From:	Brown, Emma
To:	Hornsea Project Three
Subject:	EN010080 Hornsea Project 3: Deadline 7 Submission from Natural England
Date:	15 March 2019 00:02:45
Attachments:	EN010080 Hornsea Project Three Deadline 7 - Natural England - ANNEX C - Cable Protection Advice Note.pdf EN010080 Hornsea Project Three Deadline 7 - Natural England - ANNEX D - Note on Small Scale Impact.pdf EN010080 Hornsea Project Three Deadline 7 - Natural England - ANNEX E - Ornithology Response.pdf EN010080 Hornsea Project Three Deadline 7 - Summary of Natural England"s Advice on Cromer Shoal MCZ.pdf EN010080 Hornsea Project Three Deadline 7 - Summary of Natural England"s Advice on Markham"s Triangle pMCZ.pdf EN010080 Hornsea Project Three Deadline 7 - Summary of Natural England"s Advice on North Norfolk Sandbanks and Saturen Reef SAC.pdf EN010080 Hornsea Project Three Deadline 7 Natural England"s comments on the RIES .pdf JNCC Report_598_Revised-2018_WEB - Monitoring guidance for marine benthic habitats.pdf Natural England and JNCC joint Technical Guidance Note - Marine Buffers and Margins - Final.pdf NECR164 Non-breeding season populations of seabirds in UK waters.pdf SNCB response to MSS avoidance rate report_FINAL_251114.pdf EN010080 Hornsea Project Three Deadline 7 - Natural England - ANNEX A - Further Advice on PTA REP5 - 010.pdf EN010080 Hornsea Project Three Deadline 7 - Natural England - ANNEX B - Sabellaria Spinulosa Advice Note.pdf EN010080 Hornsea Project Three Deadline 7 - Natural England - Rule 17 Response.pdf Natural England and JNCC joint Technical Guidance Note - Marine Buffers and Margins - Final.pdf

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Good Evening,

Please find attached Natural England's Deadline 7 Response.

This includes:

- Comments on the RIES
- Rule 17 Response
- ANNEX A: Further Advice on PTA REP 5 – 010
- ANNEX B: Sabellaria Spinulosa Advice Note
- ANNEX C: Cable Protection Advice Note
- ANNEX D: Note on Small Scale Impact
- ANNEX E: Ornithology Response
- Summary of Natural England's Advice on Cromer Shoal MCZ
- Summary of Natural England's Advice on Markham's Triangle pMCZ
- Summary of Natural England's Advice on The Wash and North Norfolk Coast SAC
- Summary of Natural England's Advice on North Norfolk Sandbanks SAC
- Natural England & JNCC joint Technical Guidance Note – Marine Buffers and Margins
- SNCB response to MSS Avoidance Rate Report
- NERC164
- JNCC Report 598

Please note that Natural England has reviewed the MMO's draft Response to the ExA dDCO/DML and are in agreement with their comments. Therefore we will not be providing a separate response on this occasion.

Kind regards,

Emma

Natural England and JNCC joint Technical Guidance Note.
Providing management advice on MPA features – guidance on using feature data for the purposes of fisheries management including the use of buffers and margins

4th November 2016

1. Purpose of this guidance

This guidance is primarily designed to provide support and clarity for fisheries casework advice. It will be reflected in new Conservation Advice packages ensuring consistency in advice provision; it is also designed to support regulators (Defra, the Marine Management Organisation and the Inshore Fisheries and Conservation Authorities). It seeks to underpin advice on how best to manage features where there is habitat heterogeneity or, conversely, uncertainty in the extent of feature distribution.

This paper outlines the sequential process of how these issues have been addressed:

- Firstly, briefly describing how feature presence and extent data are gathered and used;
- Secondly, describing how issues such as habitat heterogeneity or spatial and temporal uncertainty of features can be addressed by Statutory Nature Conservation Bodies (SNCBs) to better inform fisheries management. *In some instances* the mapped areas proposed for feature protection may be augmented with a **margin**, to reduce the risk of not achieving the conservation objectives due to uncertainty in feature extent. Margins are added by SNCBs as part of their conservation advice.
- Thirdly, providing an explanation of how **buffers** are determined and could be applied by regulators to existing feature presence and extent information to reduce the risk of damage to qualifying features from fishing gears.

2. The process for using data to underpin feature presence and extent; application of margins and buffers

2.1. Step 1: Protected features and the evidence which underpins them

Evidence is typically generated through a range of techniques, including collection of acoustic data, and ground truthing methods such as seabed video/photo imagery, grabs, cores, trawls and dredge surveys. These techniques vary in their potential for accurately defining spatial coverage and resolution; in addition the feature extent is often defined using multiple layers of data. For example feature data may comprise point data which indicates the presence of a feature but not its extent, or derived from predictive habitat maps / modelled habitat maps derived from a mix of from acoustic survey data and ground truth data.

