biological community. The evaluation should also determine the effects on any special aquatic sites (e.g., marine sanctuaries, refuges), the potential impacts to human health, and the effects on existing or potential recreational and commercial fishing. Finally, the assessment should also evaluate whether the facility can be operated consistently with the enforceable requirements of any applicable approved Coastal Zone Management Plan, and whether it will comply with applicable marine water quality criteria developed pursuant to CWA section 304(a)(1). As an example, EPA's 1986 Quality Criteria for Water ("Gold Book") includes recommended criteria for protecting marine aquatic life from thermal discharges.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The proposed export cable landfall location (Holbrook) is situated over the sole source aquifer of Long Island, New York. The DEIS should describe potential for construction related impacts to the sole source aquifer and how they will be addressed.

## **A-2.25. Wetlands and Waters of the U.S.**

**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

### **Comment Excerpt Text:**

Evaluate potential impacts to Carmans River and species inhabiting the waterbody resulting from the installation of the transmission cable. Evaluate the potential impacts from the clearing of vegetation near the Carman's River given its designation as a Wild/Scenic/Recreational River and Significant Coastal Fish and Wildlife Habitat. Evaluative impacts to freshwater and tidal wetlands and regulated adjacent areas.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

### **Comment Excerpt Text:**

The FWCA provides authority for our involvement in evaluating impacts to fish and wildlife from proposed federal actions that may affect waters of the United States. The FWCA requires that wildlife conservation be given equal consideration to other features of water resource development programs through planning, development, maintenance and coordination of wildlife conservation and rehabilitation. The Act does this by requiring federal action agencies to consult with us "with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development" (16 USC 662.) One of the reasons that Congress amended and strengthened the FWCA in 1958 was that it recognized that "[c]ommercial fish are of major importance to our nation[,]” and that federal permitting agencies needed general authority to require “in project construction and operation plans the needed measures for fish and wildlife conservation” S.Rep. 85-1981 (1958). As a result, our FWCA recommendations must be given full consideration by federal action agencies. Your consultation with us under the FWCA may occur concurrently with the EFH consultation under the MSA.

**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The COP states that, "... no wetlands or ecologically sensitive water resources are expected to be directly impacted by the Project." We support the efforts to design a project that avoids impacts and recommend that the DEIS include a specific discussion of existing wetlands, streams and other waters of the United States that could potentially be affected by various project components. The DEIS should explain how project activity on and offshore will comply with EPA's Clean Water Act regulations issued under Section 404 (b)(1), referred to as "EPA's 404 (b)(1) Guidelines." The DEIS should also include an evaluation of the measures incorporated into the project design to avoid, or where unavoidable, minimize direct and indirect impacts to wetlands and other waters. The evaluation of direct and indirect impacts should fully consider both temporary and permanent impacts. The evaluation of indirect impacts should include any clearing impacts for the proposed terrestrial construction activities resulting in a change (either permanent or temporary) of cover type within a wetland (e.g., converting a forested wetland to an emergent or scrub/shrub wetland). In addition, construction related indirect impacts, including water quality impacts and erosion or sedimentation impacts to wetlands or waterbodies should be analyzed.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

All construction practices which will be utilized to avoid and minimize impacts to wetlands and waters should be documented in the DEIS. Conditions proposed to protect wetlands and waters should also be documented. If the project design changes and impacts to wetlands are unavoidable, the DEIS should also include a conceptual discussion of anticipated compensatory mitigation for unavoidable direct and indirect impacts to wetlands and other waters, including cover type conversions during construction and operation of the project. The mitigation analysis should also identify measures to address potential impacts to state and federally listed endangered and threatened species. We also recommend that the discussion in the DEIS include the range of design/construction measures provided in the COP that can be implemented to avoid and minimize impacts of transmission cables as they transition to shore from the marine environment. We specifically request that the analysis discuss whether submerged aquatic vegetation exists (or has historically existed) in the nearshore cable landfall zone and what measures will be implemented to avoid work in those areas. We recognize and support the use of Horizontal Directional Drilling (HDD) as one tool to avoid impacts and recommend that the DEIS discuss the protocols that will be established to minimize impacts associated with this drilling technology.

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## **A-2.26. Other**

**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

### **Comment Excerpt Text:**

Construction Related Impacts Traffic (from Vessels, Vehicles and Aircraft): Traffic impacts from construction vessels, such as those transporting turbine parts. Traffic impacts from construction of export cable and associated upland infrastructure, especially during peak summer tourist seasons. Note: If the Project needs access the controlled access portion of the Sunrise Highway, then Federal Highway Administration (FHWA) approval is needed (even if it is only temporary for conduit laydown staging area(s)). Traffic impacts (vessel and vehicle) from use of Ports and O&M facilities. Assess impacts from inadvertent releases and spills. Discuss management of debris and waste. Discuss emergency preparedness for severe storm events. OTHER Operational and Maintenance (O&M) Impacts Provide details on O&M facilities and overview of environmental impacts and appropriate state review processes. Note: Assess environmental impacts to sensitive visual and noise receptors, proximity to sensitive natural resources (shellfish beds, fish nursery habitat, SAV, wetlands, beach, dune), potential excavation and fill below spring high water, potential temporary and permanent structures below mean high water, traffic related impacts, etc. Provide details on all contemplated port facilities and overview of environmental impacts and appropriate state review processes. Note: Assess environmental impacts to sensitive visual and noise receptors, proximity to sensitive natural resources (shellfish beds, fish nursery habitat, SAV, wetlands, beach, dune), potential excavation and fill below spring high water, potential temporary and permanent structures below mean high water, traffic related impacts, etc. Consider long-term habitat impacts. Consider vibration related impacts. Consider impacts from cable heat transfer. Discuss emergency preparedness for severe storm events.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

### **Comment Excerpt Text:**

Evaluate impacts to terrestrial vegetation, including to the Long Island Central Pine Barrens (<https://pb.state.ny.us/assets/1/6/longis.pdf>). Discuss measures to prevent the spread of invasive species.

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**Comment Number:** BOEM-2021-0052-0003  
**Government Agency:** Mastic Fire Department  
**Commenter Type:** Local Government

**Comment Excerpt Text:**

How long will this project go on for? When will the project start? Will this cause a delay? What are the hours of operations? Will we get notified of the project timelines? We will see an increase of incidents as well as accidents due to roadwork? Will there be detours at any times? Is someone making communication with all first responder agencies to ensure there is not delayed responses to transportation to area hospitals? Public Safety, first responder safety must become paramount in a situation like this.

