

Fisheries

Mitigation Plan

For

Leading Light Wind



New York State Energy Research and Development Authority

Albany, NY

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1.0 Fisheries Mitigation Plan Summary

1.1 Overall Philosophy and Principals

Leading Light Wind's believes that fishing communities and offshore wind energy development can mutually coexist and thrive. The project sponsors believe that coexistence can be achieved by carefully evaluating existing uses in the lease area and waters adjacent to the lease area and offshore export cable routes (the project area); avoiding impacts where feasible; and as needed, reducing impacts through mitigation.

Interactive participation from the fishing industry will help Leading Light Wind reduce and avoid stakeholder conflict, create a positive narrative, and hopefully serve as an industry standard for offshore wind farm developments in the future. To achieve this goal, the Fisheries Mitigation Plan (FMP) will focus on a set of core principles:

- Apply transparency and accountability. Facilitate open, efficient, timely, and transparent communications to promote awareness and safety.
- Incorporate diverse experiences. Seek out and apply the diverse expertise and knowledge of the commercial and recreational fishing communities in the shared project area.
- Conduct respectful communication. Acknowledge and respect the concerns and interests of fishing interests and their supporting businesses.

1.2 Overall Approach to Incorporating Data and Stakeholder Feedback

Leading Light Wind will use research, data, and stakeholder feedback to support decision-making throughout the life cycle of the project.

Leading Light Wind believes consultation and coordination with relevant stakeholders is an important means of identifying potential risks or opportunities while also sufficiently avoiding and mitigating fisheries impacts where they may occur. Leading Light Wind shall seek consultation and coordinate with relevant stakeholders. Relevant stakeholders include but are not limited to regulatory agencies, marine users, research organizations (e.g., universities, regional consortiums, NYSERDA Technical Working Groups), leading subject matter experts, and Environmental NGOs (ENGOs). A comprehensive description of Leading Light Wind's stakeholder engagement strategy is presented in Section 16 of the proposal. Specifically, Leading Light Wind will proactively solicit feedback on fisheries stakeholder concerns and strive for open, transparent communication to avoid conflicts before they develop, and quickly and equitably resolve conflicts that do develop.

Leading Light Wind shall review existing research and data and seek input from relevant stakeholders regarding data gaps to inform decisions made throughout the project life cycle. As described in the Leading Light Wind Permitting Plan (Section 10 of the proposal), Invenergy met with BOEM in August 2022 to discuss its comprehensive data collection strategy to characterize the lease area and potential cable routes. Key data collection principles include but are not limited to leveraging existing data and science where applicable; consulting past-project precedent; conducting purposeful data collection that is useful in evaluating potential project impacts and data gaps; and engaging with relevant stakeholders. These principles will be applied throughout the project life cycle. Leading Light Wind will identify potential impacts to fishers and related industries; understand, as fully as possible, historic, current, and potential fisheries uses in the project area; and make informed decisions on how to avoid, minimize, and/or mitigate effects.

Leading Light Wind shall review and seek input from relevant stakeholders on proposed and conducted survey rationales and methodologies. Through the permitting process, and throughout the project life cycle, Leading Light Wind will seek



input from relevant stakeholders on design, construction and operation, and decommissioning plans for the project. Leading Light Wind will document actionable stakeholder feedback and will document responses on how this feedback was considered.

Leading Light Wind intends to collaborate with relevant stakeholders, potentially in association with other proposed offshore wind projects, to conduct all project related monitoring in scientifically valid ways that furthers the understanding of potential impacts on fisheries. Monitoring provides an excellent platform for bolstering shared knowledge of the New York Bight and the larger Atlantic Ocean ecosystems but will require deliberate collaboration and coordination. Regional consortiums such as the Responsible Offshore Science Alliance (ROSA) play a critical role here. Leading Light Wind will also coordinate with other regional developers as appropriate to develop a framework for pre- and post-construction fisheries monitoring programs to enhance the understanding of offshore wind development on fisheries resources.

1.3 Existing Guidance and Best Practices That Will be Followed

This FMP is developed in accordance with BOEM guidelines¹ as well as best practices guidance from other relevant resources, such as the following:

- Ecology and Environment, Inc. 2014. Development of Mitigation Measures to Address Potential Use Conflicts between Commercial Wind Energy Lessees/Grantees and Commercial Fishermen on the Atlantic Outer Continental Shelf Report on Best Management Practices and Mitigation Measures.
- The Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW). 2014. FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison.
- BOEM. 2022. <u>Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries on the Outer Continental</u> <u>Shelf Pursuant to 30 CFR Part 585 (boem.gov).</u> https://www.boem.gov/sites/default/files/documents/renewableenergy/DRAFT%20Fisheries%20Mitigation%20Guidance%2006232022_0.pdf
- BOEM. 2019. Guidelines for Providing Information on Fisheries for Renewable Energy Development on the Atlantic Outer Continental Shelf. <u>https://www.boem.gov/sites/default/files/renewable-energy-program/Regulatory-</u> Information/BOEM-Fishery-Guidelines.pdf.
- US Coast Guard (USCG) Port Access Route Studies: Northern New York Bight. 2022. https://www.federalregister.gov/documents/2022/01/03/2021-28457/port-access-route-study-northern-new-york-bight.
- New York State Energy Research and Development Authority (NYSERDA), F-TWG. 2022. CT, NY, NJ and VA fishing
 participants and Bureau of Ocean Energy Management Draft Fisheries Mitigation Guidance Document Meeting.
 https://www.nyftwg.com/wp-content/uploads/2022/08/7.12.2022 FTWG-Mitigation-Guidance-Meeting-Summary.pdf.
- NYSERDA, Fisheries Technical Work Group (F-TWG). 2021. Fisheries Compensation Overview: Preliminary Draft, Revision 1. <u>https://www.nyftwg.com/wp-</u> content/uploads/2022/05/NYSERDA FTWG FisheriesCompensation Draft Rev1 clean.pdf.
- NYSERDA, F-TWG. 2021. The Responsible Offshore Development Alliance Impact Fees for Commercial Fishing from Offshore Wind Development: Considerations for a National Framework. <u>https://www.nyftwg.com/other-resources/</u>.

¹ <u>Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries on the Outer Continental Shelf Pursuant to</u> <u>30 CFR Part 585.</u>



2.0 Communications and Collaboration Approach

2.1 Overview and Communication Plan Objectives

Leading Light Wind recognizes that implementing a communication plan and objectives is important to fisheries mitigation.

Leading Light Wind shall establish methods and processes to allow for a two-way flow of information between key stakeholders and developers, highlighting how feedback informs their decision making. Key stakeholders for Leading Light Wind include regulatory agencies, marine users, research organizations (e.g., universities, regional consortiums, NYSERDA Technical Working Groups), leading subject matter experts, and ENGOs. A comprehensive description of Leading Light Wind's stakeholder engagement strategy is described in the Stakeholder Engagement Plan (Section 16 of the proposal). Leading Light Wind has established a Fisheries Liaison Officer (FLO) (listed in Section 2.3 of this document) who will serve as a facilitator between project sponsors and fisheries stakeholders. The FLO will work to maintain visibility and accessibility with fisheries stakeholders by supporting regular port hours, attending fisheries organizational meetings and events, participating in regional fisheries management council meetings, and coordinating with other project FLOs where possible to reduce "outreach fatigue" experienced by stakeholders.

Leading Light Wind has established Fisheries Technical Working Group (F-TWG) representatives (listed in Section 2.3 of this document) who will actively participate in discussions on how to responsibly develop offshore wind energy, recognizing the complexity and importance of the fishing industry. We will ensure inclusive means of communication with commercial and recreational fisheries users by engaging Fisheries Industry Representatives (FIRs), the Responsible Offshore Development Alliance (RODA), and other fisheries organizations and individual fishers that use the project area. Actionable stakeholder feedback will be documented, and responses on how this feedback was considered will also be documented and provided as necessary.

Leading Light Wind shall provide updates to the fishing industry stakeholders in an appropriate manner that is easily accessed and widely distributed. To facilitate this goal, the Fisheries Communication Plan (FCP) is available on Leading Light Wind's website at https://leadinglightwind.com/mariners. The FCP will be updated to reflect the current state of project development. Relevant project information and updates will be posted in a timely manner to the Mariners page on the website. A method to sign up to receive project updates and information will be made available on the website.

Leading Light Wind shall seek collaboration with the fishing industry to use technical applications (e.g., mobile apps) to enhance communication and coordination for all on-water activities. Leading Light Wind will provide a pathway to quickly and fairly resolve fisheries-related issues that may develop during the life of the project. We will create authentic and professional relationships, facilitating coexistence of fishing and wind energy, with the goal of ensuring both will prosper on a long-term basis. Leading Light Wind will identify potential opportunities to enhance the safe and productive shared use of the project area.

2.2 Communication Officers/Positions, Responsibilities, and Contact Information

Leading Light Wind will communicate with fisheries via an FLO and FIRs. The primary role of the FLO is to provide communication to and from the fishing community directly to Leading Light Wind regarding issues and concerns raised. FIRs serve as additional points of contact to the fishing communities. The FLO and FIRs will work together to review, evaluate, and improve the effectiveness of fisheries-related outreach and communication. BOEM has defined a Project Coordinator who will serve as the primary point of contact for other federal, state, and local government agencies, developers, and other stakeholders.



BOEM will also perform project review, internal and external coordination, and stakeholder outreach for renewable energy projects on the Outer Continental Shelf. The Fisheries Communication Team will include experienced fisheries professionals who understand offshore wind and have existing relationships with the fishing communities. This will enable the project sponsors to build mutually respectful lines of communications with the fishing communities.

Table 1 below provides a list of communication officers, their role, and contact information as well as links to the project website.

Tuble 1. I Ishenes communications ream (onioers/positions, responsibilities, and contact information)	Fisheries Communications Team	(officers/positions, responsibilitie	s, and contact information)
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Name/Title	Role/Responsibilities	Contact Information
Wes Jacobs Project Director	Primary point of contact for the Leading Light Wind project	wjacobs@invenergy.com
	F-TWG representative (primary)	
Annette Ehrhorn BOEM Project Coordinator	Primary point of contact for BOEM on Lease OCS- A-0542	Annette.ehrhorn@boem.gov
Marine Affairs Manager	Primary point of contact for maritime interest and navigation	info@leadinglightwind.com
Adam Tate, Manager	M-TWG representative(primary)	atate@invenergy.com
Bill Smith, Senior Associate	M-TWG representative (alternate)	wsmith@invenergy.com
Sarah Hudak; Fisheries Liaison Officer (FLO), Sea	F-TWG representative (secondary)	sarahhudak@leadinglightwind.com
Risk Solutions	Facilitate the work of the Fisheries Industry	
	Representatives (FIRs) by serving as the primary point of contact.	
	Communicate across fishery communities and regions inside and outside of the FIRs' network to educate and to disseminate information in a timely manner regarding the project, and to receive input.	
	 Validate fisheries information through cross- referencing among the best available data sources. 	
	Develop relationships and direct lines of communication with individuals who are representative of fishing regions, industries, and interests to the project area.	
	Convey current fishing industry concerns and feedback to the project development team so they can identify and work toward solutions, as needed.	
	Organize meetings, as necessary, to garner fishers' views of project effects on their industry and navigational rights.	



