

The Scottish Government has proposed 33 Marine Protected Areas (MPAs) which will only protect ONE of Scotland's 24 breeding seabird species.

A network of MPAs which does not include sites for our threatened seabird species is incoherent, and the Scottish Government will fail to meet its national and international obligations to protect Scotland's seas.

The Scottish Government has the power, and scientific advice, to create MPAs for nationally important populations of seabirds NOW. It must do so as a matter of urgency to stem the shocking declines in our seabird colonies.

The Firth of Forth Banks Complex pMPA must be designated and the Priority Marine Feature, lesser sandeel (*Amodytes marinus*), added as a protected feature.

All proposed sites for black guillemot (*Cephus grylle*) must be designated.

About RSPB Scotland

RSPB Scotland is part of the RSPB, which speaks out for birds and wildlife, tackles the problems that threaten our environment and promotes the conservation of wild birds and their habitats. We are a charity supported by nearly 90,000 members in Scotland, based in coastal and rural areas as well as towns and cities, and 2,358 volunteers who contributed 131,904 hours in 2011/12. Some 80% of our income, and thus our spend, is raised from the private sector and our membership, with the remainder coming from public funds, grants, trust funds and foundations.

RSPB Scotland's work covers a wide range of issues including planning, climate change, agriculture and marine issues. We work with the renewable energy industry on and offshore, and with all marine-based industries including fisheries and aquaculture, with the aim of developing sustainable businesses supporting coastal communities for the long term. We have practical experience of managing land and coast for conservation, farming, forestry and other enterprises. We undertake scientific and social research to underpin our policy analysis and advocacy. Our professional planning staff comment on several hundred individual project proposals in Scotland each year. Together with our partners in Birdlife International, we have expertise in spatial planning, marine and sustainability issues within Scotland and throughout Europe and the world.

Summary of RSPB Scotland's key points

Scotland is home to 24 species of breeding seabirds. Scottish Natural Heritage reports significant declines in our seabird colonies since 1986 – as much as 80% decline in Arctic skua, and 68% in black-legged kittiwake¹. Using RSPB Scotland's most recent data, scientists predict that some of Scotland's globally important seabird colonies could soon be extinct in parts of the country. Despite these long term declines and RSPB Scotland's continued support for nationally important Marine Protected Areas (MPAs), the MPAs proposed by the Scottish Government will only protect ONE of Scotland's 24 breeding seabird species. We are angered and perplexed by the exclusion of almost all seabird species from the current proposals. Our key arguments are:

1. The Scottish Government has the power to create MPAs for seabirds now. It must do so as a matter of urgency to stem the shocking declines in our seabird colonies. MPAs can help seabirds build resilience to climate change and food shortages, and will protect them against badly sited developments at sea. The current proposals only include protection for black guillemot, the Scottish population of which is stable². A network which protects one species of seabird (and only 39 species and habitats in total) is not ecologically coherent - a duty under the Marine (Scotland) Act 2010.
2. RSPB Scotland is not suggesting that national MPAs can or should replace marine Special Protection Areas (SPAs), or compensate for the lack of marine SPAs. On land, there are two different levels of protection, whereby nationally important populations are protected by SSSIs (under domestic legislation) and internationally important populations are protected by SPAs (under European law). Our seas must be afforded the same protection through these two complementary tiers – (1) marine extensions to existing SSSIs on land, and other sites to protect nationally important populations of seabirds, and (2) SPAs for foraging 'hotspots' where internationally important populations of seabirds feed. The Scottish Government must designate both tiers of MPAs now to comply with national and international law.
3. RSPB's seabird tracking data from around Scotland show that seabirds do aggregate and that important areas can be identified and protected now. Where data show seabirds to be feeding at areas of sea already included in MPA proposals, these species should be immediately added as protected features for those MPAs. Tracking data show the 'Southern Trench' search location is important for a number of seabird species. Also, the proposed 'Loch Sunart to the Sound of Jura' MPA, if extended slightly, would protect an important seabird foraging area at the Gulf of Corryvreckan. These sites and other feeding 'hotspots' must be designated now.
4. The Scottish Government has extended protection around internationally important seabird colony SPAs into the sea, to help protect waters at the base of their breeding cliffs. These 'maintenance' areas are used for a variety of behaviours such as preening and courtship. However, this protection has not been extended to our nationally important SSSI colonies. We have identified at least six colonies which could have their existing protection on land extended out to sea; we gained support from local people and community organisations for these proposals, but these were

¹ <http://www.snh.gov.uk/docs/B424907.pdf>

² <http://www.snh.gov.uk/docs/B424907.pdf>

rejected by Scottish National Heritage. The Scottish Government can, and must, designate these sites now.

5. The six MPAs proposed to protect black guillemot must be designated and effectively managed to meet the conservation objectives set out for each site. Because black guillemot populations are not in decline, few management measures have been proposed by Government. RSPB Scotland support precautionary restrictions to 'set net' fishing in the areas (to protect against entanglement) and to implement biosecurity best practice to stop invasive species, for example rats populating islands predated on eggs and chicks.
6. Seabird species must be added to the Scottish Government's list of Priority Marine Features. The PMF list '*represents 80 habitats and species of marine conservation importance ... for which action will be prioritised*'. RSPB Scotland believes that declining seabird species have a desperate need for such focused action. Seabirds can be proven to meet the criteria-based approach used to identify PMFs. Excluding seabirds from this list is yet another lapse in logic from the Scottish Government.
7. The three sites proposed to protect sandeels – a prey species heavily relied upon by our seabirds - must be designated and managed effectively. These include North-west Orkney which holds a spawning stock important to much of the North Sea ecosystem. An 'optional' site, the Firth of Forth Banks Complex, must be designated and include sandeels as a protected feature. This area is one of the most important sandeel areas on the Scottish east coast.
8. The continued delay in the designation of MPAs for seabirds causes unnecessary costs for developments at sea due to regulatory uncertainty. In May, RSPB Scotland and Scottish Environment LINK joined with the oil and gas, fishing industries and others to ask Government to follow good science to select MPAs so that multiple benefits can flow from the improved health of our seas and avoid unnecessarily prolonging the designation process.
9. Management of MPAs must achieve the protection and, where appropriate, enhancement of the health of Scotland's seas as is a duty in the Marine (Scotland) Act 2010. The current management proposals protect the *status quo* in most areas. We support strong management throughout MPA sites.
10. Attempts to assess the socio-economic costs of the MPAs proposals are based on some false assumptions and little effort has gone into quantifying the potential benefits of having a well managed marine environment. We estimate that, in 2000, £1.3 million of tourism spending could be attributed to Orkney's birds³. The Scottish Government's own figures show marine wildlife tourism contributes £63million to the Scottish economy annually⁴.

