

Conservation Objectives and Management Advice for The Canyons Marine Conservation zone UKMCZ0027

May 2026



What the conservation advice package includes

The information provided in this document sets out:

- The conservation objectives for the protected features of the site;
- The conservation benefits which the site can provide if managed effectively;
- JNCC's current view of protected feature condition; and
- The conservation measures that JNCC consider are required to support achievement of the site's conservation objectives.

This document forms part of JNCC's formal conservation advice package for the site and must be read in conjunction with:

- **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;
- **Supplementary Advice on Conservation Objectives (SACO)** providing more detailed and site-specific information on the conservation objectives of the protected features of the site; and
- **Advice on Operations** providing information on those human activities that, if taking place within or near to the site, could impact it and hinder the achievement of the conservation objectives stated for the site.

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

Conservation objectives

This site has been designated to protect [deep-sea bed](#), [cold-water coral reefs](#), [coral gardens](#) and [sea-pen and burrowing megafauna communities](#). Cold-water coral reefs, coral gardens and sea-pen and burrowing megafauna communities are included on the [OSPAR list of Threatened and/or Declining Habitats & Species](#) across the North-east Atlantic.

The conservation objectives for The Canyons MPA are set out in the [Designation Order](#) (2013) and [Designation Order Amendment](#) (2019) and say that *the protected features*:

- *so far as already in favourable condition, remain in such condition; and*

- *so far as not already in favourable condition, be brought into such condition, and remain in such condition and*

With respect to deep-sea bed, cold-water coral reefs, coral gardens and sea-pen and burrowing megafauna communities within the site, this means that their:

- *extent is stable or increasing; and*
- *structures and functions, quality, and the composition of characteristic biological communities (which includes a reference to the diversity and abundance of species forming part of or inhabiting the habitats) are such as to ensure that it they remain in a condition which is healthy and not deteriorating.*

Any temporary deterioration in condition is to be disregarded if the habitats are sufficiently healthy and resilient to enable recovery. Any alteration of the features brought about entirely by natural processes is to be disregarded.

Conservation benefits

Maintaining or recovering the protected features of the site at or to favourable condition, will contribute to delivering:

- A network of MPAs around the UK, as outlined under the [UK Marine & Coastal Access Act \(2009\)](#);
- An ecologically coherent network of MPAs which are well managed under the Convention for the Protection of the Marine Environment of the North-east Atlantic [OSPAR Convention](#), specifically OSPAR Region III: Celtic Sea;
- Good Environmental Status under the [UK Marine Strategy](#); and
- Target 3 of [The Kunming-Montreal Global Biodiversity Framework](#), known as the 30by30 target is a global commitment to effectively conserve and manage by 2030 at least 30% of terrestrial and inland water areas, and of marine and coastal areas through an ecologically representative, well-connected and equitably governed systems of protected areas and other effective areas-based conservation measures.

Ecosystem services and natural capital

MPAs are typically designated for the conservation and/or recovery of specific habitats and/or species features. Through their effective management, features can function in such a way as to deliver wider benefits to the environment, society and the economy such as provisioning, cultural or regulation and maintenance services.

The universal Asset Service Matrix ([uASM](#)) is a tool that evidences the linkages between natural assets (habitats and species) and the ecosystem services they can potentially provide. Examples of the broad categories of ecosystem services that can potentially be provided by the protected features of the Canyons MCZ (deep-sea bed, cold-water coral reefs, coral gardens and sea-pen and burrowing megafauna communities) are listed below with the full list of ecosystem services with a high or medium delivery supply score provided in [Annex 1](#).

The ecosystem services which available evidence more reliably shows could be delivered by the protected features within The Canyons MCZ are:

- **Provisioning services** such as:
 - Wild animals (aquatic) for nutrition, materials or energy;

- Genetic material;
- Mineral substances used for nutrition, materials or energy.
- **Regulation and maintenance services**, including:
 - Reduction of nutrient loads and mediation of wastes or toxic substances of anthropogenic origin by living processes;
 - Regulation of baseline flows and extreme events;
 - Regulation of physical, chemical, biological conditions, including:
 - Lifecycle maintenance
 - Habitat and gene pool protection
 - Water conditions
- **Cultural services** such as:
 - Other biophysical characteristics of species or ecosystems that are appreciated in their own right by people

Managing activities to conserve the protected features at, or recover them to, favourable condition, will support provision of ecosystem services and help fulfil the policy and legal obligations listed above.

