

Oceana's response to Defra's Highly Protected Marine Area consultation

Oct 2019

Introduction

Oceana seeks to make our oceans more biodiverse and abundant by winning policy victories in the countries that govern much of the world's marine life. Founded in 2001, we are the largest international advocacy organisation focused solely on ocean conservation. Since its founding, Oceana has won nearly 200 victories resulting in protection of more than 3.5 million square miles of ocean. <https://eu.oceana.org/en/home>

Oceana welcomes Defra's establishment of a Review into Highly Protected Marine Areas and this consultation.

Consultation questions

8. The UK already has a network of MPAs that includes Marine Conservation Zones (MCZs). How could HPMA's complement and enhance the current designations in English inshore and offshore waters and Northern Irish offshore waters?

Oceana supports the recommendation by scientists and by our own UK Government for 30 by 30 – that is 30% of worldwide seas to be effectively protected in MPAs by 2030. IUCN members¹ recommend that this 30% should be in Highly Protected Marine Areas. Oceana support this call by 2030, with shorter term targets of 10% HPMA's by 2020 in UK waters and 20% by 2025 i.e.:

2020 10% HPMA's (fully & highly protected) under the IUCN MPA guide definition.

2025 20% HPMA's

2030 30% HPMA's

In order to achieve this there will likely need to be a significant overlap of these HPMA's with existing MPAs, both MCZs under the Marine Act and SACs under the Habitats Regulations. HPMA's will enhance the current designations by actually providing the protection that MPAs require in order to deliver ecosystem and biodiversity recovery that is needed to deliver the ecological benefits and also the UK's policy and legal commitments – see evidence provided in answer to Q. 9 & Q. 11.

9. Do you have any experience or examples relevant to the UK where you believe HPMA's or similar have been effective or ineffective? Please provide any relevant evidence.

There are numerous studies and evidence that Highly Protected Marine Areas (HPMA's) are the most effective way of protecting the oceans (Lester and Halpern 2008, Edgar et al. 2014, Appolloni et al. 2017). A recent 2017 study² undertook a new meta-analysis of previous studies and showed that the biomass of whole fish assemblages in marine reserves (i.e., HPMA's) is, on average, 670% greater than in adjacent unprotected areas, and 343% greater than in partially-protected MPAs. It also confirms that marine reserves help restore the complexity of ecosystems through a chain of ecological effects (trophic cascades) once the abundance of large animals recovers sufficiently. The paper also touched on the benefits of HPMA's for climate change resilience.

The UK Government also has plenty of experience and examples of HPMA's/Marine Reserves from its ten years experience of establishing fully protected marine reserves around the UK Overseas

¹ MPA News; <https://mpanews.openchannels.org/news/mpa-news/iucn-members-approve-30-2030-goal-mpas-%E2%80%94-most-ambitious-target-so-far-mpa-coverage>

² Sala, E., and Giakoumi, S. 2017. No-take marine reserves are the most effective protected areas in the ocean. – ICES Journal of Marine Science, 75: 1166–1168.

Territories. The UK Government worked closely with the UKOT Administrations in support of site selection, designation, undertaking surveys and providing funds towards implementation and monitoring. These sites include marine reserves around Chagos, Ascension, Pitcairns and South Georgia. A range of bodies from ZSL to Cefas have been involved in monitoring the benefits of these sites and this data will be available to the UK Government. It is very much time that the ambition shown in the UK Overseas Territories is learnt from and replicated in UK national waters.

New Zealand has now established 44 Marine Reserves under the Marine Reserves Act, 1971. These marine reserves are free from impacts and provide useful evidence of the benefits of HPMAs³.

The Global Ocean Refuge System awards MPAs that effectively safeguard marine biodiversity regulating activities that negatively impact the biodiversity values of the site. GLORES prioritizes fully protected no-take MPAs (Lubchenco and Grorud-Colvert 2015), as these MPAs result in the best biological and ecological outcomes⁴.

10. Do you see any challenges to the introduction of HPMAs? If so, how could these challenges be addressed? Please provide any relevant evidence.