RSPB Scotland is a signatory to, and therefore fully supports, the consultation response submitted by Scottish Environment LINK. However, this individual response by RSPB Scotland focuses on the exclusion of all but one of Scotland's seabird species from the process to designate Scotland's MPA network.

³ https://www.rspb.org.uk/Images/watchedlikeneverbefore_tcm9-133081.pdf

⁴ <http://www.scotland.gov.uk/Resource/Doc/311951/0098489.pdf>

RSPB Scotland's response to the consultation questions

1. Do you support the development of an MPA network in Scotland's Seas?

Yes X

RSPB Scotland fully supports the development of an ecologically coherent network of MPAs in Scotland's seas, and we strongly welcomed the Scottish Government's commitment to this in the Marine (Scotland) Act 2010. Indeed, RSPB Scotland has campaigned for a network of MPAs to protect Scottish marine wildlife for over 15 years.

We have supported the Scottish Government in developing MPAs through our significant involvement in the Cabinet Secretary's Marine Strategy Forum, and its predecessors the Sustainable Seas Task Force, the Advisory Group on Marine and Coastal Strategy.

We have invested significant time, resources and effort in the national MPA process in Scotland, attending all stakeholder workshops, and inputting evidence and expertise including undertaking groundbreaking seabird tracking science to better understand population dynamics, sensitivities and foraging radii of Scotland's seabirds. Using RSPB Scotland's most recent data, scientists predict that some of Scotland's globally important seabird colonies could soon be extinct in parts of the country.

Species like common guillemots, razorbills and puffins are struggling to cope with increasing threats including a lack of food and the effects of climate change, leaving Scotland's once bustling seabird 'cities' in danger of falling silent. Scottish Natural Heritage reports significant declines in our seabird colonies since 1986 – as much as 80% decline in Arctic skua, and 68% in black-legged kittiwake.

Despite these long term declines in Scotland's seabird populations, and RSPB Scotland's continued support for MPAs, the sites proposed by the Scottish Government will only protect ONE of Scotland's seabird species – the black guillemot, the Scottish population of which is stable.

We believe that the exclusion of all but one of Scotland's 24 breeding seabird species from protection from MPAs entirely undermines Scotland's groundbreaking marine legislation, the Marine (Scotland) Act 2010.

The Scottish Government is obligated to designate an 'ecologically coherent network of MPAs. However, these proposed MPAs will only offer direct protection to 39 species and habitats, a tiny proportion of the 6,500 species and many important habitats found in Scotland's seas. This goes against the intended interpretation of the OSPAR recommendations which ask that the areas include 'the range of species, habitats and ecological processes (for which MPAs are a suitable measure)'. **An MPA network that does not represent the full range of seabirds cannot be considered ecologically coherent at any geographic scale.** Not only does this mean the Scottish Government will fail to meet a duty under its own Marine Act, but it will also fail to meet international commitments including those

under the OSPAR Convention, the World Summit on Sustainable Development, and the EU Marine Strategy Framework Directive.

The Scottish Government now has the power to create MPAs for our seabirds, which, together with other well-managed sites, would form a globally-renowned network of MPAs. **The Scottish Government must designate these sites now as matter of urgency to stem the shocking declines in our seabird colonies.** MPAs for seabirds would throw colonies a lifeline by allowing them to increase their resistance to increasing threats of climate change, food shortages and badly sited developments at sea excluding seabirds from their feeding areas or damaging important habitats. Of course, MPAs cannot reverse the pervasive and damaging effects of climate change, but, as an integral part of Scotland's new marine planning system, MPAs can be managed appropriately to prevent human activities from piling on the pressure to seabirds on top of climate change hardships.

Advice from independent scientists to the UK government stresses that *"MPAs can make an important contribution to the conservation of highly mobile species, for example by protecting sites that are important for certain stages in their life cycles (such as breeding sites), or by protecting populations of prey species."*

RSPB's seabird tracking data from around Scotland show that seabirds do aggregate and that important areas can be identified and protected now. **These sites and other feeding hotspots must be designated as a matter of urgency. Where data show seabirds to be feeding at areas of sea already included in MPA proposals, these seabird species should be immediately added as protected features for those MPAs.**

RSPB Scotland is not suggesting that national MPAs can or should replace marine Special Protection Areas (SPAs), or compensate for the lack of marine SPAs. On land, there are two different levels of protection, whereby nationally important populations are protected by SSSIs (under domestic legislation) and internationally important populations are protected by SPAs (under European law). Our seas must be afforded the same protection through these two complementary tiers – (1) marine extensions to existing SSSIs on land, and other sites to protect nationally important populations of seabirds, and (2) SPAs for foraging 'hotspots' where internationally important populations of seabirds feed. The Scottish Government must designate both tiers of MPAs now to comply with national and international law.

Therefore, we utterly refute the argument by Scottish Government that SPAs will offer sufficient protection to Scotland's seabirds (other than Black Guillemot) and so need not be protected in national MPAs. We cannot understand why Scotland's marine wildlife and is being afforded less protection than, for example, farmland or forests.

The Scottish Government has already extended protection around internationally important seabird colony SPAs into the sea, to help protect waters at the base of their breeding cliffs. These 'maintenance' areas are used for a variety of behaviours such as preening and courtship. However, this protection has not been extended to our nationally important SSSI colonies. **We have identified at least six colonies which could have their existing protection on land extended out to sea; we gained support from local people and community organisations for these**

proposals, but these were rejected by Scottish National Heritage. The Scottish Government can, and must, designate these sites now.

As well as seabirds have been largely excluded from the process of the selecting Scotland's MPAs, there are no other binding, explicit or targeted conservation measures for seabirds in the marine environment. In addition, there is no effective comprehensive programme of data acquisition to inform the protection and management of seabirds at sea. More than 30 years after the deadline for implementing the Birds Directive in the UK, there are no protected areas for seabirds feeding out at sea. Therefore, it is ludicrous that the Scottish Government appears resolutely to rely on SPAs as the sole means by which it will meet its obligations of the EU Birds Directive.

