

NOAA Fisheries Greater Atlantic Region Technical Assistance on Protected Species Best Management Practices and Risk Reduction Measures for Fisheries Surveys and Monitoring Activities to Support Offshore Wind Energy Projects Development

The purpose of this informal, technical assistance document is to provide information and recommendations to offshore wind energy lessees/project proponents and other stakeholders for consideration when designing and implementing surveys, monitoring, or research activities targeting fish species managed by the NOAA Fisheries Service's Greater Atlantic Regional Fisheries Office (GARFO). This technical assistance is intended to satisfy requests from stakeholders for this information, to improve the efficiency of permitting and other review processes, and to help conserve protected species as well as their habitat. It does not create new obligations, authorize any activities, or convey any exemptions from the law. This document is not intended to be binding on members of the public or the agency, and is not a substitute for independent legal review of the terms of the relevant statutes and regulations. Nevertheless, this technical assistance generally reflects NOAA Fisheries staff's current knowledge, recommendations, and expectations.

Depending on gear type, proposed fisheries survey/monitoring activities to support offshore wind energy development have the potential to interact (e.g., by entangling or catching in the gear) with species protected by the Endangered Species Act (ESA) and/or the Marine Mammal Protection Act (MMPA). As a result, obtaining ESA and/or MMPA incidental take authorizations should be considered well before a survey begins. Depending on whether and how the proposed fishery survey/monitoring will be authorized, the process to obtain an ESA¹ and/or MMPA² incidental take authorization will differ and may be lengthy. Please refer to [NOAA Fisheries Greater Atlantic Region Permitting Considerations for Fisheries Surveys and Monitoring Activities to Support Offshore Wind Energy Development](https://www.fisheries.noaa.gov/new-england-mid-atlantic/science-data/technical-guidance-offshore-wind-energy-projects-greater-atlantic-region) for more information (<https://www.fisheries.noaa.gov/new-england-mid-atlantic/science-data/technical-guidance-offshore-wind-energy-projects-greater-atlantic-region>). Note that no protected species take coverage (ESA-listed or MMPA-protected) is afforded by following the recommendations outlined in this document. Depending on whether and how the survey/monitoring activities are authorized, as well as the specifics of the survey/monitoring activities themselves, additional measures than those provided in this document may be advisable to reduce risks.

Some fisheries operating in the Greater Atlantic Region (Maine-Virginia) use gear types that can capture or collect (including entanglement) protected species. Table 1 provides a summary of the fishing gear types that can interact with protected species in the Greater Atlantic.

¹ [Permits](#) for the incidental taking of ESA-listed species

² [Incidental Take Authorizations under the MMPA](#)

Table 1. Gear types that may result in the capture or collection (including entanglement) of protected species (e.g. marine mammals, sea turtles, and some ESA-listed fish).

Fishing Gear Types	Protected Species Group
Pot/Trap	Large whales Sea turtles
Mid-Water Trawl	Small cetaceans (dolphins and porpoise) Pinnipeds (seals)
Bottom Trawl	Sea turtles Atlantic Sturgeon Shortnose Sturgeon Atlantic Salmon* Small cetaceans (dolphins and porpoise) Pinnipeds (seals) Giant manta ray
Scallop Dredge	Sea turtles Atlantic sturgeon
Sink Gillnet	Large whales Sea turtles Atlantic Sturgeon Shortnose Sturgeon Atlantic Salmon* Small cetaceans (dolphins and porpoise) Pinnipeds

* Atlantic salmon are only found in a portion of the Gulf of Maine, additional information can be found at: <https://www.fisheries.noaa.gov/species/atlantic-salmon-protected>

Any survey/monitoring activity proposing to use gear types identified in Table 1 has the potential to interact with various protected species. The likelihood of an interaction is affected by the following factors:

- (1) Where and when the gear is used and how that overlaps with the presence of protected species.
- (2) The quantity of gear in the water (e.g., number of vertical lines, gillnets, bottom trawls).
- (3) The gear soak or tow duration.

Interaction risk can be reduced based on the above factors. Generally, the likelihood of capture or collection (including entanglement) of protected species will be reduced by minimizing the amount of gear fished (i.e., set or towed), gear soak or tow duration, and the spatial and temporal overlap with protected species.

Please note that this list of gear types is not exhaustive and interactions with protected species can occur with other proposed survey/monitoring methods not listed here. As offshore wind fishery survey/monitoring plans are developed, we strongly recommend the developer and/or group conducting the activities contact NOAA Fisheries Greater Atlantic Region Fisheries Office's (GARFO) Protected Resources Division (PRD). Contact GARFO PRD (nmfs.gar.esa.section7@noaa.gov) to begin early coordination on proposed surveys, identify potential measures to reduce risk, and help identify permitting needs.