Yes. The UK has consistently failed to effectively manage its MPA network due to the Government's ongoing obedience to the fishing and other maritime industries. The processes that are established to designate and manage MPAs always work in industries favour and thwart conservation efforts. Only when Government is prepared to challenge industries ubiquitous exploitation of our marine ecosystems will we see the protection needed to deliver the full range of positive benefits HPMAs can deliver. Examples of this issue go back many decades and are detailed in the answer to Q15a.

11. What is your opinion of the evidence for HPMAs? Where is more evidence required?

Oceana considers there to be substantial evidence of i) the climate and ecological crisis ii) the unfavourable status of UK marine habitats and species iii) the benefits of HPMAs as well as iv) International consensus of scientists on the urgent need for HPMAs.

With such evidence already in place and consensus amongst international marine scientists that 30% HPMAs are needed as a minimum, the UK must not postpone designating their own network and wait for more evidence. With the present climate and ecological crisis we have not got time for trials and adaptive management, but must act on the existing scientific evidence available.

i) Climate and ecological crisis:

The climate and ecological crisis are clearly evidenced in this years comprehensive scientific assessments – the [IPCC's Special Report on the Ocean and the Cryosphere](#)⁵ and the [IPBES Global Assessment Report on Biodiversity and Ecosystem Services](#)⁶

ii) Unfavourable status of UK marine habitats and species:

The UK Government has just published Marine Strategy: UK updated assessment on Good Environmental Status October 2019⁷ which determined that the UK is failing to meet its legally binding commitment of achieving Good Environmental Status by 2020 for benthic habitats as well as fish and birds.

³ <https://www.doc.govt.nz/nature/habitats/marine/type-1-marine-protected-areas-marine-reserves/>

⁴ <https://globaloceanrefuge.org/>

⁵ [IPCC's Special Report on the Ocean and the Cryosphere](#)

⁶ [IPBES Global Assessment Report on Biodiversity and Ecosystem Services](#)

⁷ <https://www.gov.uk/government/publications/marine-strategy-part-one-uk-updated-assessment-and-good-environmental-status>

D1 & D4 BIRDS		The UK has achieved its aim of GES for non-breeding waterbirds in the Greater North Sea but not in the Celtic Seas. Breeding seabirds have not achieved GES.
D1 & D4 FISH		Demersal fish communities are recovering from over-exploitation in the past, but GES has not yet been achieved in either the Greater North Sea or the Celtic Seas. A partial assessment of pelagic shelf fish did not provide a clear result.
D1, D4 PELAGIC HABITATS		Prevailing environmental conditions are likely to be driving the observed changes in plankton communities but human activities cannot be ruled out and it is uncertain whether GES has been achieved.
D1 & D6 BENTHIC HABITATS		The achievement of GES is uncertain for intertidal and soft sediment habitats. The levels of physical damage to soft sediment habitats are considered to be consistent with the achievement of GES in UK waters to the west of the Celtic Seas, but not in the Celtic Seas or in the Greater North Sea. For sublittoral rock and biogenic habitats GES has not yet been achieved.
D2-NON-INDIGENOUS SPECIES (NIS)		The UK has not yet achieved its aim of GES for NIS. Our ability to detect new NIS has improved but there has been no significant change in the number of new records of NIS made between 2003 and 2014.
D3 COMMERCIAL FISH		The UK has achieved its aim of GES for some commercially exploited fish. In 2015, 53% of marine fish (quota) stocks were fished below maximum sustainable yield (MSY). Most national shellfish stocks have either not yet achieved GES or their status is uncertain. The percentage of quota stocks fished below MSY and the proportion of marine fish spawning stock biomasses capable of producing MSY have increased significantly since 1990.

Table 1 p. 10 Updated Assessment of Good Environmental Status⁸

The Marine Strategy Framework Regulations three key biodiversity descriptors as detailed below cannot be met by multi-use MPAs, again providing evidence of the need for HPAs.

D 1. Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.

