OCEANA response to Scottish Government consultation on proposals to designate four Marine Protected Areas in Scottish waters

August 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. We have offices around the world, including London, Brussels, Madrid and Copenhagen in Europe – the London office having been opened just last year.

1. Do you support the designation of these possible Marine Protected Areas?

North-east Lewis:	Strongly support
Sea of the Hebrides:	Strongly support
Shiant East Bank:	Strongly support
Southern Trench:	Strongly support

Comments:

Oceana strongly supports the designation of the Scottish Government's four possible Marine Protected Areas (pMPAs) of North-east Lewis, Sea of the Hebrides, Shiant East Bank and Southern Trench. We agree with the Scottish Government and its statutory nature conservation advisers Scottish Natural Heritage (SNH) and the Joint Nature Conservation Committee (JNCC) that the sites meet the MPA selection guidelines, and that they are necessary to progress towards completion of the Scottish MPA network.

Scotland has a wonderful array of marine wildlife and habitats and, with over 60% of the UK's seas under its jurisdiction, is a key contributor to the development of ecologically coherent networks of MPAs in the UK and the North-East Atlantic. The Scottish MPA network is essential to protect biodiversity and recover our ecosystems. The MPAs are also an important contribution to the Scottish Government's work and policy commitments to:

- Strengthen the OSPAR Convention network of MPAs for the North-East Atlantic.
- Progress towards Good Environmental Status (GES), as set out by the Marine Strategy Framework Regulations.
- Maintain and enhance biodiversity, which is a focus of the Habitats Regulations.

2. Do you agree that the scientific evidence presented justifies the case for the designation of each site?

Yes, Oceana agrees that the scientific evidence presented justifies the case for the designation of each site.

Comments:

Scientific evidence for all sites: Oceana fully supports the designation of the four new Scottish Nature Conservation Marine Protected Areas that the Scottish Government is proposing. These four sites are

an important component of the ecologically coherent network of MPAs that the UK is working to complete. They include iconic species such basking shark, minke whale, and Risso's dolphin, and geomorphology features and broadscale habitats such as mixed sediments, which in turn support a range of species.

Additional features or sub-features: Oceana undertook a research expedition that included waters inside and outside the boundaries of the Southern Trench pMPA, and we provide further data in support of the inclusion of additional priority marine features (PMFs) and other features of conservation importance found within that site (see 2.4.1 and 2.4.2). In fact, we would like to see additional features, whether priority or not, be formally added to all sites, to aid management and increase the potential conservation benefits that would result from the protection of the pMPAs. We request that SNH (together with JNCC, where appropriate) further explore the available data sources to determine whether there is further scientific evidence for the formal addition of other conservation features that could also improve adequacy, representativity and connectivity of the whole network. Furthermore, we hope that as any additional data become available from future studies of the areas, features of conservation importance will continue to be formally added to the sites.

Extending the sites: While Oceana welcomes and strongly supports the protection of the proposed sites, we are concerned that two sites (Southern Trench and Sea of the Hebrides) do not extend sufficiently to fully cover the habitats and species of importance in their vicinity (see below). In the case of Southern Trench, we provide further data of our own in support of the expansion of the area, to protect additional PMFs and other features of conservation importance in the vicinity of the pMPA (see 2.4.3).

2.1 North-east Lewis

2.1.1 Oceana agrees: Oceana agrees that the scientific evidence presented justifies the case for the designation of the North-east Lewis pMPA for its Risso's dolphins, sandeels, and geodiversity features (marine geomorphology and Quaternary of Scotland). We agree with SNH that the site meets the MPA selection guidelines.

2.1.2 Additional features or sub-features: We request that, following designation, SNH further explore the available data sources to determine whether there is further scientific evidence for the formal addition of other conservation features.

2.1.3 Size & location: Oceana supports the size and location of this pMPA.

2.2 Sea of the Hebrides

2.2.1 Oceana agrees: Oceana agrees that the scientific evidence presented justifies the case for the designation of the Sea of the Hebrides pMPA. The pMPA is a renowned region for its basking sharks and minke whales, for which there is substantial evidence, and it is also well documented that their occurrence in the area is due to the fronts that lead to enhanced primary production. Both species and their habitats need further protection, particularly basking shark, an OSPAR Threatened and/or Declining species. We note that SNH have found that this region is not only an important feeding

ground for basking shark, but is also likely to be important for breeding, given that the animals show social, group and courtship-like behaviours. We also welcome the designation for the area's geodiversity feature, the marine geomorphology of the Scottish shelf seabed, which is renowned for its maërl beds and seagrass beds, which support a range of biodiversity and shellfish species.