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**Comment Number:** BOEM-2021-0052-DRAFT-0091  
**Organization:** Save the Sound  
**Commenter:** Charles Rothenberger  
**Commenter Type:** Individual

**Comment Excerpt Text:**

Decommissioning considerations should take into account the environmental and ecological impacts of both a wholesale dismantling and removal of all structures and associated apparatus (essentially retuning the site to a "pre-build state") as well as a more selective approach in which some elements of the project may remain in place. The impact of decommissioning on the surrounding ecosystem should be the first and highest consideration. Consideration of the reuse and recycling of decommissioned equipment should also be part of the process, with disposal/landfilling of material to be considered as a last resort.

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**Comment Number:** BOEM-2021-0052-0003  
**Government Agency:** Mastic Fire Department  
**Commenter Type:** Local Government

**Comment Excerpt Text:**

The concern of the Mastic Fire Dept. and always will remain the public safety of our community. Please let the record be know that our first responders can not have a delayed response for alarms. Communication of project timelines, response to calls when minutes and seconds counts is always a concern. We had an incident recently where the gates at William Floyd were down and it took 30 plus minutes to get down the road. As you know the east side of Floyd is the Mastic Fire District to Beacon however we need the west side to respond down to calls in the home depot area.

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**Comment Number:** BOEM-2021-0052-0004  
**Commenter:** Jennifer Valentine  
**Commenter Type:** Individual

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**Comment Excerpt Text:**

We need clean and responsible energy that also does not harm wildlife

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**Comment Number:** BOEM-2021-0052-0006**Government Agency:** Suffolk County, NY**Commenter Type:** Local Government**Comment Excerpt Text:**

We anticipate that the onshore portion of the cable will be buried underneath Town, County and State-owned roads or rights-of-way for approximately 18 miles to the substation. We urge BOEM to ensure that this project adhere to construction restrictions to minimize disruption to residents and avoid construction in certain roads and parks during the peak summer season.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053**Organization:** Oceana**Commenter Type:** Non-Governmental Organization**Comment Excerpt Text:**

Due to changing ocean conditions in the U.S. Atlantic Wind Energy Areas, Oceana also suggests that BOEM require new biological and ecological surveys of all proposed lease areas where the data is over five years old to ensure that development of these areas is appropriate and compatible with other marine conservation goals

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**Comment Number:** BOEM-2021-0052-DRAFT-0053**Organization:** Oceana**Commenter Type:** Non-Governmental Organization**Comment Excerpt Text:**

Offshore energy projects will install hundreds of pilings and thousands of miles of cable in public waters. All offshore wind projects have a finite duration and will ultimately need to be decommissioned and removed from the ocean. The EIS must include alternatives to ensure decommissioning, removal and mitigation of the site occurs regardless of economic, political, or environmental factors. The EIS must therefore include alternatives to make developers explicitly responsible for removing offshore wind equipment when their project ends and further include alternatives to require offshore wind developers and operators to place adequate resources in trust to ensure that decommissioning will occur regardless of bankruptcy, change of ownership or lack of profitability.

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**Comment Number:** BOEM-2021-0052-DRAFT-0068**Organization:** Sakonnet Point Fisheries LLC**Commenter:** Greg Mataronas**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

This is going to devastate the area and many year classes of fish. The area will be negatively altered forever, with barely any compensation or mitigation. This lack of concern and disregard for critically important habitat is a disappointment and should not have been allowed. My concern is that the same approvals without actual concern for the environment will happen for these future projects, such as Sunrise Wind right now.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils**Commenter:** Dr. Christopher Moore**Commenter Type:** Non-Governmental Organization**Comment Excerpt Text:**

Through modeling work, the physical presence of turbines has been estimated to alter the nearsurface and near-bottom temperatures, and thus, the juvenile transport of commercially important species like sea scallop (Chen, et al. 2021). The COP states construction, operations and maintenance, and decommissioning of the wind farm “are not expected to measurably impact oceanographic and meteorological conditions” (Section 4-58). The EIS should acknowledge both the individual project’s potential to materially affect oceanographic and hydrodynamic conditions based on ongoing research efforts and the project’s contribution to cumulative effects from development of several wind farms on a regional scale. The EIS should also utilize the findings from ongoing research funded by BOEM in its impact assessment to understand how wind energy facilities will likely affect local and regional physical oceanographic processes (Section 4-59).

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**Comment Number:** BOEM-2021-0052-DRAFT-0071**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils**Commenter:** Dr. Christopher Moore**Commenter Type:** Non-Governmental Organization**Comment Excerpt Text:**

In the context of both cable and turbine installation, any place where the bottom sediments will be disturbed must be evaluated for sediment contamination to understand the potential for environmental effects associated with contaminant release. Two obvious sources of contamination are dredged spoils from inshore, nearshore, or harbor maintenance and disposal of onshore materials (including waste). For many years, such disposal was not evaluated carefully and not regulated as it is today. As a result, sediments and other material with unacceptable levels of heavy metals and persistent organic pollutants (POPS) were disposed in ocean waters and may remain in locations where they could be disturbed. These sources of contamination need to be assessed and managed as part of the offshore wind development process.

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**Comment Number:** BOEM-2021-0052-DRAFT-0071

**Organization:** New England and Mid-Atlantic Fishery Mgmt Councils  
**Commenter:** Dr. Christopher Moore  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The COP states that “Decommissioning will involve removing the structures and foundations in the SRWF to a depth of 15 ft (4.6 m) below the seafloor” (Section 4-9), which is assumed to include the removal of the offshore cable system. It is essential that cables be removed during decommissioning. Abandoned, unmonitored cables could pose a significant safety risk for fisheries that use bottom-tending gear and the long-term risks to marine habitats are unknown.

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**Comment Number:** BOEM-2021-0052-TRANS-091621-0001  
**Organization:** OR Energy  
**Commenter:** George Povall  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

One of the other things -- so also involved with that is community benefits. We would love to see that, focused in that area. And we would really love to see a process that is not simply through the municipalities. And one of the last things we will just talk about for the moment is we would really like to see this process really get the localities involved.