Protected Feature Condition

Table 1. JNCC's view on the condition of the protected features in the site. **Table 1** below sets out JNCC's view on the condition of the site's protected features. This view is based on JNCC's assessment of protected feature condition using best available information at the time of writing and which is summarised in the SACO available from the [conservation advice section of the Site Information Centre](#) on JNCC's website. The SACO sets out our understanding of the condition of a feature's attributes as listed in the conservation objective for the site; extent and distribution, structure and function and supporting processes.

In summary, a protected feature is in unfavourable condition either where evidence indicates one or more of its attributes need to be recovered. Conversely, a protected feature is in favourable condition where evidence indicates none of the attributes are being adversely affected.

Table 1. JNCC’s view on the condition of the protected features in the site.

Protected feature	View of condition and protected feature objective
Deep-sea bed	Unfavourable, recover to favourable condition
Cold-water coral reefs	Unfavourable, recover to favourable condition
Coral gardens	Unfavourable, recover to favourable condition
Sea-pen and burrowing megafauna communities	Unfavourable, recover to favourable condition

The conservation measures listed below set out JNCC’s advice regarding management which should be implemented to recover the protected features of the site to favourable condition.

Conservation measures

Based on JNCC’s understanding of the pressures associated with human activities taking place within, or in close proximity to the site and the sensitivity of the protected features to those pressures, we conclude that all of the protected features of the site need to be recovered to favourable condition.

JNCC advise the following conservation measures are adopted to support protected feature recovery to favourable condition and reduce the risk of the site not achieving its conservation objectives to the lowest possible level.

No new licensable activities capable of impacting (either directly or indirectly) the protected features of deep-sea bed, cold-water coral reefs, coral gardens and sea-pen and burrowing megafauna communities (this includes activities capable of impacting the protected feature's supporting habitat subtidal mud within the site), or hindering their recovery, **should be permitted**. More information about how activities can impact the protected features can be found in the Advice on Operations workbook and should be read in conjunction with information provided in the Supplementary Advice on Conservation Objectives.

Any new *activities* whether located within or outwith the site, must look to avoid, or, as far as is practicable to do so, **minimise the introduction of contaminants to ensure compliance with sedimentary and water Environmental Quality Standards** within the site.

There is a **significant risk of not achieving the conservation objectives** for the protected features of the site **if mobile bottom contact gears are not managed** within the site. JNCC recognise that the Marine Management Organisation (MMO) have brought into force a

byelaw to protect the protected features across the majority of the site. **Removing all mobile bottom contact gears from the remainder of the site would reduce the risk of not achieving the conservation objectives** to the lowest possible levels.

Under normal operating conditions, **pelagic fishing gears are not expected to interact with the protected features of the site** and therefore should not present a risk to the achievement of the conservation objectives. Therefore, no additional management of this gear type is advised.

The use of static bottom-contacting fishing gear is occurring within the site. It has the potential to impact the protected features of the site, but we are limited in our ability to assess the degree of impact. This is due to limitations around knowledge of the extent and intensity of the fishing activity itself, as well as the impact of this fishing type on the site's protected feature. JNCC recognise that the Marine Management Organisation (MMO) have brought into force a byelaw to protect the designated features across the majority of the site from the impacts of anchored nets and lines. To better understand the potential impacts of other static gears, e.g. gill netting, more scientific research and better fishing effort data is needed. In the meantime, JNCC advises that static gear fishing effort within the site is monitored and the effects of ongoing use on the conservation status of the protected features is kept under review. If monitoring shows evidence of detrimental effects at the scale of the conservation status of the protected features, additional management may need to be considered

The Advice on Operations for this site is accessible via the [conservation advice section of the Site Information Centre](#). It provides information on the sensitivity of the protected features of the site to pressures associated with activities that JNCC consider may conceivably take place within, or in close proximity to, the site. This should be used when undertaking an initial assessment of whether a proposed plan or project (or ongoing activity) may have an impact on the protected features of the site.

JNCC can provide additional assistance through our [discretionary advice service](#) with assessing the impact of proposed operations on the protected features. For queries regarding this service, please contact OIA@jncc.gov.uk.

References

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Annex 1 – uASM

The uASM (universal Asset Service Matrix) provides a qualitative rating system to assess the level of service provided by a habitat or species and can be used to indicate the wider benefits to the environment, society and the economy that marine protected areas (MPAs) provide. The uASM is a tool, and like all tools, the outputs are only as useful as the evidence and data that is input. Some linkages of ecosystem services and assets, while known in the wider literature, may not yet been included in the tool. There are also geographically specific sources of information that can provide MPA-specific context and evidence for ecosystem services. The tool does not take into consideration the condition of an asset, instead it estimates levels of service delivery assuming an asset is in broadly good condition. Therefore, the information should be used in conjunction with MPA-specific evidence to provide a rounded view and bespoke advice.