2.2.2 Additional features or sub-features: We are surprised there are not more features and/or sub-features that qualify for this pMPA. SNH mention the importance of the maërl beds and seagrass beds as a sub-feature of the geodiversity feature, but they are not listed as part of the proposed designation. In addition, we would expect that the rocky reefs, biogenic reefs such as horse mussel (*Modiolus modiolus*) or extensive kelp forests in the region might also qualify for protection within the pMPA. Species-wise we wonder if more marine mammals might be formally included as species within the site, including bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), common seal (*Phoca vitulina*), and grey seal (*Halichoerus grypus*). We request that, following designation, SNH further explore the available data sources and/or commission new surveys to determine whether there is further scientific evidence for the formal addition of other conservation features.

2.2.3 Size & location: Oceana fully supports the size and location of this pMPA. In order to cover this highly productive area, it is essential that the full region be protected; in fact, we would prefer to see the site enlarged. In particular, we would recommend that the boundaries of the MPA follow the coastline of North Uist, South Uist and Barra and also be closer to Arisaig and Mallaig. According to the Data Confidence Assessment (Figures 2i-ii) and the Conservation and Management Advice (Figures 2i-ii), basking shark and minke whale have been documented closer to the Outer Hebrides coastline than the proposed pMPA boundary. We also wonder if there might be more data available from the various small ferries (in particular those that operate out of Mallaig and Arisaig to the Small Isles) which are famous for minke whale and basking shark sightings, and whether such records have been fully utilised to ensure the boundaries are correct in that region.

2.3 Shiant East Bank

2.3.1 Oceana agrees: Oceana agrees that the scientific evidence presented justifies the case for the designation of the Shiant East Bank pMPA.

2.3.2 Additional features or sub-features: We request that, following designation, SNH further explore the available data sources to determine whether there is further scientific evidence for the formal addition of other conservation features.

2.3.3 Size & location: Oceana supports the size and location of this pMPA.

2.4 Southern Trench

2.4.1 Oceana agrees: Oceana agrees that the scientific evidence presented justifies the case for the designation of the Southern Trench pMPA, in order to protect its minke whales, burrowed mud habitats, fronts, shelf deeps, and geodiversity features (Quaternary of Scotland and Submarine mass movement).

In addition to the evidence presented by SNH, Oceana would like to provide further scientific evidence of its own, in support of the designation of this site. In 2017, Oceana carried out an eight-week research cruise in the North Sea, in waters of the UK, Denmark, Germany, the Netherlands,

and Norway. As part of this research, surveys were carried out within the Southern Trench pMPA and its vicinity, via a remotely operated vehicle (ROV), filming by SCUBA divers, and benthic grab samples. Below are summarised the relevant findings from those surveys, with particular emphasis on PMFs (both habitats and species) and on other features of conservation importance.

Detailed data from Oceana's surveys are provided in an accompanying Excel file (*Oceana_data_MPA_consultation_2019.xlsx*), along with maps showing the locations of surveys and specific features (*Oceana_maps_MPA_consultation_2019.docx*) and supporting photographic evidence (*Oceana_photos_MPA_consultation_2019.pdf*).

Oceana's surveys within the pMPA (Map 1) provided additional data in relation to the proposed protected feature **burrowed mud**. During ROV surveys, Oceana documented an area characterised by the component biotope *Seapens and burrowing megafauna in circalittoral fine mud*, at depths ranging between 94.2 – 99.3 m (see Map 2). In the area surveyed, phosphorescent sea pen (*Pennatula phosphorea*) was abundant.

In addition to this PMF, Oceana's surveys indicated the presence of other biodiversity PMFs (see Map 2), which are currently not included as proposed protected features of the pMPA, and merit further study and consideration as to whether they could be formally included within the site:

- **Kelp beds:** surveys revealed a dense forest of *Laminaria hyperborea*, at a depth of 17.3 m, in which the soft coral dead man's fingers (*Alcyonium digitatum*) was also very abundant.

- **Sandeels** (*Ammodytes marinus* and *A. tobianus*)**:** a school of *A. tobianus* was documented at 17.3 m depth, and two immature individuals of *A. marinus* (8 cm total length) were collected in one grab sample from 48 m depth.