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**Comment Number:** BOEM-2021-0052-EMAIL-100421-0004  
**Organization:** MONTAUKETT INDIAN NATION  
**Commenter:** Sandi Brewster-walker  
**Commenter Type:** Tribal Government

**Comment Excerpt Text:**

From the reports we have read, the Montaukett Indian Nation agrees with the New England Native American communities' concerns about not being heard, regarding potential impacts from the proposed offshore projects. In fact, this is the first time, our Nation has been asked to comment on this project or any other wind turbine project off-the shores of our territory.

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**Comment Number:** BOEM-2021-0052-TRANS-092021-0002  
**Organization:** Mastic Beach Conservancy  
**Commenter:** Maura Sperry  
**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The town is currently working on 147, acre habitat restoration. We're looking to put green trails and blue trails through that. And we're hoping that in doing that we could have your help.

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**Comment Number:** BOEM-2021-0052-TRANS-092221-0001

**Commenter:** Joseph Kommer

**Commenter Type:** Individual

**Comment Excerpt Text:**

I do actually have concerns that involve the nature of our energy creation and usage cycles, such that it not just create some structures and/or devices that go from cradle to grave, but that go even further and close the loop so that all materials are accounted for at all stages in the energy creation and also in the distribution, as well.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As for Native American tribes, there are several cultural connections with the coastal lands and waters in the region of development. Already BOEM and Sunrise Wind have engaged with representatives from the Unkechaug Nation, Delaware Tribe of Indians, and Mashantucket Pequot Tribal Nation, who have expressed concerns for the environmental and cultural resources of significance to their communities [7]. For one, several northeastern tribes hold connections with the now submerged lands that their ancestral indigenous communities occupied, prior to early Holocene sea-level rise. Additionally, each tribe has a maritime tradition significant to their cultural practices and, for some tribes, the project may obstruct the observation of celestial phenomena on the ocean horizon during ceremonies [7]. Tribes also have use for quahog beds and cultural connection with the North Atlantic whale. It is imperative that Sunrise Wind continue to engage with Native American tribes to avoid, reduce, or resolve impacts to cultural sites and resources.

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**Comment Number:** BOEM-2021-0052-DRAFT-0055

**Organization:** Students of University of San Francisco

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

According to some estimates, 200,000 tonnes of wind turbine blade waste will be disposed of each year from 2033 globally [25]. As more energy must be harvested, the diameter of turbine's blades and the height of steel towers is increasing. While many parts (nearly 85%) such as steel, copper wires, electronics of the turbine can be reused or recycled [26], blades, consisting of composite materials, cannot follow these procedures, or their recycling is not feasible [27]. Thus, it is mandatory to exert effort to quantify the potential volume of wind blades that will be uninstalled during and after the project's life. With this, the BOEM must provide several scenarios on how blades of 122 turbines will be stored or recycled. Besides that we urge BOEM to participate if possible in fiberglass research and development projects like Re-wind Network and include proposed solutions into the EIS of Sunrise Wind Farm and similar following projects. Likewise, the BOEM's plan for such scenarios as "repowering and continuation of

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operation," "full decommissioning," and "partial decommissioning" with provision of possible effects on future ecosystems, electric grid, socio-economic system, environmental justice. Even though it is difficult to predict and quantify the real transformation of offshore wind industry and its future impact, parameters such as volume of material sent to landfills and recycling centers, dynamics of ecosystem change, and change in energy consumption over 25 years can be anticipated and included into the decommissioning plan.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

A simpler and more protective approach would be for Sunrise Wind, to pivot to a closed loop cooling technology now. This move would send a signal all developers for other projects that may require cooling systems for AC to DC conversion stations, to simply and smartly plan for closed loop cooling from the start. As we have observed at Block Island Wind Farm, fouling organisms quickly colonize offshore wind turbine foundations. Thus, closed loop cooling would have an additional benefit of alleviating the need for routine underwater maintenance to remove fouling of open loop cooling water intake pipes. Propensity for fouling and clogging of open loop cooling systems and its potential impact on system reliability seems like a risk that could easily be avoided with adoption of a closed loop cooling alternative.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

We also encourage BOEM to, at the earliest stages possible for this and other projects, evaluate the utilization of foundations and scour protection as habitat for fish and invertebrates and use that information to inform projections of eventual decommissioning requirements. Currently, regulations require all man-made structures be removed at the end of a project's operational life, to a depth of 15 feet (4.6 meters) below the mudline (BOEM (30 CFR § 585.910(a))). However, a recent review by Fortune and Paterson (2021)<sup>2</sup> on the impacts of decommissioning man-made structures provides the case for considering alternatives to this regulation. The paper emphasizes the potential importance of man-made submerged structures as complex habitats that can support a rich localized food web long after the project's lifespan. This ecological importance can only be quantified through careful habitat monitoring of these novel hard surfaces, including the Nature-Based Design products. Documenting the established mobile and epifaunal communities inhabiting the project structures will provide information on their habitat value, including their value as refugia, spawning habitat, and as a food source for fish and invertebrates. The data gathered from these post-construction surveys should be used to inform decommissioning strategies, as well as to inform the design and development of Nature-Based Design options moving forward.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The Rigs-to-Reef program is a functional example of man-made structures being left in situ to continue providing complex habitat for marine life. Upon decommissioning of oil and gas platforms in the Gulf of Mexico and California, developers apply to leave a portion of each structure in place to continue functioning as an artificial reef (Fortune and Paterson, 2021); California guidelines even call for enhancement of man-made habitat upon decommissioning (Schroeder and Love, 2004)<sup>3</sup>. Part of the costs saved by not removing the entire structure is put towards management of the artificial reef (Fortune and Paterson, 2021). Monitoring studies that have been sponsored by the federal government include addressing habitat value, fish recruitment and attraction, and impacts to species upon platform removal (BSEE, 2021)<sup>4</sup>. Even though decommissioning is decades away, uncertainty concerning decommissioning requirements is influencing decisions that are made during construction planning. Thus, to the extent that uncertainty can be reduced early on, it will be beneficial, and could lead to greater interest in using marine life-friendly foundation types and incorporating intentional habitat creation into the designs of scour protection and foundations.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