Data underpinning each protected feature of an MPA has been provided directly to regulators for offshore sites; for inshore sites these are available online via MAGIC[1]. These data show the **best available evidence** for the presence and extent of the following:

- Protected features for designated Annex I habitats in marine Special Areas of Conservation;
- Supporting habitats for bird species protected in marine Special Protection Areas;
- Protected features and supporting habitats for designated RAMSAR features;
- Protected features in Marine Conservation Zones.

Due to the spatial scale and resolution of data underpinning protected features, defining feature extent for the purposes of advising on fisheries management may present a challenge. Section 2 provides some examples and describes how these issues may be addressed by SNCBs.

2.2. Step 2: Using feature data for fisheries management purposes: accounting for feature heterogeneity/mosaics, and spatial/temporal uncertainty

There are a number of factors for SNCBs to consider when using feature data for fisheries management purposes, depending on its spatial and temporal scale.

(i) Accounting for feature heterogeneity/mosaics

Considering the tendency for patchiness in sedimentary feature distribution across large tracts of the UK continental shelf (i.e. mix of muds-sands-gravels), it is possible to have high confidence in the presence and extent of a feature within a site but such heterogeneity can present challenges when attempting to define areas for feature-specific management. To overcome this problem, it is recommended that the area to be managed is defined from the perspective of managing the risk to achieving the site's conservation objectives. For example, where a regulator is minded to remove such risk, the management boundary would be drawn to include the entire habitat mosaic in instances where the protected feature occurs as part of that mosaic. Where risk is being reduced, but not removed entirely, the management boundary could be drawn to capture a proportion of the mosaic.

(ii) Accounting for spatial/temporal uncertainty

In some instances, the precise location of a feature may be uncertain. Examples of such cases and how this might be dealt with include:

- The use of point and modelled polygon data – in some sites evidence for feature presence and extent is based on point record data (e.g. seabed imagery/grab sampling) or modelled polygon data (e.g. sandbank delineation). Due to the nature of point based sampling, it typically yields high resolution but low spatial coverage datasets. In such cases it can prove difficult to extrapolate the extent of feature distribution with high confidence. When using modelled polygon data, the

[1] http://magic.defra.gov.uk/home.htm The MAGIC website provides geographic information about the natural environment from across government.

topographic methodologies used may give rise to some uncertainty in delineation of the features. Therefore, in both of these cases, the application of a margin may be appropriate to reduce the risk of impact on unmapped (and unknown) feature within the Marine Protected Area.

- Dynamic habitats - habitats that move with relative regularity may benefit from an appropriate margin that is determined through an understanding of the structure and function of the *specific* habitat. Features move at different rates, so this will be set according to site specific characteristics. As an example, at Margate and Long Sands SCI Natural England has recommended that the initial conservation advice provided should incorporate a realistic ten year window of mobility. This advice and addition of a margin is based on historic and contemporary empirical data on feature mobility and will ensure sufficient protection of the feature for the foreseeable future.
- Ephemeral habitats – the optimum approach to map ephemeral features has been to use several data sets gathered over a reasonable time series. This helps inform delineation of a core area which protects the most regular and persistent occurrences of the feature. An alternative approach, where time series data is unavailable, is to use available point data (effectively spanning a single point in time) and, where appropriate, apply a margin to that.
- Historical extent and recovery potential – Where there is evidence from historical data that the extent of a feature (e.g. cold water coral reef) has declined, this can be used to identify and highlight areas that are most likely to respond to management. Recognising that these areas typically lack evidence of existing feature presence, the advice is to include them within areas to be considered for management of the feature. This approach is consistent with that taken for management of Sabellaria reef in the Southern North Sea and Lophelia reef in the Celtic Sea.

Where it is deemed appropriate to apply margins, regulators should consider **the margin as if it were part of the feature**.

Margins may not always be appropriate for particular features in MPAs and decisions on the application of margins should be made on a site-by site basis.

2.3. Step 3: Application of buffers; preventing damaging direct and indirect interactions with activities

In the context of feature management, a buffer is defined as a spatial extension applied to known feature extent (including any potential margin) that safeguards the feature from accidental damage by an activity. Such buffers are designed by the appropriate regulator (e.g. IFCA, MMO, and Defra).

