



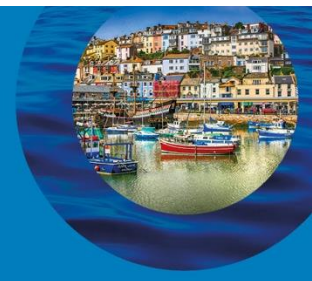
Marine
Management
Organisation

**Decision
document:**

The Canyons MCZ Call for Evidence

February 2021

...ambitious for our seas and coasts



1. Introduction

Between 28 October and 15 December 2020 the MMO ran a call for evidence to seek views on the draft assessments of the impacts of fishing and non-licensable activities in five marine protected areas (MPAs).

The four MPAs which are being assessed for the impact of fishing are:

- The Canyons Marine Conservation Zone (MCZ);
- Dogger Bank Special Area of Conservation (SAC);
- Inner Dowsing, Race Bank, North Ridge SAC;
- South Dorset MCZ.

Studland Bay MCZ is being assessed for the impact of marine non-licensable activities.

Further details on the call for evidence are provided [here](#).

This document presents a summary of the call for evidence responses received and the decision for the next steps for The Canyons MCZ.

2. The Canyons Marine Conservation Zone

The Canyons MCZ was formally designated on 21 November 2013¹ with two new features: coral gardens and sea-pen and burrowing megafauna communities being added on 31 May 2019². Following this amendment, the site has four designated features:

- Sea-pen and burrowing megafauna communities
- Coral gardens
- Cold-water coral reefs
- Deep-sea bed

The conservation objectives for The Canyons MCZ are set out in the designation order as:

The habitats, so far as:

- already in favourable condition, remain in such condition; and
- not already in favourable condition, be brought into such condition, and remain in such condition.

The Joint Nature Conservation Committee (JNCC) advises a general management approach of 'maintain in favourable condition' for the sea-pen and burrowing

¹ Ministerial order 2013 No. 4. Available online at: <https://www.legislation.gov.uk/ukmo/2013/4/created>

² Ministerial order 2019 No. 7. Available online at: <https://www.legislation.gov.uk/ukmo/2019/7/created>

megafauna communities feature, and 'recover to favourable condition' for the remaining features of The Canyons MCZ³.

3. Assessment of the effects of fishing activities in The Canyons MCZ

The draft MMO assessment of fishing impacts at this site, taking into account advice from JNCC and scientific literature, is that coral gardens, cold-water coral reefs and sea-pen and burrowing megafauna communities and deep-sea bed are sensitive to the impacts of demersal fishing activities including demersal trawls, demersal seines and anchored nets and lines. For these features, the conservation objectives are unlikely to be achieved due to their vulnerability to the demersal fishing activities occurring.

4. Call for evidence responses

4.1. Methodology for collecting responses

The call for evidence for The Canyons MCZ included a survey which presented multiple management options for fishing activities.

Questions sought evidence and views from stakeholders on management options for each activity and asked for information about the location, condition and sensitivity of designated features as well as the level or nature of fishing within the site.

Stakeholders also had the option to answer the questions to consider in the call for evidence letter via email. A number of responses were received in this way.

Please note, some stakeholders responded to the surveys and via email. In these cases, email responses have been considered alongside the survey responses.

4.2. The Canyons MCZ Survey Responses

During the call for evidence 20 responses were received relating specifically to The Canyons MCZ. These included responses from individuals, fishers, non-governmental organisations, industry groups and other government departments. Of these, responses 18 were in support of management being introduced, and two responses were neither in favour or opposed to the introduction of management.