There is little peer-reviewed information regarding the economic costs and benefits of OSW. Most of the information in the public domain is generated by OSW developers or trade associations and based upon information deemed confidential so that it cannot be verified. The true ecological cost of OSW is site specific, as well as cumulative. The public must understand the overall Sunrise Wind project cost, the amount of federal, state, or local taxpayer subsidies devoted to the project, projections of the full cost to ratepayers (including the contract price in addition to any predictions of project contingencies or overages), and portion of project costs that will accrue to foreign markets. This information is required to make even a basic informed evaluation of the project's desirability or whether BOEM's final project decision will constitute a reasoned decision among alternatives. OSW appears to have widely different costs and benefits as compared to other renewable power sources. Multiple technologies exist at commercial scales that may have relative benefits in comparison to OSW. Depending on site-specific conditions, technology that may be inappropriate in one area due to unreasonable conflicts or environmental conditions may be the most desirable in another. For example, in California, the State Groundwater Management Act required certain farmland to be fallowed during drought conditions, leading to a potential opportunity for co-location of agrivoltaic solar projects. Similar examples likely exist for OSW; regardless, a comparison of relative costs and environmental impacts of alternative technologies should be included in the EIS.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

RODA has concerns over the ability of the turbines to operate safely year-round based on local environmental conditions. RODA has raised, in previous comment letters, the topic that turbines are known to ice over and create safety hazards. Developer representatives have indicated that they do not believe icing is not an issue in this region, raising doubt whether they are likely to investigate best available de-icing technology. However, the Sunrise Wind COP states that icing could be an issue based on air temperature data for the site.<sup>15</sup> Icing is a major safety concern for the fishing industry as they do not want to be put at risk from ice falling off turbines while operating near them (depending on whether conditions allow that). It is not clear in the COP what de-icing technologies are available and whether they would be incorporated into the project design envelope.

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**Comment Number:** BOEM-2021-0052-DRAFT-0088

**Organization:** RODA

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The lack of details regarding the decommissioning of these projects must be addressed in a programmatic way. BOEM has regulations regarding decommissioning but these have not been translated into explicit guidelines, which may provide a more thorough explanation for the fishing industry and public to better understand. The FMP also provides no specific details and even goes so far as to state that Sunrise Wind will learn from other OSW projects who decommission before them. Guidelines from BOEM should also answer questions regarding the ability to decommission a project before the end of the lease term if extreme environmental effects are discovered, especially to protected resources. All OSW projects should have a detailed plan approved prior to construction and sufficient funds set aside for adequate decommissioning. Details should include specific recycling plans for all components, especially the carbon fiber from the turbine blades. Mischaracterization of Impacts The FMP entirely ignore the length of the lease and assume negative impacts will only occur during construction and decommissioning. However, the presence of the turbines and scour protection for the 30 years of the lease will alter local environments for the duration of the project, if not permanently (especially given the lack of details on decommissioning).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The COP stipulates that Sunrise Wind will coordinate with local authorities and develop a plan to minimize potential traffic impacts during construction. While visitation is high during the period from Memorial Day to Labor Day, this period is not the only time when we see large numbers of visitors. The NPS requests participation in traffic planning discussions in order to minimize potential impacts from construction activities.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Protecting the night sky is a critical role the NPS pursues at Fire Island National Seashore. Despite the presence of the New York metropolitan area, the park provides some of the darkest nighttime skies available to visitors and local residents alike. Night skies are an important resource for Fire Island, affecting aspects such as biological and cultural properties, the wilderness and historic setting, and the visitor experience and enjoyment. The opportunity to enjoy starry night skies and other nocturnal phenomenon, as well as landscape features of the park under natural light from the night sky is an integral part of an overall visitor experience. Night skies are one of the many resources protected under the National Park Service Organic Act. The important role that natural cycles of light and dark play in natural resource processes and the evolution of species is well established and, therefore, the NPS protects natural darkness and other components of natural lightscapes in parks by minimizing light from park facilities, and by educating and working cooperatively with neighboring communities, local governments, and the public to minimize the use of outdoor lighting wherever possible considering public safety and other park management objectives. As the Sunrise Wind project is further developed we will provide analysis and specific recommendations for reducing night time light impacts from construction activities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Robust consultation with states and tribes under Section 106 is paramount to ensuring the Project appropriately considers impacts on historic state and tribal resources.<sup>70</sup> Additionally, it is necessary that during development proper precautions are taken in case unknown cultural resources are uncovered.<sup>71</sup> It is critical that the project include best management practices developed collaboratively with tribes for cultural resource protection in order to avoid, minimize, and mitigate any potential adverse impacts to cultural resources. Executive Order 13175 mandates all executive agencies recognize and respect tribal sovereign status and engage in “regular, meaningful, and robust consultation with Tribal officials in the development of Federal policies that have Tribal implications.”<sup>72</sup> We encourage BOEM to also adopt early consultation as envisioned in Secretary Haaland’s recent Secretarial Order. Native American and Alaska

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Native Tribes are sovereign governments recognized as self-governing under federal law, and the U.S. government has a “trust responsibility” to those tribes.<sup>74</sup> The federal government has special fiduciary obligations to protect Native resources and uphold the rights of Indigenous peoples to govern themselves on tribal lands.<sup>75</sup> In carrying out this duty, federal officials are “bound by every moral and equitable consideration to discharge the federal government’s trust with good faith and fairness.”<sup>76</sup> Acting in accord with these trust responsibilities requires nation-to-nation consultation from the first opportunity.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Geological resources: Discuss sediment quality, type, and chemistry including grain size analysis of all to be disturbed sediment, in any areas where sediment disturbing activities will occur. Evaluate contaminant concentration in sediments with grain sizes less than 90% sand and gravel for the complete depth of material to be disturbed. Identify existing erosional or non-depositional sedimentary environs. Physical Oceanography: Consideration and evaluation of currents; bathymetry; microclimates (i.e., air circulation, changing sea surface temperatures, etc.); and metocean data (i.e., temperature, salinity, pH, dissolved oxygen, etc.). Characterize areas where the Mid-Atlantic cold pool overlaps with the Project. Note: see Lentz, S. J (2017), Seasonal warming of the Middle Atlantic Bight Cold Pool, *J Geophys. Res. Oceans*, 122, 941-954.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Ocean Habitats: Discuss phytoplankton photosynthetic output (carbon cycling). Discuss areas of importance for deep water corals. Provide baseline electromagnetic fields (EMF) levels.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Evaluate micro-gyres and circulation changes around structures. Evaluate scouring and sedimentation from turbine bases. Evaluate air circulation changes from turbines and resulting sea surface temperature impacts. Evaluate sand scouring, effects of littoral drift and storms on cable burial. Assess seafloor and land disturbance from offshore wind components, including but not limited to turbine structures, cables, etc. Assess seafloor and land disturbance from construction methodologies, including but not limited to, anchoring, dredging, seafloor leveling, etc.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Existing and Future Sand Borrow Areas and Beach Nourishment Activities. Note: Construction is underway for segments of the US. Army Corps of Engineers Fire Island to Montauk Point (FIMP) project, which requires the use of offshore borrow areas and shoreline access to undertake structural and non-structural restoration and protective activities.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Construction Related Impacts Traffic (from Vessels, Vehicles and Aircraft): Traffic impacts from construction vessels, such as those transporting turbine parts. Traffic impacts from construction of export cable and associated upland infrastructure, especially during peak summer tourist seasons. Note: If the Project needs access the controlled access portion of the Sunrise Highway, then Federal Highway Administration (FHWA) approval is needed (even if it is only temporary for conduit laydown staging area(s)). Traffic impacts (vessel and vehicle) from use of Ports and