A buffer can be used to prevent <u>direct</u> damaging physical interactions (including unintentional damage) between a fishing activity and the interest feature e.g, trawler fishing outside the site, but the bottom towed gear has sufficient warp length to stray inside the site. In addition, the regulator may also wish to consider the use of buffers to prevent <u>indirect</u> damaging effects of an activity, for example the resettlement of sediments (which could

potentially adversely impact a reef feature) put into suspension by trawling. Regulators may seek advice from the relevant SNCB on the potential risk of such indirect effects prior to setting of a buffer.

The application of a buffer may result in the feature receiving spatial protection outside of the marine protected area. In applying a buffer, the regulator must consider what constitutes adequate management for the site and what will best minimise the risk of not achieving the conservation objectives.

3. Summary

This guidance describes the sequential process of how protected features are underpinned by data and the process for attributing margins and buffers to specific sites and features.

As stated in the paragraphs above, it is not always necessary to implement margins and buffers, especially where there is little or no uncertainty in feature presence or extent and fishing practices pose no threat of direct or indirect interactions.

We have produced the following figure (figure 1) to summarise the elements described above. It highlights the additional feature protection which may be afforded to specific features if required on a site by site basis in order to ensure adequate spatial protection.

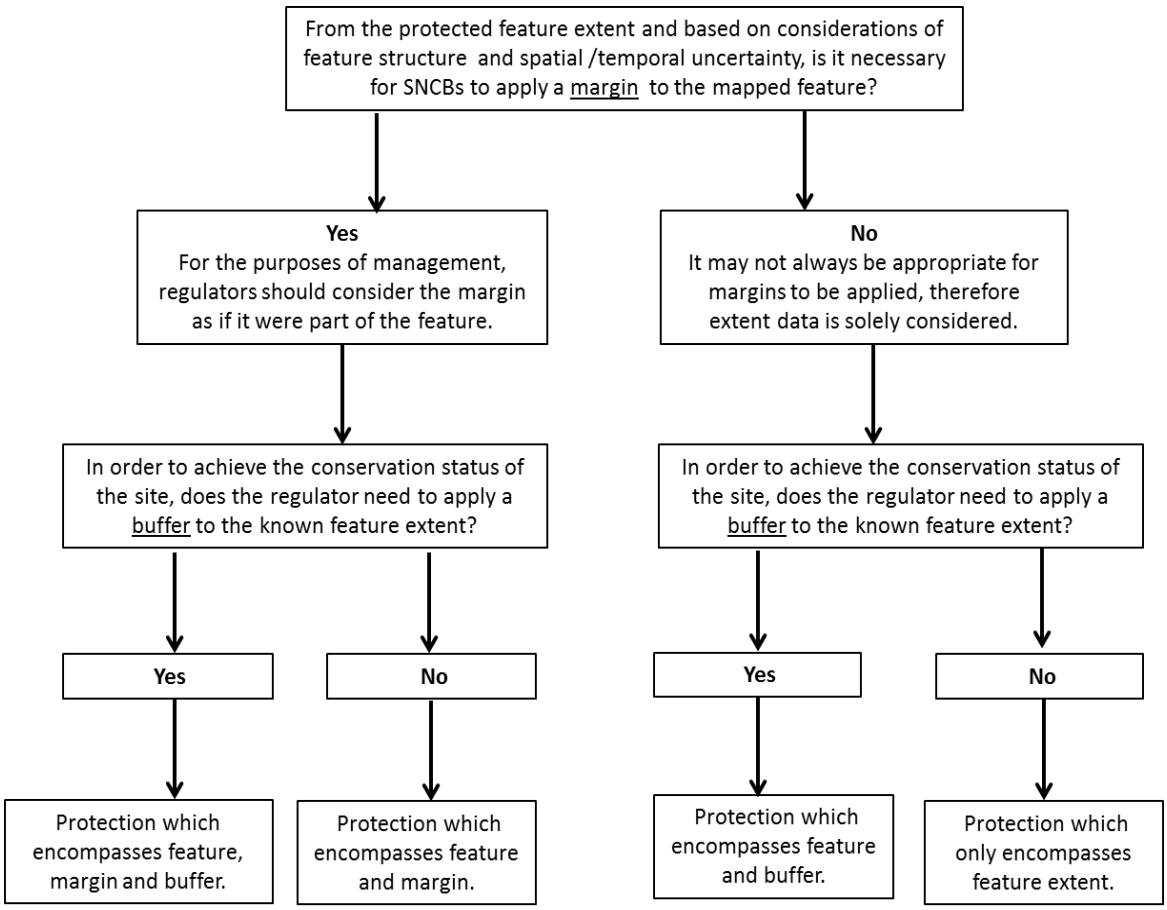

Figure 1: The components of feature, margin and buffer than when combined determine the area of spatial protection required for habitats and species of conservation importance.