	Develop a stakeholders' list in consultation with the Fisheries Representatives that includes relevant fishery community individuals, officials, and organizations for communication efforts.	
	Serve as the primary point of contact and coordinate resolution of issues regarding gear conflicts that may arise.	
Offshore Fisheries Liaison Representative (OFLR)	Establish and maintain professional, respectful, and friendly communication directly with fishing vessels in the project area.	info@leadinglightwind.com
	Contact any fishing vessels working in or transiting the area while our survey vessel is in the project area and gear is deployed.	
	Document the communications with fishing vessels, as part of survey reporting.	
Fisheries Industry Representative(s) (FIR(s))	 Available during project planning and construction phases. 	info@leadinglightwind.com
	Able to provide the project sponsors with guidance, through the Fisheries Liaison Officer (FLO), on fishing activity in the area and an understanding of particular fishing sensitivities, etc.	
	Knowledgeable about different fishing sectors, seasons, key species, fishing patterns, and gear types and have fishing experience in the region.	
Michael Porto, External Engagement Director	Stakeholder Manager	mporto@invenergy.com
Kirsten Barnstead, Associate, Biological Systems	Point of contact for Leading Light Wind on matters related to wildlife assessment and impacts	kbarnstead@invenergy.com

Project Website: https://leadinglightwind.com

2.3 Identification of Fishing Industry Stakeholders

Leading Light Wind has prepared Fisheries Assessment Reports (FARs) to identify historical, current, and potential future commercial and recreational fisheries uses of the project area (see Section 3.4).

Leading Light Wind will create and promote a straightforward, professional, open, and ongoing dialogue with the commercial and recreational fishing communities that could be affected by the development of the project.

Leading Light Wind has and will maintain a comprehensive contact database that tracks communication activities, including in-person communications, letters, meeting notes, phone logs, and emails where substantive information has been discussed or received. The contact database will be maintained and regularly updated by the FLO in conjunction with Leading Light Wind's project team.



Methods of identification and communication with the fisheries stakeholders may include, but are not limited to these:

- Fishing industry leaders known through the combined FLOs' industry experience
- Fishing industry association leaders
- Fishery Management Council meetings
- New York State F-TWG meetings and interactions
- Meetings related to offshore wind and fisheries interactions
- Commercial and recreational fishing forums
- Recommendations from state and federal fisheries staff
- Fisheries Management Council Advisory Panel lists online
- Public comments and documents online
- Word of mouth from the fishing community
- Automatic Identification System (AIS) monitoring including ship identification
- Fishing vessels identified offshore during surveys by OFLRs
- NMFS permit holder lists online
- Dock and port visits
- Fisheries contact information referenced in NYSERDA's New York State Offshore Wind Master Plan Fish and Fisheries Study

2.4 Participation in Stakeholder and Technical Working Groups

2.4.1 Communication with F-TWG

Leading Light Wind is committed to active participation on the F-TWG as a means to collaborate on best practices and research for offshore wind energy development, balancing environmental concerns with responsible technically and commercially feasible offshore wind development.

Primary and secondary core members have been identified for the F-TWG who will participate in F-TWG meetings and serve as liaisons for communication between the F-TWG and the Leading Light Wind project team.

Leading Light Wind will present all relevant aspects of the project to the F-TWG during dedicated workshops and meetings throughout the duration of the project development, including project updates. These meetings will serve to ensure the goals of the FMP are met and the FMP is evolved to reflect feedback.

Leading Light Wind will proactively engage with relevant fishing communities that may not be represented in the F-TWG.

2.4.2 Communication with Other New York State Agencies

Leading Light Wind is committed to continuing consultation with New York State agencies throughout the project development process. Leading Light Wind plans to consult on matters, including but not limited to the project development and schedule updates, benthic and fisheries resources, and fisheries outreach and cooperation.





2.4.3 Communication with Other Stakeholder and Working Groups

In terms of communication with other stakeholders and working groups, Leading Light Wind shall continue to actively engage as participating members and sponsors of regional collaborative efforts including the F-TWG, E-TWG, Maritime Technical Working Group (M-TWG), ROSA, Regional Wildlife Science Entity (RWSE), and the New York Habitat and Fisheries Working Groups. Specific activities include:

- Pursuing the development of regional science strategies by collaborating with organizations such as ROSA in addition to local, state, and federal agencies.
- Attending Mid-Atlantic Fisheries Management Council (MAFMC) and New England Fisheries Management Council (NEFMC) meetings to be readily available to answer questions for those in attendance.
- Engaging professional associations representing the "for-hire" fleet of party and charter fishing boats and schedule meetings to share information and obtain feedback.
- Participating and potentially partnering with established fisheries science and research institutions, including the American Fisheries Society, NOAA Cooperative Extension, and academic institutions.
- Identifying and engaging local offshore fishing clubs, attending meetings, delivering educational presentations, and soliciting feedback.
- Identifying offshore fishing tournaments and dates, engaging with tournament organizers, sharing operational plans and contact information and identifying and monitoring the VHF channel used by the tournament when operations and tournaments events overlap.
- Participating in sportfishing conferences and trade shows as a vendor to provide an additional point of engagement with the recreational fishing community.
- Participating in commercial fishing conferences and trade shows as a vendor to provide an additional point of engagement with commercial fisherman.
- Scheduling meetings with local fishers when offshore operational plans and dates are confirmed, to discuss the activity and identify potential conflicts.
- Establishing and supporting regular "port hours," virtually and in-person, with an open-door policy in local ports to encourage regular engagement to help identify and characterize important local details regarding fisheries' operations and practices.
- Approaching local fishers to serve as OFLRs on vessels working in the project area, and securing local vessels as available to function as scout boats during offshore activities.



- Participating in existing offshore wind meetings where federal (e.g., BOEM, National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service [NMFS], US Coast Guard [USCG]) and state (e.g., NYSERDA, NYSDEC, New Jersey Department of Environmental Protection) agencies participate. A Fisheries Communication Team member will be in attendance and available to answer questions from those in attendance.
- Engage with the general public through web postings, social media notifications, project newsletter, open houses and public hearings to share project information and address comments and questions.

2.4.4 Communication and Collaboration with Other Developers

Leading Light Wind shall continue its ongoing communication with other developers and shall seek to maximize the impact of research and monitoring efforts by collaborating with those undertaking similar initiatives, particularly in adjacent lease areas. Through meetings coordinated by entities such as BOEM, the American Clean Power Association (ACP), the Special Initiative for Offshore Wind (SIOW), and others, Leading Light Wind is engaging in collaborative efforts with other New York Bight leaseholders to support the following shared objectives:

- Work together to identify innovative avoidance, minimization, mitigation, and monitoring measures based on lessons learned in the industry both domestically and globally.
- Work together to identify innovative avoidance, minimization, mitigation, and monitoring measures based on lessons learned in the industry both domestically and globally.
- Develop data collection and research means and methods that provide maximum scientific benefit.
- Seek opportunities to meet as a group on select topics to reduce the need for individual agency meetings, reducing the strain on resources within those agencies.
- Seek to meet jointly in other forums and/or request joint New York Bight presentations/agenda items at various working group and stakeholder meetings to reduce the need for individual presentations.
- Work together to coordinate port hours and developer presence at other fishing community events (e.g., fisheries management meetings, fisheries trade shoes, etc.) so that fishers have consolidated, rather than dispersed, times to discuss issues with New York Bight leaseholders.





2.5 Communication Methods and Tools

2.5.1 Methods by Phase

Table 2 below describes Leading Light Wind's communication and outreach methods and tools that will be employed for each stakeholder group during each phase of the project.

Table 2: Proposed Communication Methods and Tools by Phase

Proposed Outreach Methods/Tools			Phase*			
	1	2	3	4		
Contact Fishing Industry Representatives	х	х	х	х		
Contact fisheries associations	х	х	х	х		
Host stakeholder meetings and workgroups	х	х	х	х		
Attend E-TWG and F-TWG meetings	х	х	х	х		
Post timely updates and project information to Leading Light Wind's website, "Fisheries" page	х	х	х	х		
Host town hall meetings and webinars regarding project activities designed to educate fishing	х	х	х	х		
stakeholders, share project information, and solicit feedback						
Use stakeholder email list and text distribution to provide regular project updates and other		х	х	х		
important notices						
Use social media to update and inform the public on project developments	Х	х	х	х		
Support the publication of announcements and share project updates via print and online	х	х	х	х		
industry publications, project newsletters, and local news outlets						
Issue local notice(s) to mariners ahead of any offshore activities as needed	х	х	х	х		
Participate in conferences and trade shows as a vendor	х	х	х	х		
* Phase: 1: Survey/design; 2: Construction; 3: Operation; 4: Decommissioning						

2.5.2 Communication with Vessels

To avoid fisheries conflicts, to the greatest extent practicable, Leading Light Wind shall seek to employ a fishing captain or other experienced fishing industry representative to be onboard vessels as an OFLR during key times/activities where potential conflicts could be greatest.

Timely communication and information dissemination are essential for identifying and avoiding potential conflicts during project development and construction. Sharing information and two-way communications about fishing activities, planned infrastructure positions, submarine cable routes, vessel movements, and safety zones, among other information, can reduce and prevent potential conflicts detrimental to fishing activities in and around the project area.

Leading Light Wind will establish and maintain professional, respectful, and friendly communication directly with fishing vessels in the project area. We will attempt to contact any fishing vessels working or transiting in the vicinity of project vessels during times of on-site surveying and construction. In accordance with lease requirements, the project sponsors will notify applicable ocean users two weeks in advance of any field survey activities. Leading Light Wind will document communications with fishing vessels throughout the project duration,

Leading Light Wind will regularly distribute bulletins showing the project area (depicted on local nautical charts) with a description of vessels and operations in the area, the activities taking place, the timelines, and the relevant contact information.



3.0 Monitoring and Research Pre, During, and Post-Construction

3.1 Identification of Scope of Monitoring Activities/Studies

Leading Light Wind's monitoring methods and scientific designs shall meet the highest scientific standards, including applicable guidance mentioned in the Offshore Wind Project Monitoring Framework and Guidelines developed by ROSA. Identifying changes to biological resources, including fisheries, which are a direct result of offshore wind development will be challenging since a change may result from any number natural and/or anthropogenic factors. We will work with relevant stakeholders to identify and define monitoring objectives and then determine appropriate methods for monitoring, which may include a combination of extractive and non-extractive techniques.

To the greatest extent practicable, Leading Light Wind will endeavor to engage in cooperative fisheries and related research, engaging fishermen as part of the process and utilizing commercial and recreational fishing vessels as research platforms where feasible. These vessels shall meet all appropriate regulatory safety and scientific standards prior to the beginning of any monitoring activity.

The duration of monitoring will be determined as part of the initial effort to determine the scope of the study, but it is anticipated to include a preconstruction period and at least one year of postconstruction monitoring.

3.2 Baseline Data and Characterization Approach

3.2.1 Existing Literature and Data for Benthic and Fisheries Resources

Public data sources are suitable for characterizing baseline benthic habitat and fisheries resources in the project area. Such sources include:

- NOAA National Centers for Coastal Ocean Science and BOEM Comprehensive Seafloor Substrate Mapping and Model Validation in the Atlantic (2019).
- Estuarine Living Marine Resource database (NOAA 2000). Provides descriptions of spatial and temporal distributions of species (by life stage).
- Commercial and recreational fisheries effort data. This can be used as a proxy for fish species presence/occurrence.