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Operational and Maintenance

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

In the New York State review pursuant to Article VII of the Public Service Law (§120,et. seq.) the New York State Department of Public Service will be reviewing conformance of the proposed facility design with the criteria adopted by the Public Service Commission for EMF levels at right-of-way edge. The installation of cables and conduits in, on, or over New York State-owned underwater lands would require the issuance of an easement(s) pursuant to Public Lands Law §3(2). Further, in accordance with the provisions of Public Lands Law §75(7), the New York State Office of General Services has adopted rules and regulations with respect to the procedures involved in applying for the use of underwater lands including the establishment of fees, and factors to be examined in considering an application, including without limitation: the environmental impact of the Project; the values for natural resource management, recreational uses, and commercial uses of the pertinent underwater land; the size, character and effects of the Project in relation to neighboring uses; the potential for interference with navigation, public uses of the waterway and rights of other riparian owners; the effect of the Project on the natural resource interests of the State in the lands; the water-dependent nature of the use; and any adverse economic impact on existing commercial enterprises.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Provide additional information on decommissioning cable protection and scour protection areas, particularly since the reef-like habitat that would form over the course of the facility's operation would be significantly disturbed. The Agencies commend BOEM for requiring the complete removal of export and interarray cables during decommissioning, provided measures are taken to monitor water quality and minimized resuspension of sediment in areas of known or potential contamination.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Construction Related Impacts Traffic (from Vessels, Vehicles and Aircraft): Traffic impacts from construction vessels, such as those transporting turbine parts. Traffic impacts from construction of export cable and associated upland infrastructure, especially during peak summer tourist seasons. Note: If the Project needs access the controlled access portion of the Sunrise Highway, then Federal Highway Administration (FHWA) approval is needed (even if it is only temporary for conduit laydown staging area(s)). Traffic impacts (vessel and vehicle) from use of Ports and O

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

It is vital that all costs and benefits of available alternatives, including the no action alternative, are considered in a cost-benefit analysis. Costs and benefits should include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider (including potential economic, environmental, public health and safety, distributive impacts, equity, etc.).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Impacts associated with decommissioning of the project should also be included, with details on how decommissioning would occur and the environmental consequences associated with project removal.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

We expect that any environmental documentation regarding a proposed wind facility in the lease area will fully examine all potential impacts to our listed species, the ecosystems on which they depend, and any designated critical habitat within the action area. We have developed a checklist (ESA Information Needs document) to identify information needs for considering effects of wind projects on ESA-listed species and critical habitats and we strongly encourage you to use that as

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you develop the EIS. We also strongly urge you to carefully consider the information we have provided for the Vineyard Wind and South Fork NEPA documents and to incorporate that into this EIS as appropriate.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

The construction and operation of a wind energy facility and installation of subsea electrical cables have the potential to impact listed species and the ecosystems on which they depend. Potential effects of offshore wind energy development on listed species that should be considered by BOEM when making any determinations about construction and operation in the Sunrise Wind project area include: ● Potential for an increased risk of vessel strike due to increases in vessel traffic and/or shifts in vessel traffic patterns due to the placement of structures; ● Impacts of elevated noise during any geophysical and geotechnical surveys, pile driving, wind turbine operations, and other activities; ● Potential interactions, including entanglement, injury, and mortality, of listed species from proposed surveys or monitoring of fisheries resources; ● Any activities which may displace species from preferred habitats, alter movements or feeding behaviors, increase stress and/or result in temporary or permanent injury or mortality; ● Disruption of benthic habitats during construction and conversion of habitat types that may affect the use of the area, alter prey assemblages or result in the displacement of individuals; ● Impacts to water quality through sediment disturbance or pollutant discharge; project lighting as a potential attractant; ● Effects from electromagnetic fields and heat from inter-array and export cable to listed species and their prey (i.e. ability to forage, attraction, etc.); and ● Potential changes to pelagic habitat resulting from the presence of wind turbines.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

EPA supports the tribal consultation and engagement efforts to date and encourages continued engagement with the culturally affiliated tribes throughout the NEPA process. We specifically request that the DEIS detail the consultation and engagement process, the proximity of project components to cultural resources, and plans for a UDP.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

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**Comment Excerpt Text:**

We recommend that the DEIS include a discussion of mitigation, minimization and monitoring measures to reduce risks to the marine environment and marine organisms in case of accidental spills.

**A-2.26.1. General Wildlife**

**Comment Number:** BOEM-2021-0052-DRAFT-0077

**Organization:** Citizens Campaign for the Environment

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

As part of the Environmental Impact Statement and Construction and Operations plan for Sunrise Wind, impacts to fish, birds and marine species need to be assessed and mitigated to the greatest extent possible. However, it is important to note in the study that climate change is a significant threat to these important species. Fisheries, bird populations and marine species are all adversely impacted by ocean acidification, warming waters, changing ocean currents and extreme weather events.

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**Comment Number:** BOEM-2021-0052-DRAFT-0091

**Organization:** Save the Sound

**Commenter:** Charles Rothenberger

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

While the development of offshore wind presents an exciting new opportunity to expand the state's portfolio of clean renewable energy resources, we emphasize that such opportunities must be taken advantage of in a manner that minimizes potential harm to the ecosystems and wildlife that may be impacted.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Against this backdrop, it is imperative that all offshore wind development activities move forward with strong protections in place for already stressed coastal and marine habitats and wildlife, using science-based measures to avoid, minimize, mitigate, and monitor impacts on valuable and vulnerable wildlife and ecosystems. BOEM should include sufficient measures to protect our most vulnerable threatened and endangered species and require a robust plan for pre-, during, and post-construction monitoring that can enable effective adaptive management strategies.