The responses have been collated and summarised below:

4.2.1. Do you have information about the location, condition or sensitivity of the designated features?

Respondents stated that benthic research focused on similar geomorphological features and habitats have shown due to their unique geomorphology, submarine

³ The Canyons MCZ: factsheet. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/805607/mcz-the-canyons-2019.pdf

canyons are prone to a series of processes that may be less common along the rest of the continental margin, but that will have a direct influence on benthic communities and how they are impacted by fishing practices. The presence of submarine canyons causes enhanced bottom currents (e.g. as a result of internal waves) and enhanced sediment transport (e.g. through turbidity currents), influencing organic matter transport and ultimately effecting benthic fauna

4.2.2. Do you have information about the level or nature of fishing activity within the site?

Respondents outlined several different fishing activities occurring in the area including:

- We have evidence of potential bottom trawling impacts on an area of small cold-water coral mounds on the interfluvium south of Dangaard Canyon. This evidence consists of sidescan sonar data from 2015 which show a large number of linear scars in the seabed, interpreted as trawl scars; and video/photographic data that illustrate the status of the seabed and benthic communities in 2018.
- We have calculated that the organic carbon stored within shelf sediments of the site (from EMODNET modelled data: Eunis A5 sediment layer) that could be damaged by bottom towed fishing from the site is in the region of 1913 tonnes, leading to £85,114.21 loss of carbon storage potential from between 2016 to 2040 with continued fishing pressure (based on Luisetti et al, 2019).
- We found that the following metrics were observed for the site when analysing data from Global Fishing Watch on hours fished in the site, and examined by fishing activity in hours (2015-2018 combined) for different member states.
 - Area of MPA fished using bottom towed fishing: 100%
 - Total hours fished using demersal towed fishing gears: 1086.96.
 - France: 984.21 hours (91%)
 - Ireland: 57.04 hours (5)
 - Spain: 35.45 hours (3)
 - UK: 10.26 hours (1)

4.2.3. How would each of the proposed management options affect you?

The following section summarises the impacts respondents raised for each of the options. These are either impacts to themselves or wider impacts.

Option 1: No fisheries restrictions. Introduce a monitoring and control plan within the site.

This option was considered the preferred management option by one respondent. Other responses indicated this option would not be in keeping with the aims of the sites conservation objectives as it would lead to the destruction of the environment and would be counter to the Marine Act, Marine Strategy Regulations and other national and international laws.

Option 2: Reduce/limit pressures. Due to the potential impacts of bottom towed gear on the features of the site, management would be introduced to reduce the risk of

the conservation objectives not being achieved. This may be through a zoned management approach and/or limiting the activity/intensity of these activity types.

This option was preferred by three respondents, with others indicating this option would have a positive impact on other industries, with improved opportunities for fishing activities, as well as providing a chance to develop monitoring and scientific surveys.

However, some respondents also believed that this option was not sufficiently strong, as full protection of seabed habitats is required to enable blue carbon and biodiversity targets to be met and the option would also still be counter to the Marine Act, Marine Strategy Regulations and other national and international laws.

Option 3: Remove/avoid pressures (whole site prohibition). Demersal and semi-pelagic trawls, demersal seines and dredges will be prohibited in all areas of the site.

All respondents apart from one highlighted that this option would be beneficial to the site, providing reasons including:

- Increased biodiversity protection and opportunities for recovery since bottom trawling will have damaged many of the slow-growing deep seabed community species already.
- The natural carbon capture potential for the site will be enhanced.
- Necessary to conserve the integrity of the whole site as required by the Marine Act, Marine Strategy Regulations and other national and international laws.
- As there is very limited bottom towed fishing occurring within the site there will be little to no significant impact from a prohibition on such fishing activity. However, as the site is fished to a small degree, this may have a greater impact than if the site were regularly trawled or dredged. Therefore, a whole site prohibition is necessary to prevent the severe impact of infrequent use of bottom towed gear.

4.2.4. What other effects will each of the proposed management options have?

Option 1: No fisheries restrictions. Introduce a monitoring and control plan within the site.

Respondents stated that there will be no change in fishing activities and this would be insufficient to have any positive impact on the site.

Option 2: Reduce/limit pressures.

Some respondents stated that this option is insufficient for the site's protection and a zoned approach would not meet biodiversity targets. There was also a suggestion that placing strong limits on demersal gears could enable recovery of the site and meet conservation objectives.

