Supplementary Advice on Conservation Objectives for Hatton-Rockall Basin NCMPA UKNCMPA024

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The information provided in this document sets out JNCC's supplementary advice on the conservation objectives set for Hatton-Rockall Basin Nature Conservation MPA (NCMPA), hereafter referred to as 'the site'. This document forms part of JNCC's formal conservation advice package for the site and must be read in conjunction with all parts of the package as listed below:

- **Background Document** explaining where to find the advice package, JNCC's role in the provision of conservation advice, how the advice has been prepared, when to refer to it and how it can be applied;
- **Conservation Objectives and Management Advice** document setting out the broad ecological aims for the site and JNCC's advice on;
    - protected feature condition;
    - conservation benefits that the site can provide if managed effectively; and
    - conservation measures that JNCC consider are required to support achievement of the conservation objectives stated for the site.
- **Advice on Operations** providing information on those human activities that, if taking place within or near the site, can impact it and hinder the achievement of the conservation objectives stated for the site.

The most up-to-date conservation advice package for the site can be downloaded from the conservation advice section of the Site Information Centre (SIC) on JNCC's website.

The advice presented here describes the ecological characteristics or 'attributes' of the site's protected features as specified in the site's conservation objectives listed in the site's 2014 Designation Order:

- deep sea sponge aggregations,
- offshore deep-sea muds,
- marine geomorphology of the Scottish deep ocean seabed – sediment drifts, and
- polygonal fault systems.

These attributes include extent and distribution, structure and function and supporting processes.

Based on the best available evidence, JNCC do not consider that the activities taking place, or that could conceivably take place, are capable of affecting the marine geomorphology of the Scottish deep ocean seabed- sediment drifts and polygonal fault system. Moreover,

achievement of the conservation objectives for the offshore deep-sea mud protected within the site is expected to conserve the geomorphological features. Therefore, geomorphological features are not considered further within the scope of this advice.

Figure 1 below illustrates the concept of how a protected feature's attributes are interlinked: with impacts on one potentially having knock-on effects on another e.g. the impairment of any of the supporting processes on which a feature relies can result in changes to its extent and distribution and structure and function.

Collectively, the attributes set out in Table 1 and 2 below, along with the objectives set for each of them, describe the desired ecological condition (favourable) for the site's protected features. All attributes listed in Table 1 and 2 must be taken into consideration when assessing impacts from an activity.

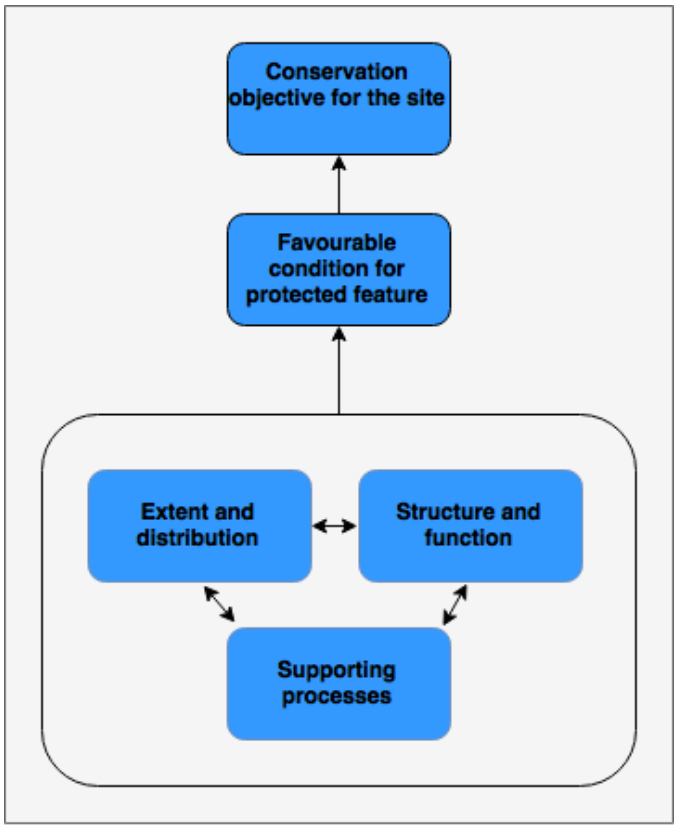

Figure 1. Conceptual diagram showing how feature attributes are interlinked and collectively describe favourable condition and contribute to the conservation objectives stated for the site.

In Table 1 and 2 below the attributes for the deep-sea sponge aggregations and offshore deep-sea muds protected features are listed, respectively. An objective of recover or conserve is set for each protected feature attribute, reflecting our current understanding of

available evidence e.g. whether it indicates some of a protected feature's extent is lost and needs to be recovered or that extent is not lost and needs to be conserved to ensure the protected feature is in overall favourable condition. Where a recover objective is advised and there is considerable uncertainty as to whether recovery is possible, this will be noted alongside the objective.