**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Potential interference with known migratory pathways, flyways, and overwintering sites of Rare, Threatened and Endangered Species, as well as important coastal habitats. Of particular concern is the migratory pathway for marine mammals and migratory birds. BOEM also should identify alternatives that avoid impacts to saltmarshes and submerged aquatic vegetation (SAV). Potential behavioral and physiological impacts from noise, vibrations, altered water quality, altered sediment chemistries, foundation lighting, wind-swept area, electromagnetic/magnetic fields, cooling water discharges, and thermal impacts on biological resources. Additionally, the effect of turbine and cable installation and operation and their potential to alter existing or create new habitats should be evaluated. BOEM should identify measures that minimize individual and population-level impacts to biological resources, such as seasonal construction windows (e.g., time-of-year and time-of-day) and operational restrictions (e.g., cut-in wind speeds).

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Organization:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

A synopsis of wildlife resources of concern to the Seashore is provided in the section above, “Wildlife at Fire Island National Seashore,” and more detailed information is available for many resources. We request this information be considered in more detailed analyses and discussions with applicable agencies, such as U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA) and its National Marine Fisheries Service (NMFS), regarding appropriate mitigation strategies to avoid adverse impacts to these species. The New York State Energy Research and Development Authority (NYSERDA) State of the Science Workshops on Wildlife and Offshore Wind Energy reports also provide a good summary of questions related to potential offshore wind impacts to some of these resources of concern to the NPS and other groups (e.g., benthic habitat, fish and invertebrates, sea turtles, 13 marine mammals, bats, and birds). These resources could be affected by a range of stressors and environmental changes associated with various stages of project development (e.g., pre-construction, construction, operation, decommissioning). Until the resource impact analyses are complete, it is difficult for the NPS to fully assess potential impacts, however we look forward to being able to review and comment in the future when more detailed analyses are provided. The NPS requests a geographic information system (GIS) mapping overlay of the project cable routes and landing points with the underwater marine animals siting maps is created. The map will help evaluate potential impacts to fish, marine mammals, sea turtles and nesting shorebirds.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Rare, Threatened and Endangered (RTE) Species: Assess impacts to RTE species along all alternative routes, including landfall sites. Discuss avoidance of work during time periods to avoid impacts to RTE species. Evaluate potential impacts to the northern long-eared bat (NLEB), including tree clearing during construction activities.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005

**Government Agency:** NOAA Fisheries

**Commenter:** Michael Petony

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Of particular concern for this project area are effects to North Atlantic right whales and Atlantic cod. Critically endangered North Atlantic right whales occur in the Sunrise Wind lease area, along the proposed cable corridor, and along many of the anticipated vessel transit routes. The status of this species is extremely poor. The proposed construction, operation, and decommissioning of the Sunrise Wind project may have adverse effects on North Atlantic right whales and this warrants special consideration throughout the environmental review process. In addition, the project area overlaps with spawning habitat for Atlantic cod, a species of economic and cultural significance to our region. As you develop the EIS, it will be critical to fully consider both project and cumulative effects of offshore development on North Atlantic right whales and Southern New England Atlantic cod and evaluate ways to avoid and minimize adverse impacts to these species and their habitats. We strongly encourage you and the developer to consider all available options to minimize risk to these species and their habitats as a result of project development.

**A-2.26.2. Noise**

**Comment Number:** BOEM-2021-0052-DRAFT-0091

**Organization:** Save the Sound

**Commenter:** Charles Rothenberger

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Save the Sound emphasizes that special attention should be paid to developing mitigation measures to protect the North Atlantic right whale, one of the world's most endangered species, from the risk of excessive underwater sound and collision with vessels. Much work is yet to be

done with respect to the impact of underwater sound on this species<sup>6</sup>, and we recommend ongoing research into these impacts to inform this and other projects.

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**Comment Number:** BOEM-2021-0052-DRAFT-0061

**Organization:** The Nature Conservancy

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

BOEM should require the applicant to provide a detailed assessment of magnitude, duration, and spatial extent underwater noise that will be generated from pile driving and also provide detailed plans for how and to what extent that noise will be minimized and mitigated to avoid impacts to vulnerable marine life including but not limited to federally protected marine mammals and sea turtles.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Offshore wind farm construction may include both driven piles and piles installed using vibratory techniques. Each of these produces disruptive noise in and around the project area and BOEM should include clear requirements on these activities to minimize the effects of the project. Specifically, the EIS should include a range of alternatives to prohibit pile driving during seasons when protected species are known to be present or migrating in the project area, in addition to any dynamic shutdown restrictions due to the presence of NARW or other endangered species.

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**Comment Number:** BOEM-2021-0052-DRAFT-0053

**Organization:** Oceana

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

The EIS should include alternatives to use best commercially available technology and methods to minimize sound levels from pile driving coupled with a robust monitoring and reporting program to ensure compliance. The EIS should include alternatives to require noise reduction technologies such as bubble curtains, noise mitigation systems, or sound dampeners. The projects shall achieve no less than 10dB (SEL) in combined noise reduction and attenuation, taking as a baseline, projections from prior noise measurements of unmitigated piles from Europe and North America. Compliance with these requirements is critically important and the EIS should include alternatives to require field measurements to be taken throughout the construction process including on the first pile installed. These compliance measurements should be taken by independent evaluators at intervals established to reduce observer bias and ensure full compliance with noise reduction requirements.

