



Harbour Porpoise Bycatch Management Option 3: Dynamic time-area closures

Two types of dynamic time-area closures have been considered:

1. A temporary closure to high-risk gears that comes into force once a bycatch level is exceeded; and
2. A temporary closure based on harbour porpoise presence, also known as a move-on procedure.
 - These closures would come into force if harbour porpoise were encountered, with fishers “moving on” when harbour porpoise are present. This could involve moving to an alternative location or a minimum distance from where the porpoise were encountered.

Dynamic time-area closures could be considered for managing porpoise bycatch within the Stage 4 porpoise MPAs and/or wider MMO waters. The advantages, disadvantages and considerations listed below will vary depending on the scale at which the option is implemented. For further detail on spatial scales please see the handout on spatial scales for harbour porpoise bycatch management.

Advantages	Disadvantages
<ul style="list-style-type: none">• Allows some fishing activity to occur, reducing socio-economic impacts.• Takes into account high spatial and temporal variability in fishing activity and porpoise presence.• Dynamic closure based on reaching a bycatch level may be seen as a more proportionate approach.	<ul style="list-style-type: none">• Requires a method to define a bycatch level that does not impact the favourable conservation status of the population, which would be highly challenging.• Dynamic closures based on porpoise presence would be highly challenging for static gears that are left to soak and harbour porpoise which are difficult to visually detect.



Other considerations:

- Dynamic closures (based on bycatch risk) require a method to define acceptable level of bycatch risk.
- Dynamic closures (based on bycatch risk) would require very strong and timely bycatch reporting and/or monitoring.
- Dynamic closures based on harbour porpoise presence would be challenging given the difficulties of detecting this small elusive species.
- Dynamic closures based on a bycatch threshold were not effective in the northeast [USA Harbour Porpoise Take Reduction Plan](#)¹.

Summary

Dynamic closures have some advantages, such as accounting for spatial and temporal variability in porpoise distribution and fishing activity. However, they present difficulties, at both a wider seas and an MPA scale. Dynamic closures based on reaching a bycatch level require defining a mortality threshold, which involves many uncertainties, and closures based on porpoise presence may be challenging due to the difficulties in detecting this elusive species. Both types of dynamic closure would require a fast-paced understanding of current bycatch levels or harbour porpoise presence, which would be highly challenging.

Questions to discuss:

- What methods could be used to determine a threshold for acceptable level of bycatch risks (above which effort limitation or dynamic closure would apply)?
- What are the main benefits of this option at either spatial scale?
- What are the main challenges of this option at either spatial scale?
- What are the socio-economic impacts of this option at either spatial scale?
- What are the environmental impacts of this option at either spatial scale?
- What are the practical implications of the option at either spatial scale?
- How feasible is this option to implement at either spatial scale?

¹ USA Harbour Porpoise Take Reduction Plan: www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/harbor-porpoise-take-reduction-plan (last accessed 08 April 2025)