- Juveniles of **cod** (*Gadus morhua*) and **ling** (*Molva molva*) were documented via ROV at approximately 45 m depth, on a rocky bottom covered by ophiurids, dead man's fingers, and many other invertebrates. Juvenile **whiting** (*Merlangius merlangus*) was observed in a different location, on muddy bottom at 97 m depth.

- **Grey seal** (*Halichoerus grypus*) was recorded in a location on rocky shore, by SCUBA divers at the surface.

Data from the pMPA also included records of indicator species for three potential additional broad habitat PMFs (Map 2). Further research would be needed to confirm whether these PMFs are in fact present, and to determine their extent:

- Two heart urchins (*Brissopsis lyrifera*) were collected in a grab sample from 36 m depth. This echinoderm is the dominant species associated with the biotope **Inshore deep mud with burrowing heart urchins – *Brissopsis lyrifera* and *Amphiura chiajei* in circalittoral mud**. Remains of three *A. chiajei* individuals were also collected in grab surveys at 200 m and 205 m depth within the trench, near to where *B. lyrifera* was found, although in different locations. More research would be needed in these three locations, to confirm whether the two species coexist and form the biotope.

- Burrowing bivalves (Tellina spp., which is the accepted name for *Moerella* spp.) were collected via grab surveys at seven locations, at depths of 36 - 206 m in gravelly sand. These

bivalves are the main component species of the PMF **Tide-swept coarse sands with burrowing bivalves - *Moerella* spp. with venerid bivalves in infralittoral gravelly sand**. We recognise that these depths are below the typical depth range of this biotope, but have nevertheless included the information here for consideration.

- Various species of sponges growing on boulders were documented during two ROV surveys, and may have indicated the presence of the PMF **Northern sea fan and sponge communities - Deep sponge communities (circalittoral)**. The first of these surveys was carried out on deep bottom (171.3 - 240.1 m), and recorded sponge species included *Antho* spp., *Haliclona urceolus, Suberites carnosus*, and *Suberites* spp. The second survey was conducted in a shallower area (44.2 - 45.3 m), and three erect sponge species were documented (i.e., *Antho* sp., *Halichondria panicea* and *Hymedesmia* sp.). In both locations, other typical associated species for this biotope complex were also recorded. For example, *Alcyonium digitatum*, *Echinus esculentus*, *Nemertesia* spp. and *Sertularella gayi* were abundant in the shallower site, while *E. esculentus* and *N. ramosa* were abundant in the deeper site. However, none of the dominant sponge species that are considered characteristic of this PMF were found, and so more research is needed before the presence of the feature can be confirmed.

2.4.2 Additional features or sub-features: Oceana's research documented the presence of another feature of conservation importance that occurs within the boundaries of the Southern Trench pMPA (Map 3), but which is not currently listed among the features to be protected in the site:

- ***Sabellaria spinulosa*** aggregations were collected in a grab sample from a depth of 250 m. Some of these aggregations were attached to shells, while others were small and unattached. Unfortunately, it was not possible to carry out ROV surveys in that precise location, and therefore we could not assess whether *Sabellaria* formed reefs there. However, our finding supported observations from SNH surveys, which have also found dense encrustations of *S. spinulosa* within the pMPA.[1,2] In fact, on the basis of those surveys, it was noted that "Sabellaria-dominated habitats probably cover an extensive area in the eastern region of the proposed MPA."[2]

Given the fact that *S. spinulosa* reefs are listed under the EU Habitats Directive, are listed by OSPAR as a Threatened and/or Declining habitat in the Greater North Sea, and that these reefs are currently not protected in waters off the east coast of Scotland, further investigation of *S. spinulosa* within the pMPA (and vicinity) should be a priority. Depending on the nature and extent of the aggregations (and potentially reefs), the Scottish Government should consider formally adding them to the list of features to be protected within the Southern Trench pMPA.

2.4.3 Size & location: Oceana supports the location of this pMPA, but would like to see the size extended, in order to protect various features of conservation importance that lie outside the proposed area.

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1 Axelsson, M., O'Dell, J. & Dewey, S. 2016. Infaunal and PSA analyses of benthic samples collected from South Arran MPA, Lochs Duich, Long and Alsh MPA and Southern Trench MPA. Scottish Natural Heritage Commissioned Report No. 946.