The rationale for setting an objective is provided in the summary of evidence column and supporting references listed in the reference section at the end of this document.

Note: also that when a conserve objective is set, this does not preclude the need for management, now or in the future to ensure a protected feature remains in favourable condition.

Table 1: Supplementary Advice on Conservation Objectives for deep-sea sponge aggregations protected feature of the site

In summary, the deep-sea sponge aggregations protected feature of the site is considered to be in favourable condition and should be conserved. This conclusion is primarily based on the fact that the main pressures of concern associated with fishing activity within the site are effectively managed through the North East Atlantic Fisheries Commission (NEAFC) Vulnerable Marine Ecosystem (VME) closure, which came into force in 2018 (NEAFC Recommendation 19: 2014). Please see the Conservation Objectives and Management Advice document available in the conservation advice section of the Site Information Centre for JNCC's advice on the management of activities within the site. Further information on activities capable of affecting the protected features of the site can be found in the Advice on Operations workbook available also in the conservation advice section of the Site Information Centre.

Attribute	Summary of evidence	View of attribute condition & objective	Confidence in attribute condition
Extent and distribution	The extent and distribution of deep-sea sponge aggregations are characterised by the presence of structural sponges that occur above a specified density threshold (OSPAR, 2010; Henry and Roberts, 2014). Evidence suggests that the sponges comprising deep-sea sponge aggregation habitat have limited potential to recover from removal, dislodgement, crushing or repeated exposure to significant sediment loading (ICES, 2009). Any recovery of extent will be influenced by the method of reproduction, dispersal potential, the relative location of a potential source population of reproductive adult sponges and the presence of suitable supporting habitat. Generally, there is little information on the reproduction, recruitment, growth rates and longevity of deep-water sponges (Hogg et al., 2010; Maldonado et al., 2016). Therefore, any possible changes to the health and resilience of the feature across the full known distribution of deep-sea sponge aggregations in the site brought about by human	Favourable – needs to be conserved	Moderate – JNCC has a moderate understanding of the extent and distribution of deep-sea sponge aggregations within the site based on data from Marine Scotland Science survey 0915S, 2015 (British Geological Survey, 2015; not publicly available as of November 2025). Evidence for lack of impact since the 2015 survey is mainly indirect, based on our understanding of the sensitivity of deep sea sponge aggregations to pressures associated with human activities and their indirect impacts (Tyler-Walters et al., 2023; FeAST, 2023 and JNCC, 2022). The information that JNCC holds on activities within the site indicates that

	activities may impact the conservation status of the protected feature. Multiple qualifying aggregations have been identified across the site, with survey evidence demonstrating the healthy extent and distribution of deep-sea sponge aggregations (Marine Scotland Science, 2015). The only activities known to have taken place within, or in close proximity to, the site are one out-of-use decommissioned telecommunications cable, which intersects the MPA but is not known to impact the extent of the feature, and one wreck, which is not positioned close to any known feature aggregations. Additionally, the regulations which prohibit bottom fishing across the VMEs in the site, which came into force in 2018, removes key fishing pressures of concern (abrasion, penetration and removal of non-target species) across deep-sea sponge aggregations in the site (NEAFC Recommendation 19: 2014). Therefore, JNCC advises a conserve objective for this attribute.		the extent or distribution is unlikely to have changed since 2015.
Structure and function	Structure with respect to deep-sea sponge aggregations encompasses: • Sponge composition: namely the species, shape and size of the individual sponges that form the aggregation; • Sponge abundance within the deep sea sponge aggregation; • The presence of spicule mats, which have a strong influence on other species; and • Characteristic communities present.	Favourable – needs to be conserved	Moderate – JNCC has a moderate understanding of the structure and function of deep-sea sponge aggregations within the site based on data from Marine Scotland Science survey 0915S, 2015 (British Geological Survey, 2015; not publicly available as of November 2025). Evidence for lack of impact since the 2015 survey is mainly indirect, based on our understanding of the sensitivity