One respondent noted that a reduction in the potential impacts of gears that directly impact the seabed could also cause an inadvertent reduction on known or presently unknown archaeological materials. It is possible that the reporting of impacts or accidental recovery of new archaeological discoveries could diminish.

One respondent stated this option will have minimal effect compared to the current baseline, and will not help meet the ambitions of its climate and biodiversity goals.

Option 3: Remove/avoid pressures (whole site prohibition). Demersal and semi-pelagic trawls, demersal seines and dredges will be prohibited in all areas of the site.

Respondents stated that option 3, as well as option 2, could lead to positive impacts for other fishing gear industries, although there could also be a displacement of fishing effort. There could also be an inadvertent reduction on known or presently unknown archaeological materials.

Some respondents thought this would be the most beneficial option for species within the site, although one respondent thought the option was overly prescriptive for the area.

One respondent cited evidence that this option will recover biodiversity and protect and enhance the carbon storage capacity for the site, avoiding over £100,000 of lost carbon storage potential over 25 years, and protect seabed species in deep waters that are evolutionarily maladapted to the impact of bottom towed fishing gears. Both biodiversity and carbon capture and storage will benefit. Also, as the site is large (>100km square), & isolated it meets at least 2 of the 5 criteria of effective MPAs in that the site is large and surrounded by deep water.

One respondent reported that there was multi-sectoral support for a 'whole site' management approach and that two scientific papers under review detail the benefits of protecting mosaics habitats, which provide benefits to benthic biodiversity and fish populations beyond discrete designated features. The papers' findings are from Southern England, principally around the Lyme Bay area, so it could be assumed that the positive biodiversity, biomass and density responses within The Canyons MCZ site would be replicated by similar strict and comprehensive management measures.

4.2.5. What proportion and/or which parts of the site should be subject to a prohibition of bottom towed gears?

Most respondents believed that 100 % of the site should be subject to a prohibition of bottom towed gears. Some respondents expanded on this, stating that bottom towed fishing is highly damaging to seabed habitats and benthic communities and is not compatible with the site's conservation objectives. Prohibiting these fishing gears across the entire site would protect the features from further damage and foster their recovery as soon as possible. This would also result in more benefits to the wider society such as an improvement in essential fish habitat, an increase in biodiversity, species richness and carbon capture and storage potential.

4.2.6. Any other comments not addressed within survey responses

- There could be other environmental effects from the use of certain types of gear. In particular the direct impact which could occur between mobile seabed impacting fishing gear and archaeological materials on and exposed through the seabed. It is appreciated that mutual avoidance is the preferred strategy, but the risk may still exist that presently unknown cultural heritage sites might be encountered.

5. MMO response to site specific consultation responses

MMO would like to thank everyone who responded to the call for evidence. We have reviewed all responses and have updated our assessment accordingly.

A summary of specific evidence and comments, and how these have been addressed is set out below:

- **One respondent provided Global Fishing Watch data to show the level of fishing activity in the site.** This data primarily uses automatic identification system (AIS) data, which can be turned off by vessels and is used by vessels larger than 15 m in length. In the MMO's assessment vessel monitoring system (VMS) data is used which provides high level confidence for the activity of vessels greater than 12m in length.
- **Some respondents were commented that the prohibition of fishing activity across The Canyons MCZ could lead to the displacement of these fishing activities increasing pressure on habitats outside of the site.** The draft assessment indicates that bottom towed gears are adversely affecting the designated features. As such the potential impact of displacement to areas outside of The Canyons MCZ does not remove the requirement to ensure that fishing is managed to further the conservation objectives of The Canyons MCZ
- **One respondent commented that a reduction in bottom towed fishing within the site would cause an inadvertent reduction on the discovery of known or presently unknown archaeological materials.** The draft assessment indicates that bottom towed gears are adversely affecting the designated features. As such the potential for an inadvertent reduction on archaeological materials does not remove the requirement to ensure that fishing is managed to further the conservation objectives of the MCZ.
- The following documents provided by respondents and were reviewed and additional evidence included in the draft assessment where appropriate:
 - Brewin, PE., Farrugia, T.J. Jenkins, C. and Brickle, P. (2020) Straddling the line: high potential impact on vulnerable marine ecosystems by bottom-set longline fishing in unregulated areas beyond national jurisdiction. ICES J Mar Sci. doi:10.1093/icesjms/fsaa106
 - Duran Muñoz, P. Murillo, F.J. Sayago-Gil, M. Serrano, A. Laporta, M. Otero, I. and Gomez, C. (2011). Effects of deep-sea bottom longlining on the Hatton Bank fish communities and benthic ecosystem, north-east Atlantic. J Mar Biol Assoc UK 91 (4):939-952. doi:10.1017/S0025315410001773
 - Puig, P., Canals, M., Company, J. (2012). Ploughing the deep sea floor. Nature, 489, 286–289 <https://doi.org/10.1038/nature11410>