Best Management Practices and Risk Reduction Measures

- *Reporting:*
 - Reporting the capture or collection, (including entanglement) of protected species as described below in the **Instructions for Reporting Interactions with Protected Species** section, or as otherwise required, is strongly recommended regardless of whether the interaction is authorized. This includes animals that are released alive without injury.
 - Reporting lost/missing fishing gear (i.e., lines, traps/pots-singles or trawls, gillnets) is also strongly recommended and may be required by fishery and/or protected species authorizations.
 - Such reports should be sent to nmfs.gar.incidental-take@noaa.gov.
- *Applicable Laws and Regulations:* Regardless of whether or how the survey/monitoring activities are authorized, they must comply with prohibitions in the ESA and MMPA against take. Survey/monitoring activities must also comply with applicable ESA, MMPA, and fishery management regulations. This includes, but is not limited to, Marine Mammal Authorization Program requirements, and Atlantic Large Whale Take Reduction Program, Harbor Porpoise Take Reduction Program, or Bottlenose Dolphin Take Reduction Program regulations.³
- *Minimize Risk During Survey Gear Deployment, Operations, and Retrieval:* Personnel should monitor for protected species in the area prior to and during deployment and retrieval of survey gear/equipment and avoid setting gear if protected species are observed within 500m of the vessel to minimize entanglement risk.

³ **Marine Mammal Authorization Program:** <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-authorization-program>

Atlantic Large Whale Take Reduction Program: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/atlantic-large-whale-take-reduction-plan>

Harbor Porpoise Take Reduction Program: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/harbor-porpoise-take-reduction-plan>

Bottlenose Dolphin Take Reduction Program: <https://www.fisheries.noaa.gov/national/marine-mammal-protection/bottlenose-dolphin-take-reduction-plan>

- *Vessel Strike Avoidance:* Vessel captain and crew should maintain a vigilant watch for all protected species and slow down, stop their vessel, or alter course, as appropriate and regardless of vessel size, to avoid striking any protected species. Vessel operators should check for information regarding [mandatory or voluntary ship strike avoidance \(SMAs, DMAs, Slow Zones\)](#) and daily information regarding North Atlantic right whale sighting locations. These media may include, but are not limited to: NOAA weather radio, U.S. Coast Guard NAVTEX and channel 16 broadcasts, Notices to Mariners, the Whale Alert app, and [NOAA North Atlantic Right Whale Sightings website](#).
- *Time of Year:* Minimize the overlap of the survey/monitoring activities and protected species. This includes considering the time of year and area where the activities will take place.
 - Information on species distribution can be found at: [ESA Section 7 Mapper](#); [OBIS-SEAMAP](#); [NOAA North Atlantic Right Whale Sightings](#), [Marine Cadastre](#); [Passive Acoustic Cetacean Map](#); [Northeast Ocean Data Portal](#); and [Mid-Atlantic Ocean Data Portal](#). For further information on species occurrence and distribution contact GARFO PRD (nmfs.gar.esa.section7@noaa.gov).
- *Minimize Soak (gillnet or trap/pot) or Tow (mobile bottom/mid-water gear) Duration:* Shorter soak and tow durations reduce the risk of an interaction occurring between fishing gear and protected species. This, in turn, reduces the potential for injury or mortality to protected species that are unintentionally caught in the gear. In general, we recommend reducing trawl tow times to 30 minutes or less, and gillnet sets to less than 24 hours, with tended nets strongly encouraged. Refer to the Atlantic Trawl Take Reduction Strategy⁴ for additional measures to reduce the risk of interactions between small cetaceans and trawl gear (bottom or mid-water).
- *Minimize the Amount of Fixed (gillnet or trap/pot) or Mobile Bottom/Mid-Water Tending Gear Set or Towed:* In general, the risk of an interaction with protected species increases with an increase in the amount of gear fished (e.g., trap/pot trawls or gillnet strings). We strongly recommend designing studies to minimize the amount of gear used, consistent with statistical needs.
- *Fixed Fishing Gear (i.e., pot/trap or sink gillnet):*
 - Reduce the number of vertical lines. We strongly recommend reducing the number of vertical lines in the water column by (1) using ropeless/on-demand gear; (2) trawling up (i.e. maximize the number of traps per trawl); and/or (3) using one single buoy line per trawl or string.

⁴ **Atlantic Trawl Take Reduction Team:** <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/atlantic-trawl-take-reduction-team>

- Eliminate wet storage of gear. All gear should be hauled at least once every 30 days (§ 229.32 Atlantic Large Whale Take Reduction Plan regulations) and be removed from the water between survey periods, as well as at the end of each survey season.
- Use distinct gear markings. All gear should have a three foot long yellow/black mark using paint in the top two fathoms of the vertical line and three additional one foot yellow/black marks in the top, middle, and bottom of each vertical line using paint or woven tracer. This gear marking scheme is distinct from gear markings used in other fisheries. Contact GARFO PRD (nmfs.gar.esa.section7@noaa.gov) for directions or any questions.
- Use weak lines. To reduce the risk of serious injury or mortality to North Atlantic right whales, use 1700-pound breaking strength buoy lines for all trap/pots and where feasible, gillnets. You can use either a whole buoy line with a breaking strength of 1700 lb or a buoy line with weak inserts that result in the line having an overall breaking strength of 1700 lb. The number and placement of weak inserts should be consistent, at a minimum, with the specifications provided by the Atlantic Large Whale Take Reduction Plan.⁵

Instructions for Reporting Interactions with Protected Species

Any interactions with protected species, including the capture and release of live animals, should be reported as soon as possible, and preferably within 24 hours. Specific requirements for reporting will be provided with any authorization needed for the survey activity. For survey activities that do not require a permit from NOAA Fisheries, any interactions/takes of protected species should be immediately reported to: nmfs.gar.incidental-take@noaa.gov.

⁵ Atlantic Large Whale Take Reduction Program: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/atlantic-large-whale-take-reduction-plan>