Leading Light Wind will use existing fisheries data from multiple publicly available sources to provide initial baseline information for site characterization and future development of the Construction and Operations Plan (COP). The following data sources will be used for site characterization:

- NOAA data (fish stock assessments, population and ecosystems monitoring and analysis division, fishery monitoring, and research)
- Atlantic Coast Fishery Management Plans and Amendments
 (<u>https://www.fisheries.noaa.gov/atlantic-highly-migratory-species/atlantic-hms-fishery-management-plans-and-amendments</u>)
- Atlantic States Marine Fisheries Commission (ASMFC) (http://www.asmfc.org)



 NOAA Descriptions of Selected Fishery Landings and Estimates of Vessel Revenue from Areas: A Planning-level Assessment

(https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/OCS_A_0542.html #Species_Dependence)

- National Marine Fisheries Service (NMFS) Species Information System (https://www.st.nmfs.noaa.gov/sisPortal/sisPortalMain.jsp)
- NMFS fisheries stats (https://www.st.nmfs.noaa.gov/st1/index.html)
- Atlantic Coastal Cooperative Statistics Program (www.accsp.org)
- NMFS Fishery Independent Survey Data (https://www.st.nmfs.noaa.gov/st4/ifso/index.html)
- NMFS Atlantic Highly Migratory Species database (https://www.fisheries.noaa.gov/topic/atlantic-highly-migratory-species)
- NOAA Fisheries Office of Science and Technology independent survey system (http://www.st.nmfs.noaa.gov/st4/ifso/index.html)
- Renewable Energy Research Completed Studies (boem.gov/renewable-energy-research-completed-studies)
- Essential Fish Habitat Mapper (https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper)
- Leading Light Wind FAR for lease area
- Leading Light Wind FAR for Export Cable Route

3.2.2 Data Collected on Benthic and Fisheries Resources

Existing fisheries data will be supplemented through fisheries engagement between the FLO and FIRs and the commercial and recreational fishing communities. Fishing locations, catch data, gear usage, and other data will be obtained through voluntary community engagement; data confidentiality will be maintained if/when required. This data will be used to characterize usage and commercial and recreational harvest within the lease area. Fisheries-dependent data can also provide key information on distribution and abundance of commercially harvested species within the lease area.

Additional data on fishing activities, fisheries, and fish habitat will be obtained during survey campaigns for other resource areas (such as benthic, geophysical, and geotechnical survey campaigns). For example, the project sponsors have already conducted a reconnaissance-level geotechnical investigation with offshore fisheries liaison representatives (OFLRs) onboard the survey vessels to collect fisheries-specific information.

Offshore benthic, geophysical, and geotechnical surveys to characterize the seafloor bed and marine environment are being planned, providing an opportunity to further characterize the fish and macroinvertebrate communities.

In accordance with lease requirements, Leading Light Wind will notify applicable ocean users two weeks in advance of any field survey activities.

3.3 Monitor for Potential Impacts During Each Phase

Leading Light Wind shall continue to actively engage as participating members and sponsors of regional collaborative efforts including the F-TWG, E-TWG, M-TWG, ROSA, RWSC, and the New York Habitat and Fisheries Working Groups to identify research needs and opportunities.



Leading Light Wind will seek to collaborate with ROSA on their recently completed Fish FORWRD database. The database includes a list of completed, ongoing, and upcoming Northeast Atlantic studies related to fish, fisheries, and offshore wind since 2017, as well as research needs identified by federal and state agencies, fishery management councils, NGOs, and academics. A data gap analysis was performed to determine outstanding research needs. Prioritization criteria were assigned to help developers and agencies distribute mitigation funds. Summary information is available in various pivot tables to provide a quick snapshot for developers, state agencies, and other users to quickly identify research needs.

Leading Light Wind will collaborate on how to best use the outputs of Fish FORWRD in the identification of research priorities and appropriate regional research initiatives. Leading Light Wind will also provide nonproprietary project and survey information to ROSA for inclusion in its database and consideration of how it addresses data gaps.

3.3.1 Assess and Quantify Changes to Fisheries Resources

To assess and quantify changes to potentially impacted fisheries resources, Leading Light Wind will:

- Engage subject matter experts to conduct statistical power analyses early in the planning process to ensure that all future studies are scientifically and statistically robust.
- Use a combination of fisheries-dependent data derived from landings and revenue information coupled with fisheries-independent data derived from opportunistic sampling of fisheries resources (see Section 3.2.2) to assist in the evaluation of potential changes in fisheries resource availability, including abundance and distribution. Sound statistical methodology will be coupled with historical fisheries data to investigate attributes of population variations.
- Collaborate with F-TWG and E-TWG and seek input from other relevant stakeholders on fisheries monitoring needs, methodology, and best practices.
- Support collaborative research and monitoring opportunities through continued engagement with ROSA in the development of an offshore wind fish and fisheries research database.
- Commit to exploring relevant monitoring protocols during the lifespan of the project.

3.4 Assess Potential Changes to Commercial and Recreational Fishing Activities

3.4.1 Current and Historical Usage

Fisheries Assessment Reports (FARs) were conducted to assess the historical and current fisheries uses within the project area, inclusive of the offshore lease area and the areas along, and adjacent to, potential export cable routes.





3.4.2 Changes in Usage

Changes in commercial fisheries usage will be assessed using existing commercial fisheries reporting methods (e.g., VTR and VMS data) and supplemented with direct observations made during wind farm operations. These data will be compared with historical usage to identify any significant changes in usage.



3.5 Addressing Data Gaps

Leading Light Wind commits to establishing partnerships with local and regional experts from institutions and stakeholder groups to facilitate preparation of pre- and post-construction monitoring plans, driven by the stakeholders' interests and built upon existing data.

² <u>https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/OCS_A_0542.html#Species_Dependence</u>



3.6 Data Availability

Leading Light Wind is committed to make publicly available relevant data and supporting metadata that is developed across our portfolio of projects to enhance the understanding of environmental characteristics, or use by fisheries, of any offshore, nearshore or onshore areas, so long as it is not considered proprietary in nature or confidential business information. Leading Light Wind will seek to collect and report data consistent with standards established by regional organizations and share data through established multi-sector data and information sharing platforms related to offshore wind planning and development such as the Northeast Ocean Data Portal and Mid-Atlantic Ocean Data Portal, as well as ROSA's Fish FORWRD. Prior to any disclosure, data made available by Leading Light Wind will undergo rigorous quality assurance/quality control ("QA/QC") and version control.



4.0 Supporting Other Research

4.1 Support of Collaborative Research

Over the last 20 years, Leading Light Wind's lead developer, Invenergy, has made community partnerships a core principle of our business and this continues to guide the role we want to play in a changing world. Invenergy also sponsors environmental research programs that advance the state of practices for environmentally responsible energy infrastructure development, as well as sponsors conservation initiatives that contribute to improving the natural world around Invenergy projects. Through these partnerships and activities, we have amplified our impact in the communities where we live, work, and operate. The details of this important company work are described annually in the Invenergy Impact Report (https://invenergy.com/our-people/invenergy-impact). We will extend these guiding principles to our offshore wind portfolio and Leading Light Wind.

Leading Light Wind is committed to collaborating with the marine science and fisheries communities, TWGs, environmental NGOs, other offshore wind energy developers and third-party groups to facilitate research aligned with Invenergy principles. As US-focused research priorities are still being organized and coordinated, it is important for Leading Light Wind to engage with regional science organizations to ensure investment in research is strategic and advances gaining knowledge in the right areas and as quickly as possible. Leading Light Wind is a member and financial sponsor of RWSC and ROSA and highly values the role that these organizations play in identifying research needs, and developing tools and standards for data collection, data sharing to fill those information gaps.

In furtherance of regional science goals, Leading Light Wind will adhere to the following objectives:

- Continue to engage with ROSA on their Fish FORWRD database which provides strategic insight into future research needs and help facilitate the development of appropriate collaborative regional research initiatives.
- Continue to engage with RWSC on their developing Science Plan which will provide strategic insight into future research needs and help facilitate the development of appropriate collaborative regional research initiatives.
- Sponsor rigorous scientific research that helps inform offshore wind policy and responsible project decision-making.
- Conduct all project related data collection and monitoring in alignment with larger research efforts to further knowledge of species of concern, when appropriate, going beyond regulatory minimum monitoring protocols.
- Engage with ROSA, RWSC, TWGs, and other technical experts to review research proposals to critically assess the need for and value-add of each proposal to ensure resources are spent on the highest importance needs. Invenergy will engage with regional technical experts to develop assessment and prioritization criteria to identify and outline priority research areas and needs for funding.
- Target institutions and science organizations that focus on fisheries relevant to the lease area
- Seek out and support underfunded organizations that provide valuable contributions to scientific knowledge and/or species protection.
- Make Leading Light Wind vessels, structures, and lease area available to host research projects that are compatible with the respective missions.
- In evaluating potential research projects, consider attention to the unique geologic, geographic, and environmental conditions of the lease area (e.g., proximity to unique features such as the Hudson Canyon, distance from shore, water depth, species composition).



4.2 Handling/Processing Requests

Consistent with the objectives outlined above, Leading Light Wind will endeavor to meet with any interested parties when contacted to discuss prospective research requests and site or equipment access. Leading Light Wind is a strong supporter of collaborative research and has set aside funds specifically for third-party research as described below. In evaluating proposals not being considered through one of the regional research collaborations such as ROSA and RWSC, Leading Light Wind will establish a committee of expert technical advisors to assess and comment on proposals, as well as seek input from regional organizations such as ROSA, RWSC and TWGs to ensure proposal are not only scientifically valid but effectively address overall data and science gaps identified by these coordinating bodies.

Leading Light Wind will make every reasonable effort to support access to the project area and installed infrastructure for scientific and technological research. We will approve such requests during certain phases of construction or operational activity considering security and safety of personnel, operational marine assets, and installed infrastructure to be of primary importance. Based on requested activities, timing, etc., Leading Light Wind will coordinate with the requestor to accommodate access to the greatest extent practicable. Leading Light Wind, contingent upon a winning bid under this Request for Proposals, will establish a process for receiving and processing such requests.

Should there be sufficient volume of independent research interest, Leading Light Wind may create and publish targeted requests for proposals in a manner similar to that used by other funding entities such as US Department of Energy, to maximize creativity in research approaches and questions, as well as offer equal opportunity for new or underrepresented groups to seek funding and participate in research.

4.3 Proposed Restrictions

To enhance the understanding of environmental characteristics, or use by fisheries, of any offshore, nearshore or onshore areas, Leading Light Wind is committed to making public relevant data and supporting metadata so long as it is not considered proprietary in nature, considered confidential business information, or discloses information that may compromise sensitive environmental resources. Generally, Leading Light Wind will seek to develop collaborative efforts that do not restrict data distribution based on withholding until publication or other academic presentation and would include clear end dates for data withholding for such purposes. Some data may need to be withheld if Tribes or commercial fisheries determine data to be culturally or commercially sensitive. For example, specific locations of fishing areas or cultural practices may need to be withheld or data may need to be aggregated in some cases.

Leading Light Wind will seek to collect and report data consistent with standards established by regional organizations and share data through established multi-sector data and information sharing platforms related to offshore wind planning and development such as the Northeast Ocean Data Portal and Mid-Atlantic Ocean Data Portal. Prior to any disclosure, data made available by Leading Light Wind will undergo rigorous quality assurance/quality control ("QA/QC") and version control.

4.4 Financial Commitment for Third-party Research

Leading Light Wind, contingent upon a winning bid under this Request for Proposals ORECFRP22-1, is committed to supporting regional monitoring of wildlife and key commercial fish stocks, and third-party research, by leveraging its \$300M community benefits program aligned with the principles outlined above. As referenced in Leading Light Wind's Stakeholder Engagement Plan, the community benefits program includes budgeted funding categories that will ensure follow-through in this critical area. Leading Light Wind anticipates pursuing third-party research partnerships through its Partnerships category, and likewise looks forward to engaging with relevant communities and stakeholder groups to identify third-party research opportunities that will be funded through the Community Investment Fund.



Leading Light Wind commits \$5,000 per MW of Offer Capacity

to support regional monitoring of fish and invertebrates that support economically important fisheries to better understand how offshore wind energy development is potentially altering the biomass and/or distribution of these stocks and \$5,000 per MW of Offer Capacity

to provide financial and technical support to ongoing regional wildlife monitoring efforts and toward emerging research on potential alterations in behavior, populations, or distribution of sensitive wildlife as deemed necessary to better understand the effects of offshore wind development.