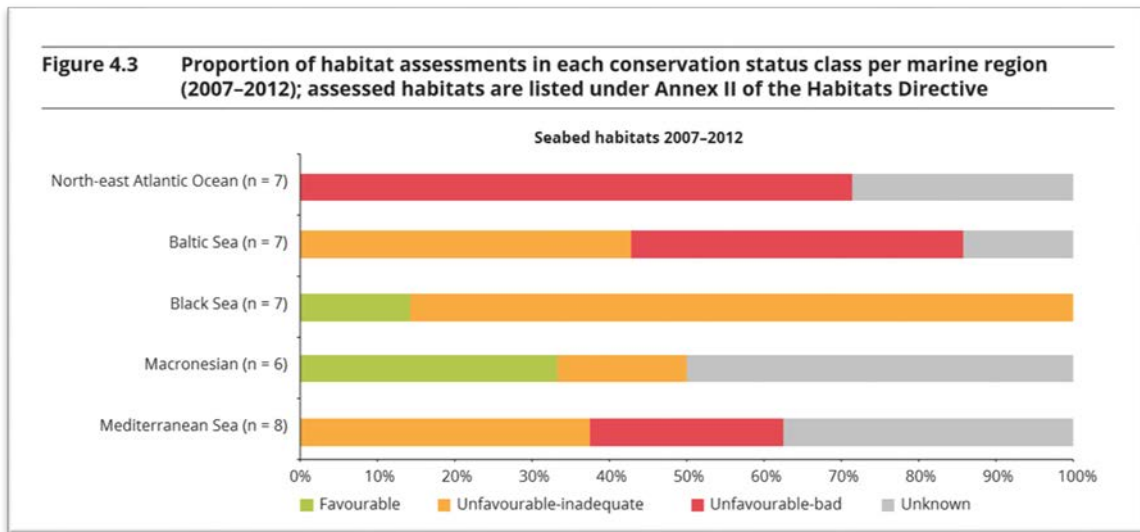
D 4. All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.

D 6. Sea floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.

The last published habitat assessments for the North East Atlantic reported that 71% of habitats were in unfavourable status⁹ and the status of the remainder was unknown. This confirms the ongoing need to do more to protect marine habitats and the species dependent on them.

⁹ European Environment Agency. 2015. Marine protected areas in Europe's seas An overview and perspectives for the future

Figure 1. European Environment Agency



European Environment Agency. 2015. Marine protected areas in Europe's seas An overview and perspectives for the future

iii) The benefits of HPMAs.

As stated under Q. 10 there are numerous studies and evidence that Highly Protected Marine Areas (HPMAs) are the most effective way of protecting the oceans (Lester and Halpern 2008, Edgar et al. 2014, Appolloni et al. 2017). A recent 2017 study¹⁰ undertook a new meta-analysis of previous studies and showed that the biomass of whole fish assemblages in marine reserves (i.e., HPMAs) is, on average, 670% greater than in adjacent unprotected areas, and 343% greater than in partially-protected MPAs.

More data and evidence on the ecological and carbon sequestration importance of HPMAs is welcome, but not prior to rolling out a full network of HPMAs in UK waters to cover at least 10% of waters.

iv) International consensus by scientists and others for 30 by 30 HPMAs

The need for much greater coverage of highly protected marine areas has been endorsed at the global level by experts working in this field:

- At the IUCN World Conservation Congress in 2016, IUCN members approved a new global target of “30% of each marine habitat” to be set aside in “highly protected MPAs and other effective area-based conservation measures” by 2030, with the ultimate aim being a “fully sustainable ocean, at least 30% of which has no extractive activities.”¹¹
- This target reiterated the “Promise of Sydney” at the 6th IUCN World Parks Congress in 2014, which delivered the following official recommendations for the coming decade: “urgently increase the ocean area that is effectively and equitably managed in ecologically representative and well-connected systems of MPAs or other effective conservation measures. This network should target protection of both biodiversity and ecosystem services and should include at least 30% of each

¹⁰ Sala, E., and Giakoumi, S. 2017. No-take marine reserves are the most effective protected areas in the ocean. – ICES Journal of Marine Science, 75: 1166–1168.