	JNCC do not consider that there is enough evidence to assess the conservation status of the key species and characteristic communities of this protected feature within the site. However, based on the same evidence presented under extent and distribution, JNCC conclude that the structure and function of the deep-sea sponge aggregations is not likely to have been significantly impacted. Therefore, JNCC advises a conserve objective for this attribute.		of deep sea sponge aggregations to pressures associated with human activities and their indirect impacts (Tyler-Walters et al., 2023; FeAST, 2023 and JNCC, 2022). The information that JNCC holds on activities within the site indicates that the extent or distribution is unlikely to have changed since 2015.
Supporting processes	Supporting processes with respect to deep sea sponge aggregations include hydrodynamic regime and water and sediment quality. There is no evidence to suggest that human activities are having an adverse impact on the typical hydrodynamic regime to which the site is exposed. In addition, there is no evidence to suggest that water and sediment quality are being impeded with respect to supporting the presence of deep-sea sponge aggregations. Therefore, JNCC advises a conserve objective for this attribute.	Favourable – needs to be conserved	Moderate – The evidence-base supporting JNCC's assessment against this attribute draws upon limited data available from within, or in close proximity to, the site itself. The lack of data pertaining to water and sediment quality within the site limits our assessment. Moreover, there is a lack of time series data about water quality and on how human activities may have impacted this. However, this confidence level has been identified due to the extremely low level of human activity within, and in proximity to, the site.

Table 2: Supplementary Advice on Conservation Objectives for offshore deep-sea muds protected feature of the site

In summary, the offshore deep-sea muds protected feature is considered to be in favourable condition and should be conserved. This conclusion is primarily based on the fact that the main pressures of concern associated with fishing activity within the site are effectively managed through the NEAFC VME closure, which came into force in 2018 (NEAFC Recommendation 19: 2014). Please see the Conservation Objectives and Management Advice document available in the conservation advice section of the Site Information Centre for JNCC's advice on

the management of activities within the site. Further information on activities capable of affecting the protected features of the site can be found in the Advice on Operations workbook available also in the conservation advice section of the Site Information Centre.

Attribute	Summary of evidence	View of attribute condition & objective	Confidence in attribute condition
Extent and distribution	The extent and distribution of the offshore deep-sea muds protected feature is defined by sediment composition and biological assemblages. Any changes to sediment composition and biological assemblages brought about by human activities may impact the conservation status of the protected feature of the site. Offshore deep-sea muds are present across the full extent of the site (Howell et al., 2014). The only activities known to have taken place within, or in close proximity to, the site are one out-of-use decommissioned telecommunications cable, which intersects the MPA but is not known to impact the extent of the feature; and one wreck, which is not likely to have significant impact on the extent or distribution of the offshore deep sea muds within the site. Additionally, the regulations which prohibit bottom fishing across the VMEs in the site and that came into force in 2018, removes key fishing pressures of concern (abrasion, penetration and removal of non-target species) across offshore deep-sea muds in the site (NEAFC Recommendation 19: 2014). Therefore, JNCC advises a conserve objective for this attribute.	Favourable – needs to be conserved	Low - JNCC has a basic understanding of the extent and distribution of offshore deep-sea muds within the site based on data from the 2006 SEA-JNCC MV Franklin survey. Evidence for lack of impact since the 2006 survey is mainly indirect, based on our understanding of the sensitivity of offshore deep-sea muds to pressures associated with human activities and their indirect impacts (Tyler-Walters et al., 2023 and JNCC, 2022). The information that JNCC holds on activities within the site indicates that the extent or distribution is unlikely to have changed since 2006.
Structure and function	Structure and function of the offshore deep sea muds feature pertains to the physical structure itself (finer scale topography and sediment composition) and its biological structure (the presence of key and influential species and characteristic communities).	Favourable – needs to be conserved	Low - JNCC has a basic understanding of the structure and function of offshore deep-sea muds within the site based on data from the 2006 SEA-JNCC MV Franklin survey.

	JNCC does not consider that there is sufficient evidence to assess the conservation status of the key and influential species associated with offshore deep-sea muds within the site. However, based on the same evidence presented under extent and distribution for this protected feature of the site, JNCC conclude that the structure and function of offshore deep-sea muds is not likely to have been significantly impacted. JNCC therefore advises a conserve objective for this attribute.		Evidence for lack of impact since the 2006 survey is mainly indirect, based on our understanding of the sensitivity of offshore deep-sea muds to pressures associated with human activities and their indirect impacts (Tyler-Walters et al., 2023 and JNCC, 2022). The information that JNCC holds on activities within the site indicates that the extent or distribution is unlikely to have changed since 2006.
Supporting processes	Supporting processes with respect to offshore deep-sea muds include hydrodynamic regime, water and sediment quality. There is no evidence to suggest that human activities are having an adverse impact on the typical hydrodynamic regime to which the site is exposed. Also, there is no evidence to suggest that the water and sediment quality are being impeded with respect to supporting the presence of offshore deep-sea muds. Therefore, JNCC advises a conserve objective for this attribute.	Favourable – needs to be conserved	Moderate – The evidence-base supporting JNCC's assessment against this attribute draws upon limited data available from within, or in close proximity to, the site itself. The lack of data pertaining to water and sediment quality within the site limits our assessment. Moreover, there is a lack of time series data about water quality and on how human activities may have impacted this. However, this confidence level has been identified due to the extremely low level of human activity within, and in proximity to, the site.

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