Leading Light Wind will provide within one year of award, a Monitoring Plan detailing the commitment of the funding. The Monitoring Plan will describe the commitment of fifty percent of the funding within two years of the award, and the remaining fifty percent within three years of the award.

In developing the required Monitoring Plan, Leading Light Wind will adhere to the objectives outlined in Section 4.1 above. The financial support for monitoring may be provided by any combination of disbursement to regional organizations and direct expenditure to finance the monitoring work. Leading Light Wind will report specific spending activity, including amount, purpose, and result of investment, in their quarterly progress reports to NYSERDA. Leading Light Wind will consult NYSERDA's Mitigation and Monitoring Practices Tool (MMP Tool) and will consider guidance mentioned in the Offshore Wind Project Monitoring Framework and Guidelines developed by ROSA.

In developing priorities for research funding, Leading Light Wind will adhere to the objectives outlined in Section 4.1 above. In evaluating third-party proposals, Leading Light Wind will establish a committee of technical advisors to assess and comment on proposals, as well as seek input from regional organization such as ROSA, RWSC and TWGs to ensure proposal are not only scientifically valid but address overall data and science gaps identified by these coordinating bodies. Funds will be directed toward areas of fundamental need as identified in Invenergy's engagement with regional technical experts (TWGs, ROSA, RWSC, etc.) and in alignment with recognized research priorities at the state and federal level, as described above. Consideration in funding will be aimed at providing resources to historically underfunded entities and programs in effort to promote equitable access to research opportunities. As themes emerge in research need, Invenergy may, as noted above, develop RFPs focused on broad objectives to promote creativity in approach, methodology, and application of emerging technologies as applicable to effectively address questions that advance understanding of sensitive resources and responses to development, and offer solutions for optimization of data collection, analyses, and dissemination.

4.5 Proposed or Existing Commitments/Collaborations

Leading Light Wind is a committed member and financial sponsor of the RWSC and ROSA. Leading Light Wind will rely heavily on these organizations as we make decisions regarding data collection, data standards, data sharing, and research commitments.

Leading Light Wind has begun establishing relationships and is contemplating partnerships with institutions and science organizations that focus on fisheries relevant to the lease area



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5.0 Proposed Mitigation of Impacts to Benthic/Fisheries Resources

5.1 Potential Impacts/Risks and Mitigation Measures by Project Stage

Table 3 below lists the potential impacts and risks to benthic/fisheries resources and proposed mitigation measures.

Table 3: Potential impacts/risks and mitigation measures by project stage: Benthic/fisheries resources

Potential Impacts Proposed Mitigation Measures		Phase*					
		1	2	3	4		
Micro-siting conflicts with habitats and fishery resources	Leading Light Wind shall seek input from regulatory authorities, the fishing industry, and maritime industry to locate foundations and cable routes in the least impactful manner that is practicable.	x					
Temporary alteration of the seabed and localized increases in noise and turbidity	Leading Light Wind shall seek to use noise attenuation technologies to reduce sound from pile driving of foundations (if such methods are used).	х	x	x	х		
Long-term changes to seabed habitat	Leading Light Wind shall, to the extent possible, avoid sensitive benthic habitats.	х	x	x	х		
EMF impacts	Leading Light Wind shall use proper shielding to reduce EMF. Leading Light Wind shall conduct EMF modeling and assessments to identify potential mitigation requirements.	x	x	x			
Cable burial	Leading Light Wind shall bury export and inter-array cables to an appropriate minimal depth to reduce exposure risk. If depth cannot be reached, the developer shall add protective materials over the cable.		x	x			
Turbine scour protection	Leading Light Wind shall seek collaboration with state and federal regulatory authorities and key stakeholders to assess the use of ecological enhancements for turbine scour protection to provide offsets from potential adverse impacts.	x	x	x	x		



Potential Impacts	Proposed Mitigation Measures	Phase*			
		1	2	3	4
Habitat loss	Leading Light Wind shall create an anchoring plan to ensure anchoring is avoided or minimized in complex habitats during construction and maintenance of the project. Anchored vessels will avoid sensitive seafloor habitats to the greatest extent practicable. Where feasible and considered safe, the project will use mid-line buoys on anchor lines to minimize impacts from anchor line sweep. Sea-to-shore transition will be installed via HDD or similar method to avoid or minimize impacts to the dunes, beach, and nearshore zone, including benthic and shellfish, finish and EFH resources.		x	x	
Impacts to fisheries resources	Leading Light Wind will examine the potential to develop protocols for collecting and properly disposing of derelict gear and marine debris encountered during the course of operations to reduce ocean pollution and improve habitat for fish	~			X

5.2 Coordination with F-TWG and Other Stakeholders

Leading Light Wind will engage with fisheries stakeholders, including but not limited to the F-TWG, recreational and commercial fishers and associated organizations, partnered organizations, and regulatory agencies (MAFMC, NEFMC, ASMFC) to address concerns related to benthic and fisheries resources. Leading Light Wind will:

- Provide opportunities for stakeholders to subscribe to project update emails.
- Maintain a messaging portal on the Leading Light Wind website for users to easily send questions or comments to the Leading Light Wind team.
- Post important project updates, outreach initiatives, and research opportunities on social media platforms and the Leading Light Wind News webpage.
- Regularly distribute a newsletter to stakeholders and subscribers describing project development activities, major past and upcoming outreach events, including port hours, and opportunities for providing input on specific project activities.
- Maintain updated contact information for the fisheries engagement team on the Leading Light Wind Mariners webpage to provide fisheries stakeholders a direct point of contact for fisheries-related questions and concerns.
- Coordinate port hours with other regional offshore wind energy developers to reduce strain on fishing communities.
- Consider timing of construction activities, working with the fishing industry and fisheries agencies on sensitive spawning and fishing periods to actively avoid or reduce interactions, as practicable.
- Engage with regulatory agencies, including but not limited to the MAFMC, NEFMC, and ASMFC, to solicit input on planned project development activities and fisheries-related concerns.
- Share results from sediment transport modeling with E-TWG and F-TWG.



- Evaluate and calculate extent of potential benthic habitat alteration/loss prior to cable laying as part of future COP assessments and share results with F-TWG and other working groups.
- Consider timing of construction activities, working with the fishing industry and fisheries agencies to actively avoid or reduce interactions, where practicable.
- Consult with F-TWG, ROSA, and other relevant working groups to discuss export cable routing, turbine layout/orientation, operational timing to de-conflict with fishing, etc.
- Actively participate within the F-TWG, ROSA, and ACP Fisheries Subgroups to ensure coordination with stakeholders across fisheries.



6.0 Proposed Mitigation of Impacts to the Recreational and Commercial Fishing Industry

6.1 Potential Impacts/Risks and Mitigation Measures by Project Stage

Table 4 below lists the potential impacts and risks to recreational and commercial fisheries and proposed mitigation measures.

Table 4: Potential impacts/risks and mitigation measures by project stage: Recreational and commercial fishing industry

Potential Impacts	Proposed Mitigation Measures		Pha	ISE*	
			2	3	4
Fishing gear loss	Leading Light Wind shall seek consultation with regulatory authorities and fisheries stakeholders for the development and use of a gear loss prevention and claim procedure.	х	х	x	x
Navigational safety concerns	Leading Light Wind shall develop a Navigational Enhancement Plan in consultation with regulatory authorities and fisheries stakeholders. The plan may include payments to enable the acquisition of navigation equipment, development of appropriate training for use of navigation equipment or other navigational aids, or creation of other programs to enable fishermen to safely continue effective navigation and fishing activities to encourage project coexistence. The developer shall seek consultation with appropriate regulators, F-TWG, and the fishing community to minimize the overall area of	x	x	x	x
Displacement/loss of access to traditional fishing grounds during	temporary closed areas. Leading Light Wind shall coordinate with fishing stakeholders to determine their spatial and temporal use, which will be considered during	х	х	x	x
survey and construction activities	operational planning to avoid/minimize operational overlap.				
EMF impacts	Leading Light Wind shall use proper shielding to reduce EMF impacts. Leading Light Wind shall conduct EMF modeling and/or assessments to identify potential mitigation requirements.			x	
Cable burial	Leading Light Wind shall bury export and inter- array cables to an appropriate minimal depth to reduce risk. If depth cannot be reached, cable risk and potential risk to mariners will be evaluated and the developer shall add protective materials over cable where necessary.		X	X	X



Potential Impacts	al Impacts Proposed Mitigation Measures		Phase*			
		1	2	3	4	
Impacts to sensitive areas	Leading Light Wind shall collaborate with state regulatory authorities and key stakeholders to collect data and avoid sensitive areas to the extent that is reasonably practicable. Leading Light Wind shall conduct cable route planning to minimize exposure to areas of hard or steep seabed where burial may be difficult.	x	x		x	
Turbine scour protection	Leading Light Wind shall seek collaboration with state and federal regulatory authorities and key stakeholders to assess the use of ecological enhancements for turbine scour protection to provide offsets from potential adverse impacts.	х	x	x	x	
Fisheries impacts	As appropriate and feasible, BMPs will be implemented to minimize impacts on fisheries, as described in the <i>Guidelines for Providing</i> <i>Information on Fisheries Social and Economic</i> <i>Conditions for Renewable Energy Development</i> <i>on the Atlantic Outer Continental Shelf Pursuant</i> <i>to 30 CFR Part 585</i> (BOEM, 2015) We will continue to work with the fishing industry	x	x	x		
	and fisheries agencies to identify sensitive spawning and fishing periods to actively avoid or reduce interaction during construction, where practicable.					
Fisheries communication	Leading Light Wind commits to collaborative science with the commercial and recreational fishing industries.	х	х	x	x	
	We will be guided by the project-specific Fisheries Communication and Outreach Plan when communicating and conducting outreach with the commercial and recreational fishing industries.					
	We will continue to implement a Fisheries Mitigation Plan throughout the construction process to alert local fishing industries to relevant construction activities through the use of in-person communications, social media, website communications, and local notice to mariners (LNMs).					
Marine navigation and safety	Leading Light Wind will aid mariners navigating the wind development area (WDA), lighting, painting, and marking WTGs and electrical service platforms (ESPs) with high-visibility paint and unique identification lettering and numbering and maintain them as Private Aids to Navigation.	x	x	x	x	
	Leading Light Wind will use a safety vessel to alert mariners to safety zones and/or active construction areas where appropriate.					



Potential Impacts Proposed Mitigation Measures		Phase*			
		1	2	3	4
Pre-construction monitoring	Leading Light Wind will identify opportunities for pre-construction fisheries baseline monitoring by consulting with fishermen, research institutions, and other organizations (e.g., ROSA). Collaboration with other regional leaseholders will take place where appropriate.	Х			
Navigation	Leading Light Wind will engage with other lease holders, fisheries, the USCG, and BOEM to inform transit routes and turbine spacing and orientation to minimize impacts to fisheries to the extent practicable, logistically reasonable, and safe.		x	x	x

6.1.1 General Approach to Avoiding and Mitigating Fishing Gear Loss



6.1.2 Processing Claims for Lost Fishing Gear

Leading Light Wind shall work with the F-TWG and the fishing community to establish appropriate procedures in advance of the start of construction activities. When practical, the procedures shall be standardized across projects, fisheries, gear types, and geographic regions. Leading Light Wind and its contractors will make every reasonable attempt to avoid damaging fishing gear during development activities (survey, construction, operation, and decommissioning).