[Table 3](#) provides the asset ecosystem service linkages for habitats known to be present with the site, while [Table 2](#) provides a key to understand the linkages. The JNCC Level of Ecosystem Service (ES) Supply score is a qualitative rating system to assess the level of service provided by a specific asset. The generated score is unitless and provides a relative comparison only and so cannot be used to quantitatively compare different assets on their ability to provide an ecosystem service. Rather, it is a tool used to quickly identify key linkages between assets and ecosystem services for further investigation. Confidence scores help users to make quick and informed decisions about the available data. The score describes the level of confidence the author has in the asset-to-ecosystem service link. In [Table 3](#) below only the ecosystem services in which we have relatively higher confidence (i.e. medium to high supply level and medium to high confidence) are presented, at CICES level 3.

Table 2. Colour-coded key to be used with [Table 3](#), which shows the four combinations of high confidence with high ecosystem service delivery, and medium confidence with medium ecosystem service delivery.

Confidence	Ecosystem Service Delivery	
	High	Medium
High		
Medium		

Table 3. Bespoke ASM for habitats (EUNIS subfeatures) in The Canyons MCZ, exported on 24/03/26. Data extracted from the universal Asset Service Matrix (uASM) (Galparsoro *et al.*, 2014; Potts *et al.*, 2014; Tempera *et al.*, 2016; Teixeira *et al.*, 2019; Tillin *et al.*, 2019; Cordingley *et al.*, 2023). Only ecosystem services with medium to high supply and confidence levels are presented in the table. Boxes with no colour are present in the table when the score was low, negligible or data deficient for ecosystem service supply or confidence. EUNIS 2007 codes represent the habitats: Deep circalittoral sand (A5.27); Seapens and burrowing megafauna in circalittoral fine mud (A5.361); Deep circalittoral mud (A5.37); Deep-sea mixed substrata (A6.2); Deep-sea mud (A6.5).

CICES_v52 Ecosystem Service		A5.27	A5.361	A5.37	A6.2	A6.5	
1.x.x.x Provisioning (Biotic/Biophysical)							
s1.x.x.x Provisioning (Biotic/Biophysical)	1.1.x.x - Biomass						
	1.1.x.x - Biomass						
	1.2.x.x - Genetic material from all biota (including seed, spore or gamete production)						
	1.2.x.x - Genetic material from all biota	1.2.1.x - Genetic material from algae					

CICES_v52 Ecosystem Service			A5.27	A5.361	A5.37	A6.2	A6.5
	(including seed, spore or gamete production)						
2.x.x.x Regulation & Maintenance (Biotic/Biophysical)							
2.x.x.x Regulation & Maintenance (Biotic/Biophysical)	2.1.x.x - Transformation of biochemical or physical inputs to ecosystems						
	2.1.x.x - Transformation of biochemical or physical inputs to ecosystems	2.1.1.x - Reduction of nutrient loads and mediation of wastes or toxic substances of anthropogenic origin by living processes					
	2.2.x.x - Regulation of baseline flows and extreme events						
	2.3.x.x - Regulation of physical, chemical, biological conditions						
	2.3.x.x - Regulation of physical, chemical, biological conditions	2.3.2.x - Lifecycle maintenance, habitat and gene pool protection					
	2.3.x.x - Regulation of physical, chemical, biological conditions	2.3.5.x - Water conditions					
	2.4.x.x - Other types of regulation and maintenance service by living processes						
3.x.x.x Cultural (Biotic/Biophysical)	3.4.x.x - Spiritual, symbolic and other cultural interactions	3.4.2.x - Other biophysical characteristics of species or ecosystems that are appreciated in their own right by people					

CICES_v52 Ecosystem Service			A5.27	A5.361	A5.37	A6.2	A6.5
	with natural environment						
4.x.x.x Provisioning (Abiotic/Geophysical)	4.2.x.x - Non-aqueous natural abiotic ecosystem outputs						
4.x.x.x Provisioning (Abiotic/Geophysical)	4.2.x.x - Non-aqueous natural abiotic ecosystem outputs	4.2.1.x - Mineral substances used for nutrition, materials or energy					
5.x.x.x Regulation & Maintenance (Abiotic/Geophysical)	5.1.x.x - Transformation of biochemical or physical inputs to ecosystems						
5.x.x.x Regulation & Maintenance (Abiotic/Geophysical)	5.2.x.x - Regulation and maintenance of geophysical						
5.x.x.x Regulation & Maintenance (Abiotic/Geophysical)	5.2.x.x - Regulation and maintenance of geophysical	5.2.1.x - Regulation of baseline flows and extreme events					
6.x.x.x Cultural (Abiotic/Geophysical)							