6. General consultation responses and MMO responses

The MMO received consultation responses which apply to the general assessment process which do not relate to specific MPAs. These are summarised in the below section together with the MMO's response to the comments.

Respondent comment: It is not appropriate to discount fishing activities from the in-combination assessment where the assessment has concluded the activities will have an adverse effect on the site alone, and this is not the normal approach. This is due to the uncertainty around the management measures being put in place for fishing activities which are causing an adverse effect, the respondent has no confidence that management will be effective and therefore suggest these activities must also be included in the in-combination assessment.

MMO Response: The MMO MPA fisheries assessments aim to identify adverse effects on designated features from fishing pressures and suggest appropriate management measures to ensure the site's conservation objectives are met, in accordance with scientific advice provided by JNCC and NE, <https://jncc.gov.uk/our-work/marine-activities-and-pressures-evidence/#jncc-pressures-activities-database>.

The assessment is completed in several parts: Part A provides a coarse sensitivity assessment to identify which fishing activities can be discounted from further assessment (Part B) as they are not taking place or are not a significant concern. Part B provides an in-depth analysis to assess the pressures of fishing activities relevant for the site. Part C considers the effects of activities in-combination with other relevant activities taking place. These can include:

- Fishing activity/pressure combinations which were excluded in Part A due to not having a significant effect on features alone, but could have an in-combination affect.
- Fishing interactions assessed in Part B but not resulting in significant or adverse effect.
- Plans or projects such as marine development works requiring a marine licence.

Where activities have been identified in Part B to result in an adverse effect/significant risk alone, their consideration during Part C depends on the mitigation identified as a result of impacts identified in Part B.

Where an activity is identified in Part B as having an adverse effect/significant risk alone, and mitigation is introduced to reduce, but not entirely remove, this impacts, the residual impact will be considered in Part C to ensure all in-combination impacts are captured.

Where mitigation will be introduced to entirely remove a pathway for a pressure from the activity to affect the feature, this pressure from this activity will not be considered

in Part C. For example, where the identified mitigation is a prohibition of use of a certain fishing gear types within the site, most or all of the pressures from this activity would be removed from the site and it is not therefore considered during the in-combination assessment.

The MMO assessment methodology is provided in Annex 1 of each assessment for full context.

Respondent comment: Any spatial management measure to reduce fishing pressure must also consider the potential displacement effects, and the wider impacts this could have on the benthic communities and mobile species associated with them.

MMO Response – The MMO MPA assessments use the best available evidence to fully consider all impacts against the conservation objectives, as identified by scientific evidence. If the assessment concludes that use of certain fishing gear types are not compatible with the site’s conservation objectives, management measures may be put in place which could cause displacement of this fishing to other areas. This potential impact of displacement to areas outside of the MPAs or management areas does not remove the requirement to ensure that fishing is managed to further the conservation objectives of the site. However, the MMO will have regard to displacement and monitor every MPA by undertaking annual reports of fishing activities and pressures within MPAs, and by regularly reviewing and updating the MPA assessments to reflect any such changes that have been observed. See section 8 of the MMO MPA fisheries assessment for further details on the MMO process on reviewing assessments.