The Scottish Government must use this opportunity to designate a national tier of MPAs for seabirds in addition to black guillemot to comply with the Birds Directive:

- Article 2, to protect areas for important populations and aggregations of birds and other species, which do not qualify for European level protection (i.e. designate a national tier of MPAs equivalent to terrestrial SSSIs).
- Article 3, which requires the taking of requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for wild birds.
- Article 4, to contribute as part of a package of special conservation measures for all Annex 1 and regularly occurring migrant species.

The Scottish Government also claims that seabirds will gain some 'consequential' protection from MPAs designated for other species and habitats. We do not accept this: unless seabirds are designated as protected features of MPAs, seabirds will not benefit directly, or even indirectly, from this protection, as the site will not be managed with their interests in mind.

The continued delay in the designation of MPAs for seabirds causes unnecessary costs for developments at sea due to regulatory uncertainty. In May, RSPB Scotland and Scottish Environment LINK joined with the oil and gas, fishing industries and others to ask Government to follow good science to select MPAs so that multiple benefits can flow from the improved health of our seas and avoid unnecessarily prolonging the designation process.

At the very least, **Seabird species must be added to the Scottish Government's list of Priority Marine Features.** The PMF list '*represents 80 habitats and species of marine conservation importance ... for which action will be prioritised*'. RSPB Scotland believes that declining seabird species have a desperate need for such focused action. Seabirds can be proven to meet the criteria-based approach used to identify PMFs. Excluding seabirds from this list is yet another lapse in logic from the Scottish Government.

Individual possible Nature Conservation MPAs

2. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Clyde Sea Sill* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the Scottish Government proposal to designate the Clyde Sea Sill MPA to protect black guillemot, circalittoral sand and coarse sediment communities, and fronts.

Fronts have been proposed as a protected feature because of their ecological significance and the role they play as highly productive areas utilised by many trophic layers. Tyler-Walters et al (2012)⁵ use seabirds as a descriptor of a front. Given that MPAs must be managed in a way that protects against a significant risk to the protected feature and that the species using the front are what characterise it and have made it appropriate for conservation, the species using the front must be protected within it. We would welcome clarity on how the descriptors of a front will be protected by this site and whether their status will be considered in the status of the protected feature.

Kober et al (2012)⁶ shows that the area is used by high numbers of northern gannet (likely those from the 23,000 pairs breeding in the Ailsa Craig SSSI/SPA) and RSPB's own tracking shows that black-legged kittiwake come to forage in the site from as far away as Rathlin Island, Northern Ireland.

This area's importance for seabirds provides added justification for the site's designation and for the consideration of seabirds as vital constituent parts of the proposed protected features.

RSPB Scotland wishes to draw attention to the Sanda Island SSSI, which sits within the pMPA, and is designated for black guillemot, Atlantic puffin, European shag, great black-backed gull, northern fulmar, European storm petrel, razorbill, common guillemot, Manx shearwater, great cormorant and black-legged kittiwake. Of these 11 species, five are classed as being in 'unfavourable' condition within the Sanda Island SSSI⁷. An extension of the Sanda Island SSSI into the marine environment was an RSPB Scotland 'third party proposal' to protect razorbills (RSPB Scotland submitted six 'third party proposals' to extend SSSIs into the

⁵ Tyler-Walters, H., James, B. (eds.), Wilding, C., Durkin, O., Lacey, C., Philpott, E., Adams, L., Chaniotis, P.D., Wilkes, P.T.V., Seeley, R., Neilly, M., Dargie, J. and Crawford-Avis, O.T. (2012). *Descriptions of Marine Protected Area (MPA) search features*. A report produced by MarLIN (Marine Life Information Network), SMRU Ltd., Scottish Natural Heritage and the Joint Nature Conservation Committee, for the Scottish Marine Protected Areas Project.

⁶ Kober, K., Wilson, L.J., Black, J., O'Brien, S., Allen, S., Win, I., Bingham, C. and J.B. Reid, 2012. The identification of possible marine SPAs for seabirds in the UK: The application of Stage 1.1 – 1.4 of the SPA selection guidelines. JNCC Report No 461.

⁷ http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=1402

marine environment – all six were rejected by SNH). Given the importance of this site for seabirds and the continued declines recorded across the country we strongly recommend that this third party proposal is reconsidered, and that the area that is already being considered for black guillemot is also designated for razorbill.

Management Options: Yes

Given the importance of this area to seabirds, indicated above, and that the management option paper for this site aims to “*make a genuine and long-lasting contribution to the protection of Scotland’s marine environment*”, RSPB Scotland urges that decisions made when establishing the site’s management plan consider the potential benefits to Scotland’s seabirds and the wider marine environment.

Renewables

Given the proximity of the lease site to Sanda Island SSSI (1.7 Km approx.), Ailsa Craig SPA/SSSI (30.3 Km approx.), and the foraging habits of many of the birds, we recommend that the lease site extant within this pMPA be developed with a condition that seabird monitoring work is carried out to assess the impact of the structure.

Given the potential effect renewable developments can have on black guillemot, we recommend that no additional renewable developments are granted permission within the pMPA until extensive monitoring work of the lease site is completed.

Proposals from holders of the tidal power lease, OceanFlow Energy, are for a 1/4 scale Evopod device. This device has a submerged turbine. “*Wave and tidal stream devices with rotating turbines are likely to pose a greater threat to birds than those without such blades. While in many ways analogous to both wind turbines and the propellers of ships and boats, the turbines of wave and tidal devices spin at considerably slower speeds, at or below 12 ms⁻¹, than such analogues, and therefore are less likely to cause injury*” (McCluskie *et al.*, RSPB 2012)⁸.

Waggitt and Scott (2013) state that “*Auks Alcidae sp, cormorants Phalacrocorax sp. and divers Gavia sp. are most vulnerable to collisions due to their tendency to consistently dive to depths where moving components are found, and also to exploit habitats suitable for tidal stream turbine installations.*” therefore there is a risk to black guillemot from this development⁹.

Other factors to consider are moorings and cables used in renewable developments. These are particularly important considerations for foraging birds, and strengthen the argument for monitoring work, given the number of birds in this area.

⁸ McCluskie, A.E., Lagston, R.H.W., Wilkinson, N.I., Birds and wave & tidal stream energy: an ecological review. RSPB Research Report: 42.

⁹ Waggitt, J.J., Scott, B.E. 2013. Using a spatial overlap approach to estimate the risk of collisions between deep diving seabirds and tidal stream turbines: A review of potential methods and approaches.” Marine Policy (in Press)

Fisheries

RSPB Scotland strongly supports the management option to remove or avoid set nets from within the site, and throughout the site.