¹¹ MPA News; <https://mpanews.openchannels.org/news/mpa-news/iucn-members-approve-30-2030-goal-mpas-%E2%80%94-most-ambitious-target-so-far-mpa-coverage>

marine habitat. The ultimate aim is to create a fully sustainable ocean, at least 30% of which has no extractive activities”¹².

Part 2: HPMA site selection

12. What evidence and factors should be considered when selecting sites for HPMA and who should be engaged in the process? 13. Are there any locations where it would be particularly beneficial: (i) for a location to become an HPMA or (ii) an existing or part of an existing MPA to become an HPMA? Please could you state these in the box below and provide any relevant evidence.

As detailed in response to Q 7. HPMA need to cover at least 30% of UK seas by 2030, with shorter term targets of 10% by 2020 and 20% by 2025. As such they will need to heavily overlap with existing MPAs. We would therefore suggest that the existing network is the starting point for selecting sites, though we would also welcome designation of sites outside existing MPAs.

We believe the statutory nature conservation organisations are best placed to identify the location of HPMA in consultation with scientists and we hope we get the opportunity to input to achieve a network of HPMA. We believe these sites should consist of a mixture of existing and new MPAs, based on the best available data. The HPMA should protect vulnerable, at-risk habitats and features, as well as a proportion of all representative habitats. Sites that are most likely to demonstrate swift recovery could also be a consideration. We also support some community proposed sites but if they do not meet the scientific criteria, they should be in addition to, not instead of scientifically selected sites.

Part 3: Future implementation and management of HPMA

14. What would be the most appropriate way of managing and monitoring HPMA? How do you think this could fit alongside existing marine management?

HPMA must be managed to halt all damaging activities, most importantly bottom trawling, in line with UN, IUCN et al MPA Guide. Oceana supports the recommendation by scientists and by our own UK Government for 30 by 30 – that is 30% of worldwide seas to be effectively protected in MPAs by 2030. IUCN members¹³ recommend that this 30% should be in Highly Protected Marine Areas. Oceana support this call by 2030, with shorter term targets as follows:

2020 10% HPMA (fully & highly protected) under the IUCN MPA guide definition.
2025 20% HPMA
2030 30% HPMA

Oceana calls for Vessel Monitoring Systems (VMS) on all vessels along with Remote Electronic Monitoring (REM) and sufficient funds to enable monitoring of this data. We believe that whole site management is cheaper and more effective than trying to manage feature by feature. We call on Government to provide the financial and other resources needed to monitor and manage our sites for the wider ecosystem service and climate sequestration services they provide.

Part 4: Your past experience of the Marine Protected Areas (MPA) identification, designation, and management process

15. Have you been involved in the identification, designation or management of MPAs in the UK previously? Yes: X, No, prefer not to answer

¹² <https://mpanews.openchannels.org/sites/default/files/mpanews/archive/MPA140.pdf>

¹³ MPA News; <https://mpanews.openchannels.org/news/mpa-news/iucn-members-approve-30-2030-goal-mpas-%E2%80%94-most-ambitious-target-so-far-mpa-coverage>

15a. If yes, we would like to learn from your experience of being involved in MPA identification, designation and management. Please could you provide information on:
The name of the MPA(s) and your role and involvement