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**Comment Number:** BOEM-2021-0052-DRAFT-0093

**Organization:** National Wildlife Federation et al.

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Pile driving noise during the construction phases has been identified as a stressor of high concern for marine mammals. Potential impacts of unmitigated exposure to pile driving noise include physical injury, hearing impairment, disruption of vital behaviors such as feeding, breeding, and communication, habitat displacement, stress, and other health effects. Although not considered in the Project's design envelope, there are commercially available options for the construction of offshore wind turbines that do not require pile driving and thus avoid the significant noise impacts stemming from this activity. These options, referred to here as "quiet foundations," currently include various designs of suction bucket (or "caisson"), gravity-based foundations, and jack-up foundations.<sup>237</sup> We recommend BOEM incentivize the use of quiet foundations as a means of avoiding underwater noise during offshore wind for all fixed-foundation wind energy projects in the United States. BOEM should consider the level and potential impacts of vessel-related noise during construction, particularly noise emitted by dynamic positioning systems. BOEM should undertake an analysis of DPS and vessel-related noise associated with the construction of Sunrise Wind, as well as cumulatively for existing and reasonably foreseeable projects in the Rhode Island and Massachusetts WEAs.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0006

**Government Agency:** National Park Service

**Commenter:** Jonathan Meade

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

NPS is interested in noise impacts on marine life within NPS jurisdictional waters, seasonal restrictions that might reduce potential impacts, and the trenching and deep underwater boring proposed to access the landfall location. Sound Impacts from Construction within Fire Island National Seashore At present it doesn't appear that sound barriers have been proposed for the construction at Smith Point County Park. This area is adjacent to the Wilderness area. The NPS recommends given the noise and duration of construction, that a sound barrier system be constructed. We are interested in further discussion on this topic and ways to reduce such impacts.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079

**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation

**Commenter:** Eileen Murphy

**Commenter Type:** State Government

**Comment Excerpt Text:**

Provide ambient noise levels.

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**Comment Number:** BOEM-2021-0052-DRAFT-0079**Government Agency:** NYS Departments of Environmental Conservation, Department of State, and the Office of Parks, Recreation and Historic Preservation**Commenter:** Eileen Murphy**Commenter Type:** State Government**Comment Excerpt Text:**

Evaluate the application of sound penalties for tonal noise; and assess adequacy of proposed mitigation measures.

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**Comment Number:** BOEM-2021-0052-EMAIL-093021-0005**Government Agency:** NOAA Fisheries**Commenter:** Michael Petony**Commenter Type:** Federal Government**Comment Excerpt Text:**

Mitigation measures should be required during pile driving that will act to reduce the intensity and extent of underwater noise and avoid exposure of listed species to noise that could result in injury or behavioral disturbance. The use of protected species observers to establish and monitor clearance zones prior to pile driving is essential and project scheduling should take into account the need for adequate visibility during the pre-pile driving clearance period, as well as for the duration of pile driving activities. Real-time and archival passive acoustic monitoring should also be used as a secondary detection/monitoring system during construction, to increase situational awareness in vessel corridors and around the project area, and to monitor the distribution of marine mammals in the lease area during construction and operations

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**Comment Number:** BOEM-2021-0052-DRAFT-0092**Organization:** Defenders of Wildlife**Commenter Type:** Non-Governmental Organization**Comment Excerpt Text:**

require a minimum of 10 dB (SEL) reduction in radiated sound level to be attained during construction using a combination of emergent and proven current technologies such as shields, screens, and barriers around the sound source, e.g. air bubble curtains,<sup>114</sup> Hydro Sound Damper Systems,<sup>115</sup> isolation casings (Noise Mitigation Screen (NMS)), dewatered cofferdams, reduced blow energy, and prolonging pulse duration by modifying the hydraulic hammers.<sup>116</sup> relative to a reference baseline of prior noise measurements of unmitigated piles. • take all necessary actions to reduce the number of Level A takes and to ensure Level B takes<sup>117</sup> for large whales are as close to zero as possible.

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**Comment Number:** BOEM-2021-0052-DRAFT-0092

**Organization:** Defenders of Wildlife

**Commenter Type:** Non-Governmental Organization

**Comment Excerpt Text:**

Reporting • require SW to report all visual observations and acoustic detections of NARW to NMFS or the Coast Guard as soon as possible and no later than the end of the PSO shift. • require use of near real-time autonomous buoy systems for automatic report of NARW detections on preset cycles • require SW to immediately report the sighting of any entangled or dead NARW to NMFS, Marine Animal Response Team (1-800-900-3622) or the USCG via phone, app, or radio. Methods of reporting are expected to advance and streamline in the coming years, and BOEM should require projects to commit to supporting and participating in these efforts. In addition, we are advocating to NFMS to revise its guidance on harassment thresholds for acoustic exposure criteria for behavioral response<sup>120</sup> to be consistent with the best available current science and be truly protective of marine mammals from the noise generated by OSW activities. BOEM must be conservative in its assessment of potential loss of communication and listening range to NARW and other listed species and assume that any substantial increase in noise will result in adverse impacts on the species' foraging, mating, or other vital behavior. A conservative approach is justified given the species' extreme vulnerability, where any additional stressor may potentially result in population-level impacts. BOEM should also partner with acoustic data scientists (from NYDEC, NYSERDA, Wildlife Conservation Society, NEFSC, NEAQ, Woods Hole Oceanographic Institution, etc.) and acoustic modeling scientists (e.g. from JASCO Applied Science) to obtain and collate best available current scientific data to inform a comprehensive acoustic impacts and cumulative impacts analyses.

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**Comment Number:** BOEM-2021-0052-EMAIL-100121-0002

**Government Agency:** EPA

**Commenter:** Timothy Timmermann

**Commenter Type:** Federal Government

**Comment Excerpt Text:**

Underwater noise can negatively affect marine life via auditory interference or by obscuring the ability of organisms to hear sounds necessary for survival including but not limited to: locating prey, mates or offspring; predator avoidance; navigation and locating habitat; and communication. The DEIS should assess whether construction and operation noise will cause potential short and long-term impacts that may disrupt normal behavioral patterns including migration, breathing, nursing, breeding, feeding, and sheltering. Technical guidance for assessing acoustic impacts is available from the National Oceanic and Atmospheric Administration. The DEIS should also describe mitigation that will be adopted to address construction and operation period noise impacts (including time of year restrictions) to marine life.