Monitoring and compliance of set net activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

Should a fishing practice thought to cause seabird bycatch or mortality commence, recommendations from the EU's Action Plan for reducing incidental catches of seabirds in fishing gears must be adopted (COM(2012) 665).

We agree that reducing or limiting pressures from demersal mobile/active should be considered to meet guidelines on circalittoral sand and coarse sediment. This should be fully discussed with skippers in the area and other stakeholders (including environmental and wider community stakeholders, not just fishing interests).

Guideline 2b in the assessment paper for this site lists a number of the species which are present due to the circalittoral and coarse sediment. We seek clarification on whether management options have considered any effects activities will have on these species as well as the feature.

Biosecurity

RSPB Scotland strongly supports the management measure to reduce or avoid the spread of mammalian predators and we would strongly support the development of biosecurity plans for the terrestrial breeding habitat adjacent to this ncMPA. The RSPB shall be developing biosecurity best practice guidelines as part of a parallel project and we welcome discussion regarding the application of these guidelines within these colonies.

Given the close association between black guillemot and kelp beds (and other habitats rich in algae), RSPB Scotland suggests that this MPA is considered in the parallel draft seaweed policy statement consultation, and particularly with regards to guidance developed for the harvest of wild seaweed.

Socioeconomic Assessment: Yes

This area is already important for seabird and wildlife tourism. Throughout summer 2005, an RSPB *Aren't Birds Brilliant* project staffed by volunteers showed people seabirds from boats on the Firth of Clyde. The volunteers provide information on the birds, their conservation and the management of marine areas.

RSPB Scotland staff met with approximately 2,000 passengers sailing around Ailsa Craig, on the world's last ocean-going paddle steamer The Waverley, and on the

Caledonian MacBrayne Ardrossan-Brodick (Arran) commercial ferry service. (Watched Like Never Before, RSPB¹⁰).

Designation and appropriate management of this site will contribute to ensuring these socioeconomic benefits may continue. Without the designation, and based on the trends already observed in the Clyde, RSPB Scotland are concerned that they may be short-lived.

3. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *East Caithness Cliffs* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of the proposed East Caithness Cliffs MPA to protect black guillemot.

The proposed site boundaries hold a significant proportion of Scotland's black guillemot population, and have been established based on scientific evidence endorsed by RSPB. RSPB Scotland welcomes the alignment of this site with the existing SPA seaward extension.

Razorbills tracked by RSPB from Orkney have visited this site in every studied year (2010 – 2013; n = 47), black-legged kittiwake have also visited the site in 2011 and 2012 (n = 39) and more than half of the tracked northern fulmar from Orkney visited this area in 2012 (n = 3). These data indicate the sites' relevance to seabirds outwith this area and add further justification to both this new MPA proposal and to properly protect the existing SPA extension.

Management Options: Yes

RSPB Scotland strongly supports the management option to remove or avoid set nets from within the site, and throughout the site.

Should a fishing practice thought to cause seabird bycatch or mortality commence, recommendations from the EU's Action Plan for reducing incidental catches of seabirds in fishing gears must be adopted (COM(2012) 665)¹¹.

Monitoring and compliance of set net activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

RSPB Scotland strongly supports the management measure to reduce or avoid the

¹⁰ https://www.rspb.org.uk/Images/watchedlikeneverbefore_tcm9-133081.pdf

¹¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0665:FIN:EN:PDF>

spread of mammalian predators and we would strongly support the development of biosecurity plans for the terrestrial breeding habitat adjacent to this ncMPA. The RSPB shall be developing biosecurity best practice guidelines as part of a parallel project and we welcome discussion regarding the application of these guidelines within these colonies.

RSPB Scotland welcomes the alignment of this pMPA with the existing East Caithness Cliffs SPA, and suggests that management measures are applied in a way that provides benefits to the entire species assemblage across MPA and SPA. Given the results of RSPB tracking studies, we suggest that management should consider these wider seabird species and the potential benefits the MPA could provide them, if the site is to make the “*genuine and long lasting contribution to the protection of Scotland’s marine environment*” as is stated in the management option paper.

Given the close association between black guillemot and kelp beds (and other habitats rich in algae), RSPB Scotland suggests that this MPA is considered in the parallel draft seaweed policy statement consultation, and particularly with regards to guidance developed for the harvest of wild seaweed.

Socioeconomic Assessment: Yes

Costs have been identified in the BRIA which relate to port and harbour activities. However, management of these activities have not been proposed in the management options paper. The link between these is spurious and must be clarified if the estimates are to be used in ministerial decision making.

All of the above: Yes

Strategic Environmental Assessment: By establishing biosecurity on the cliffs, this site would also be contributing safeguards to populations of other seabirds breeding along Caithness cliffs. RSPB Scotland welcomes this action.

However, unlike black guillemot, many of these species are in decline nationally. For biosecurity to offer real benefits to these species, and for the Scottish Government to meet its obligations under the Birds Directive, protection of at-sea feeding areas (beyond colony extensions) will also be required for these birds. RSPB Scotland strongly urges the Scottish Government to take all measures necessary to protect these areas.

4. Do you have any comments on the case for designation, management options and socioeconomic assessment for the East of Gannet and Montrose Fields possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the proposed East of Gannet and Montrose Fields MPA. The southern part of the pMPA includes one of very few examples of deep-sea mud on the continental shelf in the North Sea warranting this added protection.

Management Options: Yes

RSPB Scotland supports the removal or avoidance of bottom contact mobile fishing gear, as advised by JNCC, to reduce the risk of not achieving the conservation objectives for offshore deep sea muds and ocean quahog to the lowest possible levels.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

RSPB Scotland supports the removal or avoidance of oil and gas activity, as advised by JNCC, to reduce the risk of not achieving the conservation objectives for offshore deep sea muds and ocean quahog to the lowest possible levels..

RSPB Scotland supports the use of these management options throughout the extent of the site, given that its boundaries were determined based on the extent of suitable habitat for ocean quahog, this would most be the most effective application of this MPA and would contribute to the protection and enhancement of Scotland's seas.

Socioeconomic Assessment: Yes

RSPB Scotland notes that the Business and Regulatory Impact Assessment for this site indicates a moderate recovery of fish stocks as a result of the designation of this MPA. Such a result is welcomed by RSPB Scotland but is provisional based on the application of management similar to those options we have supported above.