In the event that a party ("Applicant") experiences gear loss or damage that they believe can reasonably be attributed to Leading Light Wind's activities, the Applicant should file a claim according to the fishing gear damage or loss claim process available in the Appendix of the Fisheries Communication Plan at https://leadinglightwind.com/mariners. The Fisheries Communications Plan is attached for reference. The fishing gear damage or loss claim process and accompanying claim form is based on a template developed collaboratively by a group of offshore wind developers with inputs from fishermen in an effort to standardize the claims process.

Applicants will be notified of the result of the review, in writing, within 30 days of receiving the completed claim form and required attachments. Applicants who wish to contest the decision may file a written notice of appeal with Leading Light Wind. The appeal will be deferred to a third party for review and final decision.



6.2 Coordination with F-TWG and Other Stakeholders

The process for creating a project layout is detailed, iterative, and involves confidential and proprietary business information. Assuming the appropriate confidentiality protections are in place, Leading Light Wind shall coordinate with the F-TWG and other relevant fisheries stakeholder groups to accommodate requests for review of the processes used to create the project layout. Leading Light Wind shall engage with the F-TWG, regional fishermen and other maritime stakeholders such as maritime experts, consultants, and marine safety committees and consider their actionable feedback to refine project layouts that aim to minimize impacts on existing fishing practices and facilitate ongoing access to traditional fishing grounds.

Leading Light Wind will consider fisheries data and consultation feedback from the F-TWG, regulatory agencies, fisheries stakeholders, maritime experts, and marine safety committees into the project layout. As appropriate, working group meetings may be arranged with a subset of stakeholder representatives to discuss actionable feedback on layout considerations which may include, but are not limited to, turbine locations, spacing, and orientation, and export cable routing, cable burial depth, and armoring methods. Efforts will be made through the ACP and/or other available avenues to coordinate with New York Bight wind developers, particularly developers of adjacent leases, to allow for appropriate corridors or other coordination of layouts as practicable.

Leading Light Wind aims to achieve the renewable energy production targets of the project while minimizing impacts on existing fisheries' uses of the project area and ensuring safe installation and operation.

Leading Light Wind shall work with fisherman and other stakeholders through Leading Light Wind's dedicated fisheries communication team to help address key concerns such as navigation, vessel access, fishing operability, and safety. Leading Light Wind will collaborate with the USCG by undertaking a Navigational Safety Risk Assessment (NSRA) and using guidance provided in the USCG Port Access Route Studies. Fisheries data and feedback from fishermen are important inputs to the planning process regarding these issues. A preliminary NSRA was completed to help inform general vessel traffic densities/directions and ideal corridors widths, and a full detailed NSRA is planned upon the upcoming layout finalization.



7.0 Considerations for Subsea Cables

7.1 Mitigation Strategies for Subsea Cables

Leading Light Wind will consult the Offshore Wind Cable Corridor Constraints Assessment to better understand the constraints of siting cables in New York State waters. To minimize the potential impacts to fisheries from subsea cables, specific mitigation measures may include, but are not limited to, the items below.

7.1.1 Cable Routing and Burial Depth

Cable routes will be planned to minimize, to the extent possible, exposure to areas of hard or steep seabed where burial is difficult.

Leading Light Wind will avoid, to the extent possible, routing export cable through sensitive marine habitat. To mitigate potential impacts on fisheries,

per BOEM's Draft Guidelines for Mitigating Impacts to Commercial and Recreational Fisheries on the Outer Continental Shelf Pursuant to 30 CFR Part 585.

In designated federal project areas, including federal anchorages and navigational channels, cable burial depths and methods will comply with the US Army Corps of Engineers (USACE) minimum cable burial requirements. Information from Cable Burial Risk Assessments (CBRA) will further be used to refine the appropriate target burial depths and burial methodologies used for submarine cable installation.

The footprint of linear infrastructure will be minimized where feasible to address potential impacts on diverse stakeholder concerns, including fisheries, navigation, habitat, and sensitive resources.

Additional consideration for cable routing and protection will be given according to the recommendations and requirements of the USCG and local port authorities in addition to feedback received from fisheries stakeholders.

7.1.2 Subsea Cable Installation and Operation

Leading Light Wind will consider the timing and use of appropriate measures during cable installation activities to minimize sediment resuspension and dispersal in areas of known historically contaminated sediments.

Leading Light Wind will consider the timing and location of fish spawning habitats during cable installation activities to minimize disturbance to the extent practicable.

Sea-to-shore transition will be installed via HDD or similar method to avoid or minimize impacts to the dunes, beach, and nearshore zone, including benthic and shellfish, finfish and essential fish habitat (EFH) resources. Appropriate measures, including development of an HDD Contingency Plan, will be implemented during HDD operations to minimize potential release of HDD fluid.

Where appropriate, cables will include sheathing that reduces electromagnetic fields, heat, and vibration associated with cables.

Location of subsea cables will be distributed to the maritime community and included in navigational charts.



8.0 Project Decommissioning

8.1 Potential Impacts Based on Available Information and Experience

Leading Light Wind's waste management during decommissioning will focus on re-use or recycling, with disposal as the last option. Wind turbines are composed primarily of steel, iron, copper, and aluminum, all of which are easily and fully recycled. The main exception to that has been the blades, which are composed primarily of fiberglass, which is much less easily recycled. Leading Light Wind lead developer Invenergy has been researching and implementing a blade recycling process that turns unusable wind turbine blades into fiberglass pellets, which can be used in other manufacturing enduses, including as aggregate in new wind turbine foundations. This process has been used on several sites where blades have been replaced. Although this recycling effort is limited in scope due to the small number of blades needing recycling in the U.S., recycling is expected to expand as the U.S. turbine fleet ages.

The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment. Consideration will be given to potential impacts of decommissioning on protected and sensitive species and habitats. Such consideration will be given to how project components are decommissioned:

- Leading Light Wind will leave buried export and infield cables and anchors in place in order to minimize environmental impacts from decommissioning activities.
- Leading Light Wind will remove wind turbines, pad-mount transformers, foundations to a depth of three feet below grade, overhead collection and transmission lines, and the project substation. These activities will all support the goal of reversing the methods used to install these components and returning the lease area back to its original benthic habitat.
- Removal of scour protection is not reasonably practicable and will therefore be left in place.

As fisheries monitoring during the project's operational life will provide a better understanding of the spatial and temporal presence of fish and fisheries within the lease area, mitigation measures can be more tailored and effective at further reducing the likelihood and level of impacts.

Leading Light Wind shall collaborate with regulatory authorities and key fisheries stakeholder groups to better understand the effects and potential impacts associated with decommissioning.

Leading Light Wind will collaborate on further research into the effects and potential impacts associated with decommissioning, including coordination with the E-TWG and F-TWG, using the experiences in Europe to help inform that process as well as experiences from decommissioning of oil and gas installations and other offshore wind developments on the eastern seaboard of the United States.

8.2 Approach for Developing Plan and Coordination with Stakeholders

Leading Light Wind will develop a decommissioning plan to identify and mitigate potential impacts, including coordination with fisheries stakeholders. Leading Light Wind shall decommission the project in accordance with all necessary laws and regulations and generate a detailed project-specific decommissioning plan. BOEM defines decommissioning as the removal of all facilities, installations, and other devices permanently or temporarily attached to the seabed on the Outer Continental Shelf to a depth of 15 feet below the mudline within two years following the termination of a lease or grant (30 CFR §585.433, §585.910). The Leading Light Wind project will continue to align with BOEM's decommissioning definition and guidance over the lifespan of the project. Furthermore, Leading Light Wind will adhere to BOEM's current decommissioning guidance, which includes the following:



- Receive BOEM approval of a decommissioning application as early as two years before expiration of the lease or as late as 90 days after expiration.
- Submit a decommissioning notice at least 60 days before beginning any activities related to decommissioning.
- Provide a final notice within 60 days after the removal of any facility, cable, or pipeline.

Leading Light Wind shall seek input on the detailed project-specific decommissioning plan from regulatory agencies, the E-TWG and F-TWG, fisheries and marine stakeholders, and local communities. Prior to decommissioning Leading Light Wind, the Fisheries Communication Team will facilitate communication and engagement with the fishing community and adjust activity timing and scope as appropriate to reduce conflicts. Leading Light Wind will continue to seek the opinions of stakeholders, with further consultation in the years preceding decommissioning to minimize the impact on the environment and stakeholders.

Leading Light Wind shall use "lessons learned" from the construction and operation activities and apply them when appropriate to the decommissioning plan. We will also consider international standards and other sea users, along with due consideration of commercial and technical viability and health and safety risks. Further consideration will be given to potential impacts of decommissioning on protected and sensitive species and habitats.

Fisheries usage will likely change within the lease area during the life of the project. Monitoring of fishing activity and continued engagement with the fishing community will provide a better understanding of the spatial and temporal fisheries usage of the lease area ahead of decommissioning. This information will help inform the decommissioning plan so it can be tailored to more effectively reduce likelihood and level of impacts.



9.0 Fisheries Compensation Plan (Optional)

9.1 Consideration of Compensation Plan

Leading Light Wind will consider the development of a fisheries compensation plan to offset impacts to fisheries and will incorporate any and all guidance being developed as part of BOEMS's Fisheries Mitigation Guidance Process: https://www.boem.gov/renewable-energy/request-information-reducing-or-avoiding-impacts-offshore-wind-energy-fisheries.

At this early stage, Leading Light Wind is pursuing efforts to understand the extent of potential impacts of development and will implement reasonable measures for avoidance, minimization, and where applicable, mitigation. These impacts will be identified and addressed in Leading Light Wind's COP.

In instances where these measures are not feasible, or development results in demonstratable losses to the fisheries industry, compensatory mitigation is warranted. Leading Light Wind fully supports and is participating in the efforts well underway to develop optimal plans for appropriate compensation, including the Special Initiative for Offshore Wind's (SIOW) effort to define the process to establish a regional fund administrator to manage the fisheries compensation process.

9.2 Approach to Developing Compensation Plan

9.2.1 Consideration with Stakeholders

In developing a compensation plan, Leading Light Wind will work as needed to evolve the guidance being developed as part of BOEM's 2022 Fisheries Mitigation Guidance Process: <u>https://www.boem.gov/renewable-energy/request-information-reducing-or-avoiding-impacts-offshore-wind-energy-fisheries</u>.

Intensive, broad-based efforts are underway to develop a regional compensation fund for offshore wind projects in the Northeast. Leading Light Wind fully supports and is dedicated to assisting in the development of these plans.

Leading Light Wind has included a fishing gear loss and damage claim process and associated form in their Fisheries Communication Plan, as described in section 6.1.2 of his document. This process and form are based on a template created across joint developers with inputs from fishermen. This form may be updated subject to feedback from the fishing community and associated stakeholders. Leading Light Wind is committed to facilitating coexistence with fishing communities in the project area. Leading Light Wind will actively solicit discussions with fisheries organizations, the F-TWG, and other relevant regulatory agencies and will incorporate feedback into the development of a compensation plan.

9.2.2 Third-Party Administration

In developing a compensation plan, Leading Light Wind shall continue working with the state, federal, fishing industry members, and others (e.g., SIOW) to assess the most appropriate entity for administration and disbursement of fisheries mitigation funds.

Leading Light Wind supports the development of a regional compensation fund that is held and distributed by a qualified non-federal third party, independent of either the offshore wind or fishing industries.



Leading Light Wind supports the creation of an oversight board, comprising members from both the offshore wind and fishing industries, to supervise and advise on fund activity.

Leading Light Wind supports the creation of a compensation plan that has a clear process to assess the validity and levels of appropriate compensation.



10.0 Additional Considerations

10.1 Additional Mitigation Strategies and FMP Refinement

Leading Light Wind shall support collaborative research on potential mitigation strategies, with other developers, agencies, and stakeholders. Leading Light Wind is committed to collaborative science with the commercial and recreational fishing industries pre-, during, and post-construction. Leading Light Wind will implement a Navigational Enhancement Plan that is designed with engagement from the F-TWG, fisheries organizations, and regulatory authorities.