[2] Moore, C.G. 2017. Biological analyses of underwater video from ongoing monitoring and research cruises in Lochs Sunart, Etive and Alsh, sea lochs off South Skye, the Sounds of Barra and Arisaig and around the Southern Trench. Scottish Natural Heritage Commissioned Report No. 959.

Oceana's surveys in the area outside the pMPA boundaries indicated the presence of nine biodiversity PMFs (both broad habitats and species) in the vicinity of the site (Map 2). These features are currently not included as proposed protected features of the pMPA, and therefore merit further study and consideration as to whether the site could be extended to include them:

- **Kelp beds:** Dense *Laminaria hyperborea* forests were documented during four SCUBA surveys, at a depth range of 8.4 - 13.5 m. Red and brown macroalgae, ascidians, bryozoans, hydrozoans, sponges, anemones, soft corals, echinoderms, and molluscs were present. During one survey, areas characterised by abundant *Saccharina latissima* (the accepted name for *Laminaria saccharina*) were also documented, at a maximum depth of 8.4 m. Fucoids (*Fucus serratus*) were also present, forming dense aggregations in some locations along one of the surveyed areas. Those aggregations of *F. serratus* could specifically be considered as the PMF **Tide-swept algal communities: Fucoids in tide-swept conditions**.

- **Ocean quahog (*Arctica islandica*):** remains of seven specimens were documented in four grab surveys, at depths ranging from 64 - 127 m.

- **Sandeels (*Ammodytes tobianus*):** schools of lesser sandeel were documented on rocky bottoms, during two SCUBA dive surveys, at maximum depths of 9.5 and 12.2 m.

- Juveniles of **cod** (*Gadus morhua*), **saithe** (*Pollachius virens*), **whiting** (*Merlangius merlangius*) and **ling** (*Molva molva*) were recorded from on rocky and sandy bottoms, at depths ranging from 8.4 - 85.5 m.

- **Grey seal** (*Halichoerus grypus*)**:** individuals were recorded during three SCUBA surveys outside the boundaries of the pMPA. During two separate locations, a total of ten individuals were observed inside submerged caves.

Data from outside the Southern Trench pMPA also included records of species that are indicator species for three potential additional broad habitat PMFs (Map 2). Further research would be needed to confirm whether these PMFs are present, and to determine their extent:

- The branching-erect sponge *Stelligera stuposa* was documented at 44.4 m depth, on sedimented rocky bottom, together with other sponge species (e.g., *Sycon ciliatum* and *Grantia compressa*). *S. stuposa* is one of the species defined as dominant species that characterises the PMF **Northern sea fan and sponge communities - Deep sponge communities (circalittoral)**[3], although only one individual of this species was found. During other ROV and grab surveys, additional sponge species were documented on sandy bottoms with rocks, at depths of 30 - 87.7 m. These included erect sponges such as *Haliclona urceolus*, *Leucosolenia* sp., and *Polymastia boletiformis*, of which the latter species frequently comprises part of this broad habitat type. Typical associated species documented during these surveys included the cnidarian *Alcyonium digitatum* (which was especially abundant in two of the ROV surveys), and *Nemertesia* spp. (which were common along the three ROV transects).

[3] JNCC. 2015. The Marine Habitat Classification for Britain and Ireland Version 15.03. Available from: https://mhc.jncc.gov.uk/.

- Shells of *Modiolus modiolus* (n=8) and *Mimachlamys varia* (the accepted name for *Chlamys varia*; n=5) were collected during a grab survey at a depth of 70 m. Based on this finding, it is possible that the PMF **Horse mussel beds - *Modiolus modiolus* beds with *Chlamys varia*, sponges, hydroids and bryozoans on slightly tide-swept very sheltered circalittoral mixed substrata** could be present in the area. *M. varia* individuals (n=24) were also documented in further grab and ROV surveys (41 – 127 m depth), but no more *M. modiolus* shells were collected or documented during these surveys.

- Burrowing bivalves (*Tellina* spp., the accepted name for *Moerella* spp.), were collected via grab surveys at six locations, at depths of 30 - 74 m. These bivalves are the main component of the PMF **Tide-swept coarse sands with burrowing bivalves - *Moerella* spp. with venerid bivalves in infralittoral gravelly sand**. We recognise that these depths are below the typical depth range of this biotope, but have nevertheless included the information here for consideration.