Respondent comment: The outcome of this call for evidence and any subsequent consultations will fall far short of providing the proper protection needed for the most ecologically important parts of our seas. The respondent highlighted that bottom trawling took place in 71 offshore MPAs in 2019 and advocate a ban on all destructive fishing gears starting with bottom trawlers and supertrawlers, across the entire MPA network. The respondent suggests these bans are introduced from 1 January 2021, by removing licenses for supertrawlers & bottom trawlers to fish in MPAs, via powers in the Fisheries Act 2020.

The respondent also stated that the process lacks ambition, both in the number of MPAs included and the management options proposed. It is also unnecessarily slow and cumbersome as a process for delivering the scale and extent of ambition required to protect our oceans.

MMO Response – The purpose of the call for evidence was to gather additional evidence and stakeholder views on the draft MMO assessments and management options for fishing in four offshore MPAs: Dogger Bank Special Area of Conservation (SAC), Inner Dowsing, Race Bank and North Ridge SAC, South Dorset Marine Conservation Zone (MCZ) and The Canyons MCZ. The MMO assessments contain detailed assessments of the impacts of fishing in these sites and set out a range of management options. The outcomes of updated MMO assessments, taking into

account evidence received and advice from Natural England and JNCC, have been used to develop ambitious and proportionate draft management measures which are now subject to public consultation.

Respondent comment: The fisheries assessments would benefit from a glossary of terms and consistent use of them throughout the documentation, and that an overarching assessment methodological conceptualisation would help communicate how the assessments are undertaken.

More explicit reference to SNCB advice within Part B would provide greater transparency on how the assessment is drawing its conclusions. The management objectives for mobile species was also identified as lacking clarity and purpose.

The respondent provided advice on the spatial footprint analysis (Pr-values) methodology and suggested applying a rule of using vessel speeds of 1-6 knots, rather than 0-6 knots currently used.

MMO response – The MMO MPA assessments aim to use clear accessible language and provide explanation where required for use of non-standard terminology. We recognise it would be valuable to provide some supporting information to aid interpretation of the assessments for wider audiences and so will seek to develop such a glossary for future assessments. Annex 1 of each of the MMO MPA assessments fully details the methodology and aims of the assessment and well as referencing the need for assessment in a manner consistent with section 126 of the Marine and Coastal Access Act. Evidence sources and SNCB advice packages are referenced in our assessments where appropriate.

Mobile species are not a designated feature of any of the sites assessed within this call for evidence. Natural England and JNCC conservation advice packages may include species (including mobile species) as a component part of a feature, and impacts on certain species may influence a target attribute for a site feature (feature target attributes are set out in Natural England or JNCC conservation advice packages). Where fishing impacts (for example the removal of target and non-target species) has the potential to impact a sites' conservation objectives we have used the best available evidence to assess this, in accordance with the pressures activities database published by JNCC and NE (<https://jncc.gov.uk/our-work/marine-activities-and-pressures-evidence/#jncc-pressures-activities-database>).

The Pr-values presented incorporate gear specific fishing speeds which are used to identify relevant vessel pings to be included within the values presented. Annex 2 in each of the MMO MPA assessments provides information regarding the speeds that have been included for each of the fishing gears included. It is acknowledged in the description, strengths and limitations of fishing activity data provided in the assessments, that this may overestimate, or in some cases, underestimate the true level of fishing activity.

7. Next steps

Having analysed all evidence and stakeholder views received during the call for evidence, and updated the MMO assessment of the impacts of fishing in The Canyons, MMO has concluded that in order to further the conservation objectives of the site, the use of bottom towed fishing gear and anchored nets and lines should be prohibited within a specified area of the site (option 2).

The MMO is therefore launching formal consultation on 1 February 2021 for eight weeks on a draft byelaw which prohibits the use of bottom towed fishing gear and anchored nets and lines will be prohibited within a specified area of the site. This will be accompanied by a regulatory triage assessment which examines the monetised and non-monetised costs and benefits of the draft byelaw and an updated fisheries assessment of The Canyons.