	What worked well?	What could be improved?
a) Identification		
	<p>The SAC identification has largely worked well, as sites have been identified based on science by the statutory nature conservation organisations – JNCC, NE, SNH, CCW.</p>	<p>The Regional MCZ groups were dominated by the maritime and fishing industry that had 44 representatives compared to the NGO 12 reps, this meant sites were often selected based more on socio-economic issues than scientific. If sites are selected by stakeholders again not only will the process be incredibly slow, but industry will likely dominate.</p> <p>The requirement for best available scientific evidence was changed to a requirement for much higher levels of evidence following challenges by the fishing industry. This again slowed down the process, lead to many sites being dropped and resulted in the feature by feature, rather than whole site approach to designation and now management.</p>
b) Designation		
		<p>The UK has had legislation enabling it to designate Marine Nature Reserves since 1981 under the Wildlife & Countryside Act, 1981. However, only three MNRs were ever designated – Lundy, Skomer and Strangford Lough due to opposition from the fishing industry.</p> <p>In Wales attempts to introduce Highly Protected Marine Areas were completely dropped due to some opposition by the fishing and yachting associations.</p> <p>Impact Assessments: UK MPAs have been subject to numerous impact assessments. These should, but presently do not fully take account of the ecosystem benefits of MPAs.</p>
c) Management		
UK European Marine Sites	In 2012 following a legal challenge by MCS and Client Earth a new	This has lead to some instances of good management of fishing in

	approach to managing fishing in MPAs was announced by Defra based on a matrix approach.	MPAs in the 0-6nm zone by some Inshore Fisheries Conservation Authorities, but not all.
		Meanwhile, offshore management of fishing is still lacking at most sites or is inadequate due to the need for consensus by all Member States that fish in the MPA to the new management measures under Article 11 of the Common Fisheries Policy. Unfortunately, again this favours the fishing industry with one or more Member State blocking the new measures.
Solway Firth MPA (SAC,SPA)	The partnership halted suction dredging of cockles due to their over exploitation and then re-opened just a hand gathered fishery	The full impacts of scallop dredging was not fully appreciated by the Partnership then, not helped by the lack of engagement by Scottish fisheries regulators and as a result there was inadequate management of Luce Bay SAC
Isle of Wight MPA (SAC)	Surveys: thanks to a budget at the time we were able to fully survey the reef area	Development: despite concerns re adverse affects two developments – a sewage pipe and a fish harbour were consented by the competent authorities.
Chichester Harbour MPA (SAC, SPA, SSSI)	Recreation: we recognised that there was extensive proportion of moorings in the harbour and had a moratorium on any new ones in the management plan. Monitoring: We secured Heritage Lottery Funding to undertake benthic habitat surveys amongst other projects, which are not undertaken as frequently as they should be in estuaries and harbour MPAs.	Fisheries: Back then fisheries management was considered the sole job of the Sea Fisheries. In some instances this is now resolved by IFCAs having a conservation remit, but there still seems too little opportunity for local marine conservation experts whether in Natural England, MPA management, CZM, academia or NGOs to input and comment on the fisheries management needed in order to conserve MPAs.

16. How has stakeholder and local knowledge been included in previous processes to introduce MPAs (inshore or offshore)? Please can you comment on whether and how this knowledge can better be integrated in future processes associated with HPMAs?

Marine Conservation Zones around England and NI were selected through the regional seas process by stakeholders. These four projects¹⁴ – Finding Sanctuary, Net Gain, Balanced Seas and the Irish Sea Conservation Zones were dominated by industry (including fishing and boating) as follows:

- Industry (22)
- Commercial fishing (24)
- Government bodies and regulators (20)
- Recreational interests (20)
- NGOs and charities (12)
- Other (18)

¹⁴ <http://jncc.defra.gov.uk/page-2409>

As a result all the existing MCZs around England were actually selected by stakeholders and sites that were thought might have an adverse economic impact were not selected.

It was anticipated by the fishing industry, as well as NGOs, that bottom trawling and other damaging activities would swiftly be halted within these MCZs and so sites were selected with this in mind. The MCZs selected during the process would hence make appropriate HPMAs since it was always envisaged that they would be protected, or highly protected, as now termed. In addition as they already had extensive stakeholder involvement in site selection they make good candidate sites for HPMAs.

Part 5: Any other comments

17. Are there any other comments you would like to make in regard to HPMA's?

Oceana consider that at least 30% of seas should be protected from damaging activities, in particular bottom trawling, within MPAs. We do not think these necessarily need to be called HPMA's but just MPAs. We do worry that terms such as HPMA's might down grade the protection given to normal MPAs and as we say all should be protected from damaging activities.