In addition to the PMFs, Oceana's research documented the presence of two features of conservation importance that occur outside the proposed boundaries of the Southern Trench pMPA (Map 3). The presence of these features provides further justification for considering the extension of the southern boundary of the site:

- ***Sabellaria spinulosa* reefs**: large aggregations of *S. spinulosa* were documented during ROV surveys at three locations, at depths from 66.7 - 85.8 m. Additional specimens were collected during four grab surveys, at depths of 30 - 83 m. Oceana's findings of *S. spinulosa* reefs in this area add to a growing body of records from both SNH and industry surveys that highlight the importance of waters off the east coast of Scotland for these systems. Oceana has also provided its raw data and images to Marine Scotland Science, to support its project to assess the status of *Sabellaria* reefs in the Moray Firth and off the east coast of Scotland. However, given the decline in these reefs in European waters, and the fact that they are listed under both OSPAR and the EU Habitats Directive, the extension of the pMPA to include waters further south would provide a key opportunity to protect the reefs.

- **Submerged caves**: four submerged caves were documented during two SCUBA surveys (maximum depths 8.4 m and 12.2 m). As previously mentioned, grey seal (*Halichoerus grypus*) were found inside caves in both survey areas, with a group of nine seals in one cave, and a single seal found in the another. Caves are listed under Annex I of the EU Habitats Directive and, based on the conclusions of the last biogeographical seminar to assess the status of the marine Natura 2000 Network, the UK has not yet reached sufficiency for this habitat type in Scotland[4]. During the seminar, the importance of such caves as habitat for *H. grypus* was highlighted, and the UK government representative noted the difficulty of identifying cave areas. The extension of the pMPA to encompass these caves would provide a clear opportunity to increase the protection of this priority habitat in Scottish waters.

[4] European Commission. 2017. Marine Atlantic Biogeographical Region. Marine habitats listed in Annex I of the EU Habitats Directive 92/43/EEC. Seminar Conclusions, Malta, 27-29 September 2016.

3. Do you have any comments on the Conservation and Management Advice for each site?

Yes, Oceana does have comments – please see below.

Comments:

Overarching comments on management

We note that all four pMPAs have a draft conservation objective to "conserve" protected features, meaning that these features are considered to be in a favourable condition at present. While we would welcome it if all features were in favourable condition within the pMPAs, we find it very surprising that none of the features are considered to be in unfavourable condition, given that:

- Individual biodiversity features that are proposed to be protected by each of the four pMPAs are known to be generally threatened and/or declining, while their status within the pMPAs is unknown (see details provided for the sites, below).
- The last EU-level assessment of the conservation status of protected habitats showed that 71% of seabed habitats in the North-East Atlantic[5] were considered to be in unfavourable status (see Fig. 1 below) and the status of the remainder was unknown. While some improvements to MPA management have been made in recent years, the revision of this assessment (due in 2020) is nevertheless unlikely to find many (if any) habitats that have achieved favourable status in the region.

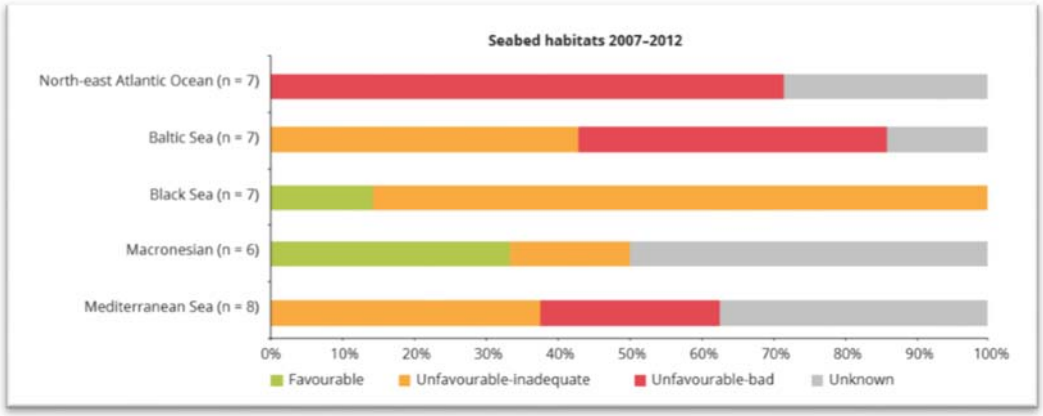

Figure 1. Proportion of assessments in each conservation status class by marine region (2007-2012), for habitats listed under Annex II of the Habitats Directive. Source: European Environment Agency. 2015. Marine protected areas in Europe's seas: An overview and perspectives for the future.