The Leading Light Wind approach to fisheries mitigation will also incorporate a funding component as part of the project's overall \$300M community benefits program (see Section 16.4 of the proposal), within its Community Investment Fund, in which funding opportunities would be evaluated using criteria in support of various initiatives to help fisheries. Such funding could be for projects supporting fisheries innovations, fishing gear conversions, vessel/mariner safety improvements, and shoreside facility/infrastructure improvements. This allocation is separate from any regional fisheries mitigation fund that may be established based on BOEM guidance.

10.2 Process for Updating the FMP

Leading Light Wind will incorporate feedback from fisheries stakeholders, F-TWG, and other agencies and working groups in the FMP.

- Leading Light Wind shall update the FMP to reflect the results of iterative exchanges with members of the F-TWG, E-TWG, and other relevant stakeholders.
- Leading Light Wind shall engage with the F-TWG and fisheries organizations and use feedback from these
 discussions to evolve the FMP.
- Leading Light shall establish a process for updating the FMP, where formal updates will likely occur after major project milestones.
- Leading Light Wind shall update the FMP in a timely manner that reflects changes made based on key regulatory project deliverable dates.

Leading Light Wind will continuously evaluate and evolve this FMP so that all the components of the FMP are complete and sufficient. We will notify stakeholders of any changes made to the FMP on our "For Mariners" page at https://leadinglightwind.com/mariners. We expect that additional guidance and information will become available throughout the planning and regulatory process and will continue to consider its relevance to the FMP at the appropriate intervals.



Attachment 1 - Fisheries Communication Plan



Fisheries Communication Plan

Leading Light Wind



Leading Light Wind Project Starrett-Lehigh Building 601 W 26th St Suite 1420 New York, NY 10001

Prepared by:



Invenergy Wind Offshore LLC One South Wacker Drive Suite 1800 Chicago, IL 60606



Record of Revision				
Revision Date	Description of changes	Revision on pages		
January 20, 2023	Updated logo and project address. Added "Record of Revision" and "Fisheries Communication Team" tables. Updated project map. Updated development status to include planned survey activity for spring 2023. Changed header of gear types to include "not limited to" on page 9. Changed Gear Loss Claim Form's mentions of "Invenergy" to "Leading Light Wind" and updated mailing address.	1, 2, 5, 9, 12, 19-22		

Fisheries Communication Team

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TBD	Offshore Fisheries Liaison Representative (OFLR)	
TBD	Fisheries Industry Representative(s) (FIRs)	



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1.0

Introduction

The Fisheries Communication Plan (FCP) develops the strategies and procedures to guide communication with the commercial and recreational fishing communities that could be affected by the development of the Leading Light Wind Project (the project). This FCP will evolve with continuous feedback and guidance from fishers, fishing organizations, regulatory agencies, and Tribes. The FCP will be updated and refined over time and made available to the fishing community and public via the Leading Light Wind Project webpage (<u>https://leadinglightwind.com</u>). Robust engagement with fisheries stakeholders will help Leading Light Wind with the following:

- Reduce user conflict.
- Inform project design.
- Build a better understanding between the project and fisheries interests.
- Improve public perception.
- Contribute to the creation of industry standards for the offshore wind industry.

This FCP complies with the terms of Lease OCS-A-0542 (Addendum C, Section 3.1.2.1) between Invenergy Wind Offshore LLC and the Bureau of Ocean Energy Management (BOEM). Development of Lease OCS-A-0542 will follow the requirements of offshore renewable energy and alternate use regulations at 30 CFR Part 585 as well as other applicable statutes and regulations in existence.

1.1 Overview of Project Sponsors

Invenergy Wind Offshore LLC (Invenergy), a global renewable energy developer, and New York-based energyRe are collectively referred to as the project sponsors in this plan. Invenergy and its affiliates have successfully developed more than 30 gigawatts of projects that are in operation, construction, or are contracted, including more than 890 megawatts of wind, solar, and advanced energy storage projects in New York. These projects align with the goals set forth by the state of New York's renewable energy policy, which requires that 70 percent of the state's energy come from renewable sources by the year 2030. Invenergy's New York projects operate under the supervision and regulatory authority of the New York State Public Service Commission and the Federal Energy Regulatory Commission.

EnergyRe is an independent New York company that focuses on solving complex challenges and providing clean energy solutions. The team at energyRe has expertise in infrastructure, engineering, and development.

1.2 Overview of Project

The project sponsors executed an offshore wind lease (OCS-A 0542) in the New York Bight in April 2022. The lease location is approximately 40 miles (35 nautical miles) east of Atlantic City and 80 miles (69 nautical miles) south of Long Island and encompasses ~84,000 acres of the outer continental shelf, illustrated in Figure 1.



Figure 1. Leading Light Wind Project Lease Area



The Leading Light Wind Project will include wind turbine generators as well as an export cable connecting to the onshore grid. The development of the cable to export power and to interconnect with the electrical grid will occur within the power procurement process, which is underway in New York and New Jersey. The project is anticipated to produce over 2,000 megawatts that could power over 650,000 homes annually.

The project sponsors are establishing protocols for offshore and onshore data collection and surveys. The data will support preparation and submittal of a Construction and Operations Plan (COP) to the BOEM. Upon approval of the COP, BOEM will provide a Notice of Intent to prepare an Environmental Impact Statement (EIS), which will analyze potential impacts of the project and identify proposed avoidance, minimization, and mitigation measures.

1.3 Principles and Objectives

The project sponsors' overall approach and philosophy to development is based on the belief that the fishing industry and offshore wind energy development can mutually coexist and thrive. The project sponsors believe that coexistence can be achieved by careful evaluation of existing uses in the lease area and waters adjacent to the lease area and offshore



export cable routes (the project area), avoiding impacts where feasible, and as needed, reducing impacts through mitigation.

Timely communication and information dissemination are essential to identifying and avoiding potential conflicts during development of the project. Sharing information on fishing activities, planned infrastructure positions, submarine cable routes, vessel movements, and safety zones, among other information, can reduce and prevent potential conflicts detrimental to fishing activities in and around the project area.

This FCP is developed in accordance with BOEM guidelines as well as best practices guidance from other relevant resources, such as:

- Ecology and Environment, Inc. 2014. Development of Mitigation Measures to Address Potential Use Conflicts between Commercial Wind Energy Lessees/Grantees and Commercial Fishermen on the Atlantic Outer Continental Shelf Report on Best Management Practices and Mitigation Measures.
- The Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW). 2014. FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison.
- National Marine Fisheries Service's (NMFS) Office of Science and Technology.

Interactive participation from the fishing industry will help the Leading Light Wind Project reduce and avoid stakeholder conflict, create a positive narrative, and hopefully serve as an "industry standard" for offshore wind farm developments in the future.

1.4 Fisheries Communication Plan Guiding Principles

The fundamental principle of this FCP is to create and promote a straightforward, professional, open and ongoing dialogue among fishing stakeholders and other users of the natural resources in the shared project area. The goal is to promote compatible shared use through responsible development of the offshore resources. Consistent with the BOEM expectations for all leaseholders, the FCP achieves accountability and transparency through a continual engagement, reporting, feedback, and refinement, illustrated in Figure 2.







Source: BOEM New York Bight Planning and Analysis, Office of Renewable Energy Programs 2022

To achieve this goal, the FCP will focus on a set of core principles:

- **Transparency and Accountability.** Facilitate open, efficient, timely, and transparent communications to promote awareness and safety.
- **Diverse Experiences.** Seek out and apply the diverse expertise and knowledge of the commercial and recreational fishing communities in the shared project area.
- Respectful Communication. Acknowledge and respect the concerns and interests of fishing interests and their supporting businesses.



1.5 Fisheries Communication Plan Objectives

This FCP defines outreach and engagement strategies necessary to inform the fishing stakeholders in a timely manner about project activities, while building reliable and cooperative working relationships between project sponsors and fishing communities. These relationships are the foundation for identifying and addressing the challenges that arise with coexistence in the shared ocean space. To work toward effective shared use, the project sponsors have identified the following objectives for the FCP:

- Promote the safety of fishers, offshore survey crews, and construction crews transiting, working, and fishing in the project area.
- Proactively solicit fishing stakeholder concerns and strive for open, transparent communication to avoid conflicts before they develop, and quickly and equitably resolve conflicts that do develop.
- Identify potential adverse impacts to fishers and related industries; understand, as fully as possible, historic, current, and potential fisheries in the affected area; and make informed decisions on how to avoid, minimize, and/or mitigate effects.
- Identify potential opportunities to enhance the safe and productive shared use of the project area.
- Provide a pathway to quickly and fairly resolve fisheries related conflicts that may develop during the life of the project.
- Create an authentic and professional coexistence of fishing and wind energy in which both will prosper on a long-term basis.
- Establish a single point of contact to serve as a facilitator between project sponsors and fisheries stakeholders (i.e., the Fisheries Liaison Officer [FLO]).



2.0 Fishing Activities Within the Project Area

2.1 Commercial Fishing

The commercial fishing industries in and around the project area consist of mobile and fixed fishing gear operations. Vessels that work in the project area typically travel from Beaufort, North Carolina, to New Bedford, Massachusetts, and all fishing ports in between. Fisheries that have been determined as the most economically significant for the project area include: (1) surf clam/ocean quahog, (2) sea scallop, (3) ilex and longfin squid, (4) summer flounder, (5) scup, (6) monkfish, and (7) black sea bass.⁴

Mobile fishing gear operations include, but are not limited to, the following:

- **Hydraulic Dredges:** Surf clam/ocean quahog fishing is conducted in the project area using hydraulic dredges. The dredges are towed directly behind the vessel and generally penetrate the seabed to a depth of 6 to 18 inches. When a dredge is on the bottom and the clammer is working, maneuverability of the vessel is limited. The fishery is managed using a harvest quota system, and the vessels fishing the project area generally sail out of Point Pleasant, Atlantic City, and Cape May, New Jersey. The typical size of a clammer is 120 to 160 feet in length.
- Steel Dredges: Scalloping typically uses two (2) steel dredges up to 14 feet wide, which are towed directly behind the vessel at speeds of ~5 knots (6 miles per hour). The vessels generally tow in a straight line for approximately 1 to 4 nm, and then turn around and tow in the opposite direction. The scallop dredge weighs between 2,000 and 3,500 pounds and is towed along the seabed. When gear is deployed, the scallop vessel is restricted in its ability to maneuver. A typical scallop vessel is between 50 and 80 feet.
- **Dragging:** The dragging fishery uses nets known as trawls. The draggers target different species of fish based on the time of year. Draggers tow nets behind them at speeds of 2 to 3.5 knots. Once deployed, bottom trawls sweep a swath of seabed for a width of between 150 and 500 feet, and up to 50 feet off the seabed, depending on vessel size. Midwater trawls do not sweep the seabed, but remain in the pelagic zone. As in all mobile fishing gear, draggers are restricted in their ability to maneuver when gear is deployed. Dragger sizes range from 50 to 120 feet.

Fixed fishing gear operations include, but are not limited to, the following:

- **Gillnet:** Typically, a net section is 300 feet in length and anchored to the seabed with weights on each end. The top of the net may be 15 feet above the bottom. The nets are hauled and reset every 48 to 72 hours, depending on species and water temperature. A single string of gillnets may consist of up to 15 net sections tied together.
- **Lobster traps:** Lobster traps are set in "trawls" (groups) of 20 to 50 traps long, covering up to half a mile. The traps sit on the seabed and depending on fishing are hauled and reset every three to seven days.
- **Fish traps:** Fish traps are set in strings/trawls similar to lobster gear. Their soak time (time between hauls) can be significantly longer since they are not baited traps. Trawls of 12 to 20 traps that soak for 2 weeks or more. Depending on the type of fishing and time of year, traps can be worked hourly, daily, and biweekly.