## A-2.27. General Support or Opposition

Table A-2 List of Submissions Containing Statements of General Support or Opposition

Submission ID	Name	Government or Non-Governmental Organization Name
BOEM-2021-0052-0005	Stephen Grossman	
BOEM-2021-0052-0006	Suffolk County, NY	
BOEM-2021-0052-DRAFT-0001	Anonymous Anonymous	
BOEM-2021-0052-DRAFT-0006	Billy Mack	
BOEM-2021-0052-DRAFT-0007		
BOEM-2021-0052-DRAFT-0043	Dave Rowe	
BOEM-2021-0052-DRAFT-0045		
BOEM-2021-0052-DRAFT-0046	Mary Doyle	
BOEM-2021-0052-DRAFT-0047		North Atlantic States Regional Council of Carpenters
BOEM-2021-0052-DRAFT-0048	Anonymous Anonymous	
BOEM-2021-0052-DRAFT-0050		
BOEM-2021-0052-DRAFT-0050-A1-002	Ann Barnett	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-004	MI Howe	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-005	Aixa Kendrick	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-006	Mark Christensen	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-007	Edith Alston	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-010	Caitlin Ferrante	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-011	Al Boccio	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-013	Harriette Resnick	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-019	William Squires	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-020	Angel Garcia	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-021	Martha Porter	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-022	Lyle Chastaine	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-024	Teresa Kotturan	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-025	Marilyn Entwistle	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-028	Ed Fey	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-032	Pete Friedrich	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-033	Cynde McCloskey	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-034	Camille Doucet	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-035	David Thomas	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-036	David Limburg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-037	Liz Galst	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-038	Margaret Comaskey	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-039	Jay Blackman	Sierra Club

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0050-A1-040	George Remscrm	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-043	John E Keevert Jr	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-044	Laura Montllor	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-045	Cindy Bobe	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-046	Pamela Geismar	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-047	Mary Troland	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-048	Royal Chamberlain	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-051	Evelyn Codrington	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-052	Ronald Fields	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-054	Edward Temple	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-056	Kari Thorstensen	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-058	Patricia Townsend	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-059	Teresa Schwind	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-060	Manjula Menon	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-062	Michael Weschler	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-063	Rebecca Greenblatt	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-064	Robert Mott	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-066	Alexandra Wendt	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-067	Rachel Miller	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-068	John South	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-070	Cornelia Marsh	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-071	Paul Lipton	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-074	Pat Henry	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-075	Eva Welchman	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-077	Irene Best	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-078	Linda Villano	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-079	Michael Greer	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-081	Justin White	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-084	Joseph Tonini	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-085	Judith Zingher	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-086	Peter Sabol	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-087	Mark Robbins	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-090	Alisa Eilenberg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-092	David Mondejar	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-093	Carolyn Koelmel	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-094	Rachel Berg	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-096	Mindy Abraham	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-097	Vesa Kaakkuriniemi	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-098	Paulette Henderson	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-100	Arlene Goodenough	Sierra Club

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0050-A1-101	John Noble	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-103	Jason Dragseth	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-104	Perri Gaffney	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-105	Lawrence Ross	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-107	Nivo Rovedo	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-108	Barbara Ladd	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-109	Darnell Rohrbaugh	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-110	Ruth Bargy	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-111	Amy Wildey-McGill	Sierra Club
BOEM-2021-0052-DRAFT-0050-A1-112	Anne Bucher	Sierra Club
BOEM-2021-0052-DRAFT-0051		
BOEM-2021-0052-DRAFT-0054	Kelly Andreuzzi	
BOEM-2021-0052-DRAFT-0056-A19-014	Diana Berardino	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-015	Sharon Nolting	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-021	Ben Kremnitzer	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-022	shyama orum	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-027	Jeffrey Seidman	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-028	Marie Long	Sierra Club
BOEM-2021-0052-DRAFT-0056-A19-031	Daniel Tainow	Sierra Club
BOEM-2021-0052-DRAFT-0059	Anne Lotito-Schuh	
BOEM-2021-0052-DRAFT-0060	Kalpana Bhandarkar	
BOEM-2021-0052-DRAFT-0062		
BOEM-2021-0052-DRAFT-0063	Selina Durio	
BOEM-2021-0052-DRAFT-0064		
BOEM-2021-0052-DRAFT-0065		
BOEM-2021-0052-DRAFT-0066	John Hyland	
BOEM-2021-0052-DRAFT-0067	Matt Cohen	
BOEM-2021-0052-DRAFT-0072	Anonymous Anonymous	
BOEM-2021-0052-DRAFT-0073	Mariah Dignan	
BOEM-2021-0052-DRAFT-0074	Rick Fridell	
BOEM-2021-0052-DRAFT-0075	Kasey Scheid	
BOEM-2021-0052-DRAFT-0076	Ross Gould	
BOEM-2021-0052-DRAFT-0078	Patrick Guidice	
BOEM-2021-0052-DRAFT-0080	James Bogen	
BOEM-2021-0052-DRAFT-0081	James Versocki	
BOEM-2021-0052-DRAFT-0082	Paul Pecorale	
BOEM-2021-0052-DRAFT-0084	Robert souto	
BOEM-2021-0052-DRAFT-0085	Richardo Sanchez	
BOEM-2021-0052-DRAFT-0086	Barbara Hafner	
BOEM-2021-0052-DRAFT-0087	Nick Hoh	

<b>Submission ID</b>	<b>Name</b>	<b>Government or Non-Governmental Organization Name</b>
BOEM-2021-0052-DRAFT-0091	Charles Rothenberger	
BOEM-2021-0052-TRANS-091621-0001	George Povall	
BOEM-2021-0052-TRANS-091621-0004	Alec Gomez	
BOEM-2021-0052-TRANS-092021-0001	Mariah Dignan	
BOEM-2021-0052-TRANS-092021-0004	Caroline Hahn	
BOEM-2021-0052-TRANS-092021-0005	Jordan Christensen	
BOEM-2021-0052-TRANS-092021-0007	Eleanor Daly Kobel	
BOEM-2021-0052-TRANS-092221-0002	Camden Ackerman	
BOEM-2021-0052-TRANS-092221-0003	Lisa Broughton	
BOEM-2021-0052-TRANS-092221-0004	Gordon Videll	
BOEM-2021-0052-TRANS-092221-0005	Rebecca Newberry	
BOEM-2021-0052-TRANS-092221-0006	Aiden Kravitz	

### **A-2.28. Submissions from Anonymous Commenters**

BOEM received two submissions from anonymous commenters. Table A-3 provides the Submission ID numbers associated with the anonymous submissions. Submissions from anonymous commenters focused on the importance of moving forward with the project to reduce the impacts of climate change and provide union jobs to the region.

**Table A-3 List of Submissions from Anonymous Commenters**

<b>Submission IDs</b>
BOEM-2021-0052-DRAFT-0001
BOEM-2021-0052-DRAFT-0048