The choice of conservation objective is of clear importance, as it directs the management scenarios with the objective of "conserve" potentially leading to little new management, while that of "recover" will necessitate more action. We would like Governments – including the Scottish Government – to implement stronger management measures and take steps not only to implement the letter of the law but to truly facilitate the recovery of our seas and achieve Good Environmental Status. Conservation and management of MPAs should be undertaken following a whole-site

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

approach, so the entire ecosystem is effectively managed, and all damaging activities prevented at this broader level, not merely with respect to individual features. Feature-by-feature management often only protects a small part of an MPA, thereby limiting its potential conservation benefits. Furthermore, it can also be more expensive to manage activities around each individual feature, rather than across a designated site.

We have welcomed the work of Marine Scotland (and Defra) in recent years to improve management of damaging activities, especially fishing, in its MPA network, both inshore and in the offshore areas through the Article 11 process under the Common Fisheries Policy. However, while some limited progress is being made, there are still far too many MPAs that are not yet protected or only partially protected from damaging fishing practices, partly as a result of lack of ambition and partly due to complex Article 11 processes. For example, we note that under these processes, the development of management measures for offshore SACs in Scottish North Sea waters has not advanced, despite the fact that the proposals for these measures were first published in 2016. Specifically, with respect to fishing practices, Oceana would like to see bottom trawling and other mobile benthic gear prohibited from more MPAs. We also note the ongoing growth in aquaculture and oppose proposals for fish farms in MPAs (e.g., Arran and Canna[6] proposals) and/or consent for any activities that may have a significant effect on sites. Commercial fisheries, aquaculture, and other activities should be required to prove that they will not adversely affect sites before consent is granted.

3.1 North-east Lewis

3.1.1 Conservation objectives: We note that North-east Lewis has a draft conservation objective of "conserve" protected features, meaning that these features are all considered to be in favourable condition at present. While this would be welcome, we find it quite surprising. The site is proposed to protect two biodiversity features (Risso's dophin and sandeels) whose populations both extend across a wider area and are of unknown status. As indicated in Table 1 of the Conservation and Management Advice document for this site, the status of Risso's dolphin is unknown both for UK waters and at the European level. Similarly, the status of sandeels in ICES Division VIa (West of Scotland) which includes North-east Lewis, is also unknown, according to the last advice issued by ICES. Moreover, while in theory the conservation objective for the site should be decided based on the status of the protected features, in the case of sandeel, the opposite appears to have been the case. According to the footnote on p. 9 of the Conservation and Management Advice for North-east Lewis, the condition of sandeels "*has been judged to be favourable because a conserve conservation objective has been set for this feature in the pMPA (see section 5.2). However this is an assumption as there have been no specific surveys in the site, there have been no landings and there is inadequate data from ICES VIa*." Given the high uncertainty about the status of both Risso's dolphin and sandeels, it would be more appropriate to set a conservation objective of "recover" for North-east Lewis.

3.1.2 Management advice: We are concerned that few of the management measures advised within Table 2 (advice to support management) are adequate to have a significant beneficial effect on the conservation features. It appears that most activities, despite having a likely significant effect

[6] Carrell, S. 2019. Heritage body objects to plans for big salmon farm off Hebridean isle. The Guardian, 19 August 2019. https://www.theguardian.com/uk-news/2019/aug/19/national-trust-objects-to-plans-for-big-salmon-farm-off-hebridean-isle

on the features (and in many cases an adverse effect on Risso's dolphins), would still be permitted to continue, with minimal mitigation. Also, we would like the "alternative management scenarios" (Table 4 of the Sustainability Appraisal), to be considered for management within the pMPAs, rather than only being considered as an alternative to an MPA. For example, the SNH conservation advice regarding aquaculture and Risso's dolphins advises following best practice with respect to the deployment of acoustic deterrent devices (ADD), while the Sustainability Appraisal suggests an alternative of replacing all ADDs with antipredator nets. For aquaculture, we would like to see a clearer indication that new proposals would not be permitted, in this, or other MPAs unless it can be proven that there will be no impact on the protected features. For boat use, including wildlife boat tours, we support the proposal in the Sustainability Appraisal to reduce boat speed for North-east Lewis as well as Sea of the Hebrides, though perhaps limiting speeds to 10 knots might be sufficient. We support the SNH management advice that the exclusion of hydraulic fishing methods from habitat supporting sandeels within the site is recommended. Without such management, it is clear that sandeel populations will not be conserved.