Note that the project area is heavily transited by commercial fishing vessels. Although required only by commercial vessels greater than 65 feet in length, Automatic Identification System (AIS) data indicates transit activity within the

⁴ <u>https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/OCS_A_0542.html#Species_Dependence</u>



project area. AIS however is only required to be actively transmitting within 12-nm from shore. Commercial vessel traffic while transiting the project area will generally travel northeast/southwest to reach the offshore fishing grounds and return to regional ports. Vessel Monitoring Systems are required by vessels participating in some federally managed fisheries. Fixed-gear fishers who work in the project area typically travel from Cape May up to Point Pleasant, New Jersey, and all fishing ports in between.

2.2 Recreational Fishing

The primary method of recreation fishing harvest is hook and line. Two groups of recreational fishers use hook and line:

- "Sport" fishing mainly made up of privately owned fishing vessels
- Professional "for-hire" fishing fleet consists of party/head boats and charter boats

This recreational fishing fleet organizes one- to two-day fishing trips for the public with smaller vessels. Charter boats can take up to six people, while party head boats can handle upward of 120 people. All captains on recreational fishing vessels must be licensed by the U.S. Coast Guard.

Recreational vessels fish in and around the project area within hard bottom outcroppings and artificial reef areas in addition to several shipwreck areas where such structures result in greater abundance of desirable fish species. Additionally, several offshore fishing tournaments occur in the project area. Fishing tackle manufacturers sponsor these fishing tournaments, which are held at various marinas in Ocean City, Maryland; Atlantic City, and Point Pleasant, New Jersey, and Jones Beach on Long Island, New York.

2.3 Fisheries Management and Data

The following data sources were used for site characterization:

- NOAA data (fish stock assessments, population and ecosystems monitoring and analysis division, fishery monitoring, and research)
- Atlantic Coast Fishery Management Plans and Amendments (<u>https://www.fisheries.noaa.gov/atlantic-highly-migratory-species/atlantic-hms-fishery-management-plans-and-amendments)</u>
- Atlantic States Marine Fisheries Commission (<u>http://www.asmfc.org</u>)
- NOAA Descriptions of Selected Fishery Landings and Estimates of Vessel Revenue from Areas: A Planning-level Assessment (https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/OCS_A_0542.html#Spe
- National Marine Fisheries Service (NMFS) Species Information System (https://www.st.nmfs.noaa.gov/sisPortal/sisPortalMain.jsp)
- NMFS fisheries stats (https://www.st.nmfs.noaa.gov/st1/index.html)
- Atlantic Coastal Cooperative Statistics Program (<u>www.accsp.org</u>)
- NMFS Fishery Independent Survey Data (<u>https://www.st.nmfs.noaa.gov/st4/ifso/index.html</u>)

cies_Dependence)



- NMFS Atlantic Highly Migratory Species database (<u>https://www.fisheries.noaa.gov/topic/atlantic-highly-migratory-species</u>)
- NOAA Fisheries Office of Science and Technology independent survey system (<u>http://www.st.nmfs.noaa.gov/st4/ifso/index.html</u>)
- Renewable Energy Research Completed Studies (<u>boem.gov/renewable-energy-research-completed-studies</u>)
- Essential Fish Habitat Mapper (<u>https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper</u>)

Fisheries operating within the project area are subject to regulations and reporting protocols that result in multiple data sets. The regulatory programs and data collection often involve interjurisdictional management between NMFS, regional fisheries management councils (e.g., Mid-Atlantic Fisheries Management Council and New England Fisheries Management Council), the Atlantic States Marine Fisheries Commission, and coastal states.

Many of the fisheries conducted within the project area are subject to tracking via a Vessel Monitoring System, which creates a spatial data record of their activities. Other vessels have permits for regulated species that require effort and landings to be reported via Vessel Trip Reporting. These fisheries' dependent data⁵ will be used to further assess the historical fishing activity inside the project area and help direct project engagement needs.

⁵ <u>https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/WIND/WIND_AREA_REPORTS/OCS_A_0542.html#Species_Dependence</u>



3.0 Offshore Surveys and Data Collection

The project sponsors will use existing fisheries data from multiple publicly available sources to provide initial baseline information for site characterization and future development of the COP. Existing fisheries data will be supplemented through fisheries engagement between the FLO and Fisheries Industry Representatives (FIRs) and the commercial and recreational fishing communities. Section 4.1.1 and Section 4.1.2 describe opportunities for the FLO and FIRs to obtain secondary fisheries data. Fishing locations, catch data, gear usage, and other data will be obtained through community engagement. Additional data on fishing activities, fisheries, and fish habitat will be obtained during survey campaigns for other resource areas (such as benthic, geophysical, and geotechnical survey campaigns). For example, the project sponsors have already conducted a light geotechnical survey with fisheries observers onboard the survey vessels collecting data. Additional offshore surveys for geotechnical and geophysical and benthic and invertebrates are being planned and are expected to begin in spring of 2023. In accordance with lease requirements, the project sponsors will notify applicable ocean users two weeks in advance of any field survey activities.



4.0 Fisheries Communication Strategies

4.1 Fisheries Communication Team

The project sponsors will conduct fisheries communication described in this FCP via an established FLO and FRs, whose roles are further described in Sections 4.1.1 and 4.1.2. The primary role of the FLO is to provide two-way communication to and from the fishing community directly to the project sponsors regarding issues and concerns raised whereas the FRs serve as additional points of contact to the fishing communities. The FLO and FRs will work together to review, evaluate, and improve the effectiveness of fisheries related outreach and communication. BOEM has defined a Project Coordinator that will serve as the primary point of contact for other federal, state, and local government agencies, developers, and other stakeholders. Additionally, BOEM will perform project review, internal and external coordination, and stakeholder outreach for renewable energy projects on the outer continental shelf. Table 1 provides the points of contact for the Fisheries Communication Team. The Fisheries Communication Team is made up of experienced fishers who understand offshore wind and have existing relationships with the fishing communities. This will enable the project sponsors to build mutually respectful lines of communications with the fishing communities.

Role	Organization	Contact Name	Contact Information
Project Director	Leading Light Wind	Wes Jacobs	wjacobs@invenergy.com
BOEM Project Coordinator	BOEM Office of Renewable Energy Programs	Annette Ehrhorn	Annette.ehrhorn@boem.gov
Fisheries Liaison Officer (FLO)	Sea Risk Solutions	Sarah Hudak	sarahhudak@leadinglightwind.com
Fisheries Industry Representative(s) (FIR(s))	To be identified based on need	TBD	TBD

Table 1 – Project Primary Points of Contact

4.1.1 4.1.1 Fisheries Liaison Officer (FLO) – Onshore Coordination

BOEM requires an individual be retained by the lessee to serve as its primary point of contact with commercial and recreational fisheries (i.e., FLO). The FLO communicates issues and concerns raised by the fishing community directly to the project sponsors. The FLO is responsible for overall implementation of the FCP and communicating project plans and activities that might affect the fishing industry during the project development, construction, and operations. The FLO will have a direct line of communication to the project sponsors' senior management to make recommendations for coordination improvement, to address complaints and concerns, and to share other input received from fishing stakeholders. The FLO will be responsible for the following:

- Facilitate the work of the FRs by serving as the FRs primary point of contact.
- Communicate across fishery communities and regions inside and outside of the FR network in order to educate and timely disseminate information regarding the project and to receive input.



- Validate fisheries information through cross-referencing among the best available data sources.
- Develop relationships and direct lines of communication with individuals who are representative of fishing regions, industries, and interests to the project area.
- Convey current fishing industry concerns and feedback to the project development team so they can identify and work toward solutions, as needed.
- Organize meetings, as necessary, to garner fishers' views of project effects on their industry and navigational rights.
- Develop a stakeholders' list in consultation with the FR that includes relevant fishery community individuals, officials, and organizations for communication efforts.
- Serve as the primary point of contact and coordinate resolution of issues regarding gear conflicts that may arise. Appendix A provides a draft of the standardized claim procedure established to facilitate the filing of a claim for potential gear damage or loss.

The FLO will be employed by the project sponsors and will work on behalf of the project.

4.1.2 4.1.2

Offshore Fisheries Liaison Representatives (OFLR) – Offshore Campaigns

The project sponsors will employ OFLRs on vessels involved in project-related offshore activities as appropriate. Typically, an OFLR will available offshore if there is a Protected Species Observer onboard a vessel. The OFLR will coordinate with any survey vessel crew and provide general information about potential fishing vessels and equipment types in the area based on consultations with fishing stakeholders prior to survey start. As needed, the OFLR will be called on to perform the following:

- Establish and maintain professional, respectful, and friendly communication directly with fishing vessels in the project area.
- Contact any fishing vessels working or transiting in the area while survey vessel is in the project area and gear is deployed.
- Document the communications with fishing vessels, as part of survey reporting

4.1.3 4.1.3 Fisheries Representatives (FR)

Designated FRs will serve as additional points of contact where necessary within the fishing community. FRs represent a particular fishery, organization, gear type, port, region, state, or sector(s), and are responsible for communicating concerns, issues, and other input to the FLO. FRs will not work for or on behalf of project sponsors; however, they will represent their respective fishing communities as defined points of contact. In addition, FRs are:

- Available during project planning and construction phases.
- Able to provide the project sponsors with guidance, through the FLO, on fishing activity in the area and an understanding of particular fishing sensitivities, etc.
- Knowledgeable about different fishing sectors, seasons, key species, fishing patterns, and gear types and have fishing experience in the region.

The project sponsors may compensate FRs for their time and expenses. An FR is typically an individual who has worked extensively within the industry they represent but is not necessarily an active fisher. The FLO will solicit the FRs through an equitable process and will ensure these individuals or organizations adequately and fairly represent their respective industry, gear type, port, or region and have the support of the fishing stakeholders they speak for



4.2 General Strategies

The Fisheries Communication Team will use outreach strategies designed to effectively engage fishing stakeholders. These strategies will offer opportunities to access or receive timely updates on project activities and encourage feedback from fishing communities regarding fishing activities (e.g., peak fishing seasons) and, to the extent practicable, means to avoid interaction offshore between survey vessels and fishermen.

General outreach strategies will include, but are not limited to, the following:

- Establish and maintain a dedicated tab/page on the project website specifically for fishing stakeholders to access the
 latest FCP. The page will include updated Notice to Mariner(s), the latest information on operations, and provide
 relevant contact information to submit feedback. This tab/page will have an RSS feed link so that interested parties
 can receive instant notifications on any device through social media platforms (e.g., Facebook/Meta, Twitter, and
 LinkedIn).
- Establish a comprehensive fishing stakeholder email and text distribution list to provide regular project updates and other important notices. This contact list will be updated throughout the project timeline.
- Regularly distribute bulletins showing the project area (depicted on local nautical charts) with a description of vessels and operations in the area, the activities taking place, the timelines, and the relevant contact information.
- Schedule and hold regular "town hall" type (open to the public) meetings and webinars regarding project activities designed to educate fishing stakeholders, share project information, and solicit feedback.
- Attend Mid-Atlantic Fisheries Management Council and New England Fisheries Management Council meetings to be readily available to answer questions for those in attendance.
- Participate in existing offshore wind meetings where federal (e.g., BOEM, NMFS) and state (e.g., New York State Energy Research and Development Authority, New Jersey Department of Environmental Protection) agencies participate. The Fisheries Communication Team will be in attendance and will be available to answer questions from those in attendance.
- Publish announcements and share project updates with print and online industry publications and local news outlets.
- Establish specific methods for communicating with fishers while they are at sea.
- Issue Local Notice(s) to Mariners ahead of any offshore activities, as required.
- Use BOEM Progress Reports, submitted every six months as required by the project lease, to document engagement with fishing interests, potential adverse effects stemming from the project to the interests of fishing community, and how, if at all, the design or implementation of the project has been informed by or altered to address these potential effects (including by investing in, or directing benefits to fishing interests).