3.1.3 Monitoring & enforcement: We hope that North-east Lewis (and the other sites) will be sufficiently funded for monitoring and enforcement. We also hope that the site and features will experience recovery to, at a minimum, achieve favourable condition. If any of the features are later shown to be declining and/or damaged, they should be considered to be in unfavourable condition, and immediate action taken to "recover" them.

3.2. Sea of the Hebrides

3.2.1 Conservation objectives: We note that the Sea of the Hebrides has a draft conservation objective to "conserve" protected features, meaning that these features are all considered to be in favourable condition at present. While this would be welcome, we find it quite surprising. One of the biodiversity features that the site proposes to protect – basking shark – is a migratory species whose range extends well beyond the boundaries of the Sea of the Hebrides pMPA. Its threatened status is recognised under multiple conservation frameworks, which include listings (among others) as:

- Threatened and/or Declining under OSPAR[7]
- Endangered (in Europe) on the IUCN Red List, on the basis of population declines of greater than 50% over three generations (> 100 years)[8]
- An Endangered migratory species under the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention; Appendix I)[9]
- Protected under the UK Wildlife and Countryside Act 1981 (Schedule 5)
- A species requiring conservation action under the Scottish Biodiversity List.

According to Annex 1 of the Conservation and Management Advice for Sea of the Hebrides, "*there are no population assessments for basking sharks that could be used for assessments in relation to this Conservation Objective at present*." Given this high uncertainty and the known threatened and

[7] OSPAR Commission. 2010. OSPAR Recommendation 2010/6 on furthering the protection and restoration of the common skate species complex, the white skate, the angel shark and the basking shark in the OSPAR maritime area. OSPAR 10/23/1-E, Annex 28.
[8] Sims, D., Fowler, S.L., Clò, S., Jung, A., Soldo, A. & Bariche, M. 2015. *Cetorhinus maximus*. The IUCN Red List of Threatened Species 2015: e.T4292A48953216. Available from: https://www.iucnredlist.org/species/4292/48953216.
[9] Convention on the Conservation of Migratory Species of Wild Animals (CMS). 2018. Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). Effective 26 January2018.

protected status of basking shark, it would be more appropriate to set a conservation objective of "recover" for Sea of the Hebrides.

3.2.2 Management advice: We are concerned that few of the management measures advised within Table 2 (advice to support management) are adequate to have a significant beneficial effect on the conservation features. It appears that many activities, despite having a likely significant-to-adverse effect on the features, would still be permitted, with minimal mitigation. Also, we would like the "alternative management scenarios" (Table 4 of the Sustainability Appraisal) to be considered for management within the pMPAs, rather than only being considered as an alternative to an MPA, as they include some good management proposals. In fact, we generally support the upper management scenarios from the Sustainability Appraisal, such as:

- Replacement of all Acoustic Deterrent Devices (ADDs) with antipredator nets.
- Vessel speeds restricted to <6 knots within the 'shark awareness zones' between June and October.
- Exclusion of drift nets and set nets between April and October across the site.

We would also like to see the inclusion of stronger management proposals for some activities, for example:

- Bottom-contacting mobile fishing gear to be prohibited throughout the site or, at a minimum, where there are any habitats such as sponge communities, maërl beds, or sandeel habitats.

3.2.3 Monitoring & enforcement: We hope that Sea of the Hebrides (and the other sites) will be sufficiently funded for monitoring and enforcement. We also hope that the site and features will experience recovery to, at a minimum, achieve favourable condition. If any of the features are later shown to be declining and/or damaged, they should be considered to be in unfavourable condition, and immediate action taken to "recover" them.

3.3 Shiant East Bank

3.3.1 Conservation objectives: We note that Shiant East Bank has a draft conservation objective to "conserve" protected features, meaning that they are all presently in favourable condition. While this would be welcome, we find it quite surprising. All of the biodiversity features proposed for protection in the site are seabed habitats and communities. As indicated in Table 1 of the Conservation and Management Advice for Shiant East Bank, neither of the community types (i.e., circalittoral sands and mixed sediment communities or northern sea fan and sponge communities) are considered to have achieved GES under the MSFD, as best as can be assessed. More broadly, in the North-East Atlantic region, the last EU-level assessment of the conservation status of protected seabed habitats showed that 71% were considered to be in unfavourable status (see Fig. 1 above), while the remainder were of unknown status. From the information provided in the Conservation and Management Advice, it is unclear what the basis is for the assessment of these features as favourable. We would prefer to see an objective of "recover" for Shiant East Bank.

3.3.2 Management advice: We are concerned that few of the management measures advised within Table 2 (advice to support management) are adequate to have a significant beneficial effect on the conservation features. It appears that many activities, despite having a likely significant-to-adverse effect on the features, would still be permitted, with minimal mitigation. Also, while the "alternative management scenarios" (Table 4 of the Sustainability Appraisal) were themselves not overly ambitious, it is not clear how these scenarios were considered and rejected.

3.3.3 Monitoring & enforcement: We hope that Shiant East Bank (and the other sites) will be sufficiently funded for monitoring and enforcement. We hope that the site and features will experience recovery to, at a minimum, achieve favourable condition. If any of the features are later found to be declining and/or damaged, they should be considered to be in unfavourable condition and immediate action taken to "recover" them.

3.4 Southern Trench

3.4.1 Conservation objectives: We note that the Southern Trench has a draft conservation objective to "conserve" protected features, meaning that these features are all considered to be in favourable condition at present. While this would be welcome, we find it surprising. One of the biodiversity features that the site proposes to protect – burrowed mud – is listed as Threatened and/or Declining under OSPAR (i.e., 'seapen and burrowing megafauna communities') for the Greater North Sea, which includes the pMPA. More broadly, in the North-East Atlantic region, the last EU-level assessment of the conservation status of showed that 71% of protected seabed habitats were considered to be in unfavourable status (see Fig. 1 above), while the remainder were of unknown status. From the information provided in the Conservation and Management Advice, it is unclear what the basis is for the assessment of this feature as favourable. We would prefer to see an objective of "recover" for Southern Trench.

3.4.2 Management advice: We are concerned that few of the management measures advised within Table 2 (advice to support management) are adequate to have a significant beneficial effect on the conservation features. It appears that many activities, despite having a likely significant-to-adverse effect on the features, would still be permitted, with minimal mitigation. Also, while the "alternative management scenarios" (Table 4 of the Sustainability Appraisal) were themselves not overly ambitious, it is not clear how these scenarios were considered and rejected.

3.4.3 Monitoring & enforcement: We hope that Southern Trench (and the other sites) will be sufficiently funded for monitoring and enforcement. We hope that the site and features will experience recovery to, at a minimum, stay in favourable condition. If any of the features are later found to be declining and/or damaged, they should be considered to be in unfavourable condition and immediate action taken to "recover" them.

4. Do you have any comments on the Business and Regulatory Impact Assessment for each site?

No.

5. Do you have any comments on the Sustainability Appraisal, including the Environmental Report and the Socio-Economic Impact Assessment?

Yes, Oceana does have comments – please see below.

Comments:

We welcome the additional information provided in the Sustainability Appraisal.

Alternatives: We were pleased to see that the Sustainability Appraisal provides various alternative management scenarios (i.e., lower, intermediate, upper) for each activity/pressure. While meant as an alternative to the pMPAs, we found them instead useful in considering alterative management

scenarios within the MPAs once designated. However, we would have liked to see more detail in Table 4, with the options further explored, as well as the consideration of stronger management scenarios, depending on the activity and feature. One ubiquitous damaging activity which Oceana would like to see halted in the majority of MPAs is the use of bottom-contacting mobile fishing gear. This should certainly be halted over benthic habitats in the MPAs, including sandeel habitats, burrowed mud (Southern Trench), circalittoral sands (Shiant East Bank), northern sea fan and sponge communities (Shiant East Bank), and maërl beds (Sea of the Hebrides).

The overall assessment of management scenarios in Table 5 contained further useful analyses. While the beneficial impacts of different management scenarios might take time, we were surprised that all management options were categorised as having only “no immediate” or “negligible to very minor immediate beneficial impact on the environment”. For all of the options it was further suggested that there was “a greater potential for future benefits”, but this seemed rather vague and the Sustainability Appraisal did not rate these at different levels to assist with consideration of the options.