4.3 Commercial Fisheries Engagement Strategies

In all cases, early identification of the commercial fisheries within and in proximity to the project area and engagement with the specific users is paramount to the success of this FCP. The Fisheries Communication Team is responsible for engaging with commercial fishing organizations (e.g., Responsible Offshore Development Alliance), local leaders who represent the various gear types used in the area, and individual fishers. Additional engagement strategies specific to commercial fisheries users of the project area include the following:



- Engage fixed-gear fishers to establish a set of guiding principles and procedures for the (1) identification of fixed gear to work around or temporary relocation if needed; (2) process for filing claims associated with lost or damaged gear; and (3) agreed upon methods to determine any required mitigations.
- Schedule meetings with local fishers (e.g., port meetings, webinars) when offshore operational plans and dates are confirmed, to discuss the activity and identify potential conflicts.
- Establish and support regular "port hours" with an open-door policy in local ports to encourage regular, local
 engagement to help identify and characterize important local details regarding fisheries operations and practices.
- Engage local fishers to serve as OFLRs on vessels working in the project area, and secure local vessels to function as scout boats during offshore activities.
- Participate in commercial fishing conferences and trade shows as a vendor to provide an additional point of engagement

4.4

Recreational Fisheries Engagement Strategies

Recreational fisheries users who may be affected by project activities in the project area are represented by national organizations (e.g., Recreational Fishing Alliance and American Sportfishing Association), local organizations (e.g., United Boatman of New Jersey, New Jersey Saltwater Fishermen), clubs (e.g., Beach Haven Marlin & Tuna Club, Atlantic City Saltwater Anglers), and individual fishers. Through these organizations, the Fisheries Communication Team will:

- Engage the professional associations representing the "for-hire" fleet of party and charter boats and schedule meetings to share information and obtain feedback.
- Identify and engage local offshore fishing clubs, attend meetings, deliver educational presentations, and solicit feedback.
- Identify offshore fishing tournaments and dates; engage with tournament organizers; share operational plans and contact information; and identify and monitor the VHF channel used by the tournament.
- Participate in sportfishing conferences and trade shows as a vendor to provide an additional point of engagement and educate the recreational fishing community.

4.5 Planning for Subsequent Project Stages

As the development of the project progresses, the FCP will be updated in accordance with the project phases identified below. These updates will reflect the shared experiences of project sponsors and the Fisheries Communication Team, and ongoing engagement with the fishing community, regulatory agencies, and Tribes. The project sponsors will make an updated and refined version of the FCP available to the fishing community and public via the Leading Light Wind webpage (<u>https://leadinglightwind.com</u>). The project website will act as a vehicle for receiving public comments and addressing those comments. The website will house the FCP that will be periodically updated as the project responds and addresses comments on a rolling basis.

Surveys and Data Collection – In addition to analyzing existing fisheries data, this phase of activity will include data collection and survey campaigns which may include but is not limited to geophysical, geotechnical, and benthic surveys. The Fisheries Communication Team will be apprised of the timing and scope of any resource surveys. The Fisheries Communication Team will notify applicable ocean users two weeks in advance of any field survey activities.



- Design and COP Preparation The project sponsors will use survey data and fisheries inputs resulting from engagement undertaken by the Fisheries Communication Team to inform the project design and layout (e.g., wind turbine generators, offshore substation foundations, inter-array cable, and export cable routes) and reduce conflicts. The FCP will be adjusted as necessary to reflect continued engagement with agencies during the design and COP preparation phases of the project.
- **Construction and Installation –** The Fisheries Communication Team will be apprised of any construction-related surveys. Ahead of construction and installation activities, the Fisheries Communication Team will facilitate ongoing communication and engagement with the fishing community and adjust activity timing and scope as appropriate to reduce conflicts. In accordance with BOEM's Survey Guidelines for Renewable Energy Development, the project sponsors will perform, as required, pre-construction fish trawl surveys.
- Decommissioning Prior to the decommissioning, the FCP will be updated to address this final phase of the project. As part of planning for project decommissioning, the Fisheries Communication Team will facilitate ongoing communication and engagement with the fishing community and adjust activity timing and scope as appropriate to reduce conflicts.

The FCP will evolve based on project activities being executed. This evolution will be based on feedback and guidance from fishers, fishing organizations, agencies, and Tribes and the shared experiences of the project sponsors and stakeholders involved in the project and will require the continued engagement and dedication of all parties to be effective.



5.0

Coordination of Engagement Across Leases

New York Bight leaseholders have begun to engage with one another in introductory meetings, with the shared goal of reducing burdens on resource-limited agencies and stakeholders. The project sponsors continue to collaborate with these leaseholders and agencies, specifically agreeing to the following shared objectives:

- To work together to identify innovative avoidance, minimization, mitigation, and monitoring measures based on lessons learned in the industry both domestically and globally.
- To seek opportunities to meet as a group on select topics to reduce the need for individual meetings with agencies, as was recently done for the New York Bight Programmatic Environmental Impact Statement (PEIS).
- To seek to meet jointly in other forums and/or request joint "New York Bight" presentations/agenda items at various working group and stakeholder meetings to reduce the need for individual presentations.
- To work together to coordinate port hours so that fishers have consolidated, rather than dispersed, times to discuss issues with New York Bight leaseholders.
- To participate in BOEM convenings of Native American Tribes.

The project sponsors welcome agency comments and suggestions to further coordinate with New York Bight leaseholders throughout this effort.



Appendix A. Gear Loss Claim Form: Leading Light Wind

I. Filing a Claim

Leading Light Wind and its contractors will make every viable attempt to avoid damaging fishing gear during development activities (survey, construction, operation).

In the event that a party ("Applicant") experiences gear loss or damage that they believe can reasonably be attributed to Leading Light Wind's activities, the Applicant should complete the attached claim form.

II. Requirements for Filing a Claim

- 1. <u>Notify Fisheries Liaison Officer</u>, Sarah Hudak of gear loss or damage within 3 days of the incident via cell phone at 919-302-8559. Please provide name and contact information.
- 2. Fill out "Gear Loss Claim Form" (attached); form must be legible and completed in its entirety.
- 3. Include the following attachments with the claim form:
 - (1) Copy of a valid fishing permit
 - (2) A vessel trip report (VTR) for the trip in which the gear loss/damage occurred, or sales slip for fish landings for period of gear loss/damage showing that the vessel was fishing in the area at the time of the incident
 - (3) Proof of vessel ownership
 - (4) Proof of fishing permit
 - (5) Photos of vessel/damaged gear
 - (6) Copy of receipt for original purchase of fishing gear that was lost/damaged.
 - (7) Sales slip or gear invoice for replacement or repair gear (must be identical to gear that was lost/damaged)
 - (8) Location of gear loss/damage either GPS coordinates and/or photo of chart plotter.
 - (9) Completed W-9 form (https://www.irs.gov/pub/irs-pdf/fw9.pdf)
- 4. <u>Submit the completed claim form and the required attachments within 30 days of incident</u> through one of the following methods:
 - Email to:

(1) Fisheries Liaison Officer, Sarah Hudak, at <u>sarahhudak@leadinglightwind.com</u>
(2) Leading Light Wind Project Director, Wes Jacobs, at <u>wjacobs@invenergy.com</u>

• Mail to:

Leading Light Wind Starrett-Lehigh Building 601 W 26th St Suite 1420 New York, NY 10001



III. Process for Claim Review

- 1. Claims will be reviewed by Leading Light Wind Fisheries Liaison Officer and a Leading Light Wind Representative.
- 2. Applicants will be notified of the result of the review, in writing, within 30 days of receiving the completed claim form and required attachments.
 - If the claim is found to be valid, payment will be remitted to the Applicant within 10 business days of approval by Leading Light Wind.
 - If the claim is denied, a written explanation will be provided to the Applicant.
- 3. <u>Applicants who wish to contest the decision</u> may file a written notice of appeal with Leading Light Wind. The appeal will be deferred to a third party for review. The decision of the third party is final and not subject to any further right of appeal.

Leading Light Wind will not be held liable for gear loss or damages that could have reasonably been prevented by Applicant. If Applicant accepts payment from Leading Light Wind as a result of a claim, Leading Light Wind will be deemed fully released from the respective claim. Leading Light Wind reserves the right to request additional information to support review of a claim; the review process will be extended by 15 days upon receiving any additional information.

[Claim Form Attached]



Gear Loss Claim Form (Page 1 of 2)

Applica	nt Name:		
Applica	nt Phone Number:		
Applica	nt Email:		
Date an	d Approximate Time of Incident:		
Vessel	Name:		
Home F	Port:		
State Li	cense #:		
Federal	Permit #:		
Fishing	Gear Type:		
Descrip damage	tion of Gear Lost/Damaged: Include as much detail as po e. Continue writing on back if necessary.	ossible	to describe lost/damaged gear and extent of
Quantity	y of gear lost (if applicable):		
Replace	ement Cost: \$		
Total Da	amage Cost: \$		
Include	the following attachments:		
	Copy of a valid fishing permit.		Copy of receipt for original purchase of fishing
	A vessel trip report (VTR) for the trip in which the		gear that was lost/damaged.
	gear loss/damage occurred, or sales slip for fish landings for period of gear loss/damage showing that the vessel was fishing in the area at the time of		Sales slip or gear invoice for replacement or repair gear (must be identical to gear that was lost/damaged)
	the incident.		Location of gear loss/damage – either GPS
	Proof of vessel ownership	_	coordinates and/or photo of chart plotter
	Proof of fishing permit		Completed W-9 form (https://www.irs.gov/pub/irs-pdf/fw9.pdf)
	Finitos or vesser/damaged gear		



Gear Loss Claim Form (Page 2 of 2)

I, _______, as Applicant hereunder, hereby understand that submitting this Gear Loss Claim Form does not guarantee payment. I further acknowledge and agree that (i) if this claim is accepted and paid by Leading Light Wind, my acceptance of such payment constitutes full, final, non-appealable and complete payment for the claim and that neither Leading Light Wind nor any of its affiliates, and its and its affiliates' contractors, agents or employees shall have any further outstanding or ongoing liability or obligation with respect to this claim or the loss of or damage to the gear described above, and (ii) I hereby release and discharge Leading Light Wind and its affiliates, contractors, agents and employees from all liability related to the claim as of the date of acceptance of the payment. I further acknowledge and agree that I shall not, directly or indirectly, assert any claim, or commence, join in, prosecute, participate in, or fund any part of, any suit or other proceeding of any kind against Leading Light Wind or any of its affiliates, based upon this claim. Additionally, I understand that any payment is the result of a compromise of a disputed claim, and that neither this release nor any payment shall be considered an admission of liability by Leading Light Wind with respect to the disputed claim.

I attest, under penalty of perjury, that to the best of my knowledge the information in this Application is true and correct.

Printed Name

Signature

Date

Submit this completed claim form and the required attachments within 30 days of incident through one of the following methods:

Email to:

Fisheries Liaison Officer, Sarah Hudak, at SHudak@searisksolutions.com

Leading Light Wind Project Director, Wes Jacobs, at WJacobs@invenergy.com

Mail to:

Leading Light Wind Starrett-Lehigh Building 601 W 26th St Suite 1420 New York, NY 10001

Invenergy