All of the above: Yes

Strategic Environmental Assessment: A strategic environmental assessment needs to consider the likely impacts of a public plan on the environment. Tracking

data show northern fulmar from Bullers of Buchan and northern gannet tracked from Bass Rock have been observed within this site (Wakefield et al., 2013)¹². If management is developed in a way that considers wider ecosystem function, this site may provide benefits to these species.

5. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Faroe-Shetland sponge belt* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the proposed Faroe-Shetland Sponge Belt MPA.

JNCC's own data, presented in Pollock et al (2000)¹³, has shown this region is frequently used by high proportions of a number of seabird species, and that the oceanographic feature represented in the area provides a much wider benefit to Scotland's seas.

Management Options: Yes

Given that Pollock et al (2000)¹³ show the area to be used by a number of seabird species, and that the management option paper for this site indicates its aim is to "*make a genuine and long-lasting contribution to the protection of Scotland's marine environment*", RSPB Scotland urges that decisions made when establishing the site's management plan consider the potential benefits to Scotland's seabirds and the wider marine environment.

RSPB Scotland supports the removal of bottom contact mobile and static gear from the site, as advised by JNCC, and as this is the only option that would allow the conservation objective to be achieved for deep-sea sponge aggregations.

The management options paper suggests that this activity be removed in areas where deep-sea sponges occur. Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

¹² Wakefield, E.D., Bodey, T.W., Bearhop, S., Blackburn, J., Colhoun, K., Davies, R., Dwyer, R.G., Green, J., Gremillet, D., Jackson, A.L., Jessopp, M.J., Kane, A., Langston, R.H.W., Lescroel, A., Murray, S., Le Nuz, M., Patrick, S.C., Peron, C., Soanes, L., Wanless, S., Votier, S.C., Hamer, K.C. 2013. Space Partitioning Without Territoriality in Gannets *Science* 1-5

¹³ Claire M. Pollock, Roderick Mavor, Caroline R. Weir, Ailsa Reid, Richard W. White, Mark L. Tasker, Andy Webb, & James B. Reid. 2000. The distribution of seabirds and marine mammals in the Atlantic Frontier, north and west of Scotland. JNCC.

RSPB Scotland supports the removal or avoidance of pressures associated with oil and gas licensed activities. We support case by case consideration of these activities where there may be negative environmental impacts.

6. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Fetlar to Haroldswick* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of this site for black guillemot and other features as proposed.

As cited in the consultation document, this site holds a significant percentage of the Great British population of black guillemot and is therefore vital for the representivity of this feature within the network.

The site overlaps with the Fetlar SPA which supports 80% of the British population of red-necked phalarope, more than 1% of British population of Arctic tern and 3.7% of the global great skua population. Its seabird assemblage also contains Arctic skua and northern fulmar¹⁴. The presence of these species and the severe declines they are experiencing at this site are further justification for this pMPA to be designated.

Management Options: Yes

Noting the global importance of Shetland to breeding seabird populations, and the particularly severe declines in these populations (SNH, 2013)¹⁵, RSPB Scotland urges that decisions made when establishing the site's management plan consider the potential benefits to Scotland's seabirds and the wider marine environment. Such consideration is essential here if this site is to realise the aim stipulated in the management option paper to *"make a genuine and long-lasting contribution to the protection of Scotland's marine environment"*.

Biosecurity

RSPB Scotland strongly supports the management measure to reduce or avoid the spread of mammalian predators and would strongly support the development of biosecurity plans for the terrestrial breeding habitat adjacent to this pMPA. RSPB Scotland shall be developing biosecurity best practice guidelines and will welcome discussion regarding the application of these guidelines within colonies adjacent to pMPAs.

¹⁴ <http://www.snh.org.uk/about/directives/fetlarB433700.pdf>

¹⁵ <http://www.snh.gov.uk/docs/B424907.pdf>

Fisheries

RSPB Scotland strongly supports the management option to remove or avoid set nets from within the site, and throughout the site, as these activities occur.

Monitoring and compliance of set net activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

Should a fishing practice thought to cause seabird bycatch or mortality commence, recommendations from the EU's Action Plan for reducing incidental catches of seabirds in fishing gears must be adopted (COM(2012) 665)¹⁶.

We agree that reducing or limiting pressures from any fishing activity should be considered to meet the objectives of the site. This should be fully discussed with skippers in the area and other stakeholders (including environmental and wider community stakeholders, not just fishing interests).

Aquaculture

We support the move to remove/avoid consents or expansions of existing leases and seek assurances that all use of predator deterrents on existing developments within the pMPA are non-lethal and will not affect protected features for which the site has been designated.

The government proposal is for aquaculture development to use "best practice" in relation to anti-predator methods within 2km of black guillemot sites. Black guillemots can forage up to 5km from nest sites¹⁷ so, as a precautionary approach, RSPB Scotland recommends extending the radius from nest sites where anti-predator methods should be used.

We welcome the commitment to work with shellfish farms to gather more information on the effects the pollution from these sites has on other features for which this site has been proposed.

It must be noted that studies show that finfish aquaculture can have a damaging effect on maerl beds and that such habitats can be "highly sensitive" to pollution from such developments (Aguado-Giménez & Ruiz-Fernández 2012)¹⁸.

We would support relocation of farms causing damage to protected features. Some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

Socioeconomic Assessment: Yes

¹⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0665:FIN:EN:PDF>

¹⁷ BirdLife International seabird wikispaces. <http://seabird.wikispaces.com/Black+Guillemot>. Accessed 01/11/013.

¹⁸ Aguado-Giménez, F., Ruiz-Fernández, J.M., 2012. Influence of an experimental fish farm on the spatio-temporal dynamic of a Mediterranean maerl algae community. *Marine Environmental Research* 74

Fetlar to Haroldswick pMPA is already important for seabirds and wildlife tourism. The RSPB reserve at Sumburgh Head attracts around 30,000 visitors annually making it the second biggest tourist attraction on Shetland. Tourism employs 629 FT and 571 PT staff on Shetland¹⁹. Although the Sumburgh Head reserve is on the southern part of the island, the information provided here shows that seabirds are of important economic benefit to the island and its people.

Designation and appropriate management of this site will contribute to ensuring these socioeconomic benefits may continue. Without the designation, and based on the trends already observed in the Shetland, RSPB Scotland is concerned that they may be short-lived.

7. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Hatton-Rockall Basin* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the Hatton-Rockall Basin possible Nature Conservation MPA for the protection of deep-sea sponge aggregations, offshore deep-sea muds and sediment drift.

Management Options: Yes

RSPB Scotland supports the recommendation for removal or avoidance of bottom contact mobile fishing gear, as advised by JNCC, to reduce the risk of not achieving the conservation objectives for deep sea muds, and as this is the only option to allow the conservation objectives to be met for deep sea sponge aggregations.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary. Further research is needed to clarify the type and extent of fishery in this area.

Pilot whale and northern bottlenose whale are known to use this site and should be included in the management options and socioeconomic assessments.

Socioeconomic Assessment: Yes

¹⁹ http://www.shetland.gov.uk/economic_development/documents/29523statisticpages_000.pdf.

There is very little information available to comment on the socioeconomic cost and benefits of this site. The costs of proposed management options is relatively low and there is no information available on the economic benefits accrued through ecosystem services and other by means.

All of the above: Yes

Further surveys are needed to identify the full extent of sponge aggregations and to document their species richness. It is likely that the area will support a large number of as species not yet known to the area.

8. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Loch Creran* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this proposed MPA. The area has already been declared an SAC and MPA management will need to refer to, and align with, the objectives of the SAC.

Management Options: Yes

RSPB Scotland supports the removal or avoidance of pressures associated with finfish farms, shellfish farms, demersal mobile active gear and diver collection of bivalves throughout areas where flame shell occur. We also support the reduction or limitation of pressures associated with static gear in these areas.

RSPB Scotland welcomes the proposal for these measures in areas holding flame shells. However, given that suitable habitat for this species exists beyond its current distribution, RSPB Scotland notes that reducing or limiting pressures beyond the feature's current extent may facilitate some enhancement of the feature within the site and contribute to the achievement of the appropriate enhancement duties within the Marine (Scotland) Act 2010.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

RSPB Scotland strongly believes that management of aquaculture should not be restricted to its geographic extent. Some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that

they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

Socioeconomic Assessment: Yes

The area is hugely important for marine tourism, including sailing, angling and diving. Without this MPA designation, and especially when considering that the NMP will likely increase impacts on the marine environment, these activities may be damaged. Designation and appropriate management of this site will contribute to ensuring their continuation.

9. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Loch Sunart* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this proposed MPA.

Serpulid aggregations are extremely rare and have declined in other parts of Scotland's seas. In this pMPA there are areas of suitable habitat beyond the features' current extent, and the detailed assessment site selection guidelines already indicates there is an ambition to see the current aggregation develop into a reef. We therefore suggest that this ambition is formally acknowledged in the designation of this site by using a 'recover' conservation objective.

The area has already been declared SAC for the reefs habitats and management, this MPA needs to refer to, and align with, the objectives of the SAC.

Management Options: Yes

RSPB Scotland supports the removal or avoidance of shellfish and finfish farms from areas of flame shell beds, northern feather star aggregations and serpulid aggregations. We would support relocation of farms causing damage to protected features. Some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

We support the removal or avoidance of moorings, demersal mobile gear and diver collection of bivalves operating in areas overlapping with flame shell beds and serpulid aggregations, as well as the removal or avoidance of static gear from areas overlapping with serpulid aggregations.

We support the reduction or limitation of pressures associated with demersal mobile gear in areas of northern feather star aggregations on mixed substrata and of pressures associated with static gear fishing in all areas of flame shell beds.

We support the removal of anchorages from the entire of Loch Teacuis and moorings that overlap serpulid aggregations.

Socioeconomic Assessment: Yes

The socioeconomic impact data presented in the BRIA indicates the relatively small displacement costs (£46,000 - £70,000 pa) by restricting damaging activities. This will be greatly outweighed by the medium to long term benefit of protecting the ecological integrity and function of the site.

Data published data by Kenter et al (2013)²⁰ estimated the socioeconomic benefits provided by this pMPA if it were designated and properly managed. Estimates related to economic gain from local and visiting recreational anglers and divers (with likely flow on to local community businesses) and concluded a potential income of up to £3.8 million - based on a willingness to pay survey evaluation under a scenario that the pMPA is afforded the highest levels of protection.

RSPB Scotland has reserves at Colonsay, Oronsay, the Oa and Loch Gruinart which are visited by around 10,000 people every year. We are also involved with white-tailed eagle tourism in Mull. Wildlife tourism on Mull is worth around £5 million per year to the local economy²¹. This type of tourism is mainly focused on white-tailed sea eagles, but seabirds and other wildlife are also an important draw for tourists. Designating the Loch Sunart to Sound of Jura MPA gives the west coast of Scotland more special places tourists can visit, boosting local economies. The BRIA document states that *“tourism may benefit from the designation of the MPA as an added attraction to the destination”*.

Designation and appropriate management of this site will contribute to ensuring these socioeconomic benefits may continue.

All of the above: Yes

Strategic Environment Assessment: Craik and Campbell (2000)²² found that common eider, common tern, common gull and black guillemot numbers in Loch Sunart have decreased greatly or disappeared entirely. RSPB Scotland urge that decisions made when establishing the site's management plan consider its potential benefits to Scotland's seabirds and the wider marine environment.

²⁰ Kenter, J.O., Bryce, R., Davies, A., Jobstvogt, N., Watson, V., Ranger, S., Solandt, J.L., Duncan, C., Christie, M., Crump, H., Irvine, K.N., Pinard, M., Reed, M.S. (2013). The value of potential marine protected areas in the UK to divers and sea anglers. UNEP-WCMC, Cambridge, UK.

²¹ http://www.rspb.org.uk/Images/wildlifeatwork_tcm9-282134.pdf

²² Craik J.C.A. & Campbell, B. 2000. Bruce Campbell's islands revisited: Changes in the seabirds of Loch Sunart after half a century. *Atlantic Seabirds* 2(3/4): 181-194.

10. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Loch Sunart to the Sound of Jura* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this proposed MPA but suggests two amendments to the designation order.

i) RSPB Scotland suggests that black-legged kittiwake, common guillemot and razorbill are added as protected features to this site. Tracking data collected by RSPB Scotland from Colonsay across 4 years show that 47% of all black-legged kittiwake visited this site (n=72), 28% of all common guillemot visited the site (n=55) and 42% of razorbill visited the site (n=36). Between years the standard error in these values is no more than 0.14 and consequently we understand with a high level of accuracy that these populations are reliant on foraging conditions within the area. The results are also substantiated by JNCC's ship and aircraft based survey work (Pollock et al., 2000)²³ these species as protected features within this MPA would contribute to the conservation of these species and the achievement of the duties of the Birds Directive as well as site objectives for the Colonsay SSSI and SPA.

ii) RSPB Scotland suggests a 5km extension of the site's south western boundary in the Sound of Jura. Tracking data collected by RSPB from Colonsay show that an intensively used razorbill foraging area lies slightly outside this proposal, within a 5km from its boundary in the Sound of Jura. By extending the south western boundary by 5km, the proportion of razorbill visiting this site would be nearly doubled and greater than half of all tracked guillemots (from 13 to 24; n=36) will have been found within the site during some part of their at-sea movements. RSPB Scotland welcomes further discussion about these data. Some components of the Firth of Lorn SAC already extend this distance beyond this pMPAs currently proposed boundaries anyway so we suggest that this might also help align the objectives of the SAC and the MPA.

Management Options: Yes

Given the importance of this area to seabirds, described above, and that the management option paper for this site aim to *"make a genuine and long-lasting contribution to the protection of Scotland's marine environment"*, we urge that decisions made when establishing the site's management plan consider its potential benefits to Scotland's seabirds and the wider marine environment.

²³ Claire M. Pollock, Roderick Mavor, Caroline R. Weir, Ailsa Reid, Richard W. White, Mark L. Tasker, Andy Webb, & James B. Reid. 2000. The distribution of seabirds and marine mammals in the Atlantic Frontier, north and west of Scotland. JNCC.

Aquaculture

RSPB Scotland supports further research into the location of common skate nursery grounds to better support decision making with regards to finfish and shellfish licences in this site. Some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

Fishing

RSPB Scotland supports the reduction or limitation of mobile gear from this site. Common skate is sensitive to trawl fisheries both in terms of bycatch of mature individuals and in terms of damage to egg cases. There has been a significant decline in abundance and range contraction since the mid-1900s (Walker & Hislop 1998)²⁴ and the species is listed as an OSPAR threatened and/or declining species (OSPAR Agreement 2008-6) so clearly additional protection for these species is warranted.

We support the removal or avoidance of bottom set nets and long-lines within the site. Not only do these activities impact on common skate, they also cause bycatch for a wide-range of species including seabirds. We support the exclusion of these activities throughout the site.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

Socioeconomic Assessment: Yes

Sea angling represents a significant income within this site²⁵. Designation of this area as an MPA would contribute to ensuring that these socioeconomic benefits continue.

All of the above: Yes

Strategic Environmental Assessment: A Strategic Environmental Assessment should judge the likely impact of a public plan on the environment. RSPB Scotland ask that the seabird species listed above are considered for designation within this site, in which case the potential for this site to contribute to the Scottish Government's already existing duties under the Birds Directive and for the Colonsay SPA should also be considered.

²⁴ Walker, P.A., Hislop, J.R.G. 1998. Sensitive skates or resilient rays? Spatial and temporal shifts in ray species composition in the central and north-western North Sea between 1930 and the present day. ICES Journal of Marine Science, 55: 392–402

²⁵ <http://www.scotland.gov.uk/Resource/Doc/280648/0084568.pdf>

11. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Loch Sween* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the Loch Sween MPA for the protection of burrowed mud, maerl beds, native oysters and sublittoral mud and mixed sediment communities. It is likely that maerl beds are more extensive than shown here.

RSPB seabird tracking data (currently unpublished) shows black-legged kittiwake, common guillemot and razorbill use the Loch Sween pMPA, providing further justification for the site's designation.

Management Options: Yes

Aquaculture

RSPB Scotland agrees with the recommended management options regarding finfish aquaculture. RSPB Scotland supports the proposed management options to removal or avoidance of pressures associated with finfish aquaculture. We would support relocation of farms causing damage to protected features and also note that some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

Fishing

RSPB Scotland supports the removal or avoidance of bottom mobile gear and diver operated gear from areas of maerl and native oysters. However, we note that it is likely that maerl beds are probably more extensive than those shown in the point locality maps. Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

Socioeconomic Assessment: Yes

This site is already important for seabird and wildlife tourism; RSPB Scotland has well established reserves at Colonsay, Oronsay, the Oa and Loch Gruinart which are visited by around 10,000 people every year. We are also involved with white-

tailed eagle tourism in Mull. Wildlife tourism on Mull is worth around £5 million per year to the local economy²⁶. This type of tourism is mainly focused on white-tailed sea eagles, but seabirds and other wildlife are also an important draw for tourists. Designating the Loch Sween MPA gives the west coast of Scotland more special places tourists can visit, boosting local economies. Designation and appropriate management of this site may contribute to ensuring these socioeconomic benefits continue.

12. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Lochs Duich, Long and Aish* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the Lochs Duich, Long and Aish possible Nature Conservation MPA for the protection of burrowed mud and flame shell beds.

The pMPA exhibits the most significant population of flame shells recorded in Scotland (and possibly the world), and is the only known loch with detected fan mussel populations. The pMPA also represents the most significant remnant burrowed mud communities in sheltered and shallow sea lochs of Scotland. We note this pMPA overlaps with an existing SAC (primarily for protection of reef habitat) and management will need to refer to, and align with, the objectives of this SAC.

Management Options: Yes

Aquaculture

RSPB Scotland supports the removal or avoidance of pressures associated with new finfish farms and undeveloped consents as well as the expansion or relocation of existing fish farms in areas where they would be likely to impact on flame shell beds. Existing aquaculture ventures will need to ensure they are compliant with updated or revised Environmental Management Systems to ensure operations minimise local, and diffuse cumulative, impacts, particularly with respect to water quality, erosion, sedimentation and disease. We would support relocation of farms causing damage to protected features and also note that some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

Fishing

RSPB Scotland supports the removal or avoidance of demersal mobile gear from

²⁶ http://www.rspb.org.uk/Images/wildlifeatwork_tcm9-282134.pdf.

the areas flame shell beds and firework anemones occur.

We support the reduction of pressures associated with static gear within the pMPA and consider removal of static gear fishing where firework anemones, burrowed mud and flame shell populations are present.

We agree with the recommendations in the management options paper to exclude diver-operated hydraulic methods of bivalve collection in areas where flame shell and horse mussel are present.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

Socioeconomic Assessment: Yes

Data published by Kenter *et al* (2013)²⁷ show this MPA has the potential to provide £20million from divers and recreational divers, were it designated with the highest level of protection. In comparison, the socioeconomic information in the BRIA suggested that the cost of designation would be £97,000 - £220,000 per annum.

13. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Monach Isles* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of this pMPA. The proposed site boundaries hold a significant proportion of Scotland's Black Guillemot population and have been established based on scientific evidence endorsed by RSPB.

Management Options: Yes

RSPB Scotland strongly supports the management option to remove or avoid set nets from within the site, and throughout the site.

²⁷ Kenter, J.O., Bryce, R., Davies, A., Jobstovgt, N., Watson, V., Ranger, S., Solandt, J.L., Duncan, C., Christie, M., Crump, H., Irvine, K.N., Pinard, M., Reed, M.S. (2013). The value of potential marine protected areas in the UK to divers and sea anglers. UNEP-WCMC, Cambridge, UK.

Monitoring and compliance of set net activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

Should a fishing practice thought to cause seabird bycatch or mortality commence, recommendations from the EU's Action Plan for reducing incidental catches of seabirds in fishing gears must be adopted (COM(2012) 665)²⁸.

RSPB Scotland strongly supports the management measure to reduce or avoid the spread of mammalian predators and would strongly support the development of biosecurity plans for the terrestrial breeding habitat adjacent to this pMPA. RSPB Scotland shall be developing biosecurity best practice guidelines and will welcome discussion regarding the application of these guidelines within colonies adjacent to pMPAs.

Given the close association between black guillemot and kelp beds (and other habitats rich in algae), RSPB Scotland suggests that this MPA is considered in the parallel draft seaweed policy statement consultation, and particularly with regards to guidance developed for the harvest of wild seaweed.

Socioeconomic Assessment: Yes

Costs have been identified in the BRIA which relate to port and harbour activities. However, management of these activities have not been proposed in the management options paper. The link between these is spurious and must be clarified if these cost estimates are to be used in ministerial decisions about the designation of this site.

This area is already important for seabird and wildlife tourism, RSPB Scotland operates a reserve at Balranald on North Uist, directly opposite the Monach Isles. Research undertaken by RSPB Scotland, using the results of visitor surveys concluded that Balranald reserve brings an additional £137,092 to the Uists and Benbecula region and supports 3.69 FTE jobs. This represents 10% of total expenditure by the estimated 10,000 annual reserve visitors during their stay in the region. Designation and appropriate management of this site will contribute to ensuring the contribution of these benefits.

All of the above: Yes

Strategic Environmental Assessment: By establishing biosecurity on the islands, this site would also be contributing safe guards to the populations of northern fulmar, European shag, cormorant, common tern and Arctic tern breeding on the islands. However, unlike the black-guillemot, many of these species are in decline and also require protection of at-sea feeding areas if this additional benefit is to be

²⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0665:FIN:EN:PDF>

realised.

14. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Mousa to Boddam* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of this area as a MPA for sandeels. However, we do not support the proposed site boundaries. Acoustic data indicate the distribution of suitable sandeel habitat beyond the proposed site boundary, and no known absence data has been used to establish its limits. Most fundamentally, historic data indicate that this area is a component of a larger population. By protecting part of the population, the site may not be able to manage the protected features effectively and will therefore fail to meet MPA selection guideline stage 4. MPA site boundaries should be reconsidered to ensure the site is effective for the population which it seeks to protect.

The conservation objective for the sandeel feature should be set to recover.

The status of the species in this site is not known and, as a result, the conservation objective has been set as 'conserve (uncertain)'. RSPB Scotland suggests that seabird breeding success has been so poor that the sandeels must be in poor condition – long term and significant declines have been observed for seabird species that are particularly well suited to capturing sandeels. At Sumburgh Head, European shag numbers have fallen from 508 in 1988 to 79 in 2012; black-legged kittiwake productivity was 0.13 last year; common guillemot numbers have halved between 1993 and 2012; and razorbill numbers have fallen from 150 to 60 in 2012. At Mousa, there has been a significant negative trend in Arctic skua and a steep decline in lesser-black backed gull (0 breeding pairs in 2006 & 2007) as well as a decrease from 400 harbour (common) seals in 1983 to 77 in 2007. Latest advice from Scottish Natural Heritage indicates that prey availability is the principal cause in the decline of Scotland's seabirds (SNH, 2013)²⁹ and RSPB Scotland believes that this is sufficient evidence to show that the sandeel population in this pMPA must be recovered.

The overall trend cannot be the product of a phenological mismatch (seabird breeding dates have varied throughout this 10 year window) We suggest this is proxy evidence that sandeels in the site are in poor condition and potentially undersize as has been found in other parts of the North Sea (Wanless et al., 2004³⁰; Frederiksen et al, 2011³¹). The conservation objective of this feature should

²⁹ <http://www.snh.gov.uk/docs/B424907.pdf>

³⁰ Wanless, S., Wright, P.J., Harris, M.P., Elston, D.A. 2004. Evidence for decrease in size of lesser sandeels *Ammodytes marinus* in a North Sea aggregation over a 30-yr period. *Marine Ecology Progress Series* 279:237–246

³¹ Frederiksen, M., Elston, D.A., Edwards, M., Mann, A.D., Wanless, S. 2011. Mechanisms of long-term decline in size of lesser sandeels in the North Sea explored using a growth and phenology model. *Marine Ecology Progress Series* 432: 137–147

be set to recover to ensure the benefits this site provides to the wider seas are restored.

Management Options: Yes

RSPB Scotland strongly supports the statement made by Marine Scotland Science and SNH that a targeted sandeel fishery should not be permitted within the pMPA.

RSPB Scotland strongly supports the proposal to remove or avoid demersal hydraulic gear from this pMPA.

RSPB Scotland asks that research is undertaken to investigate the impact of demersal dredge on sandeel. The SNH advice states *“Whilst the use of other types of dredges do cause sub-surface abrasion, given the high energy environments that sandeels live within, their use is not considered likely to affect the conservation objective for sandeels within the possible MPA”*. Given that sandeels require the presence of oxygen to survive in the sediment, and the oxic layer in the seabed sediment is rarely more than 8 cm deep in the North Sea (Lohse et al. 1996)³², we can assume sandeels exist in the sediment within the top 8cm. Currie and Parry (1996)³³ found that dredge penetrated to 6cm in sandy sediment and Hall-Spencer et al (1999)³⁴ found that a significant change in suspended sediment following similar activity on sandy sediment lasted for 15 hours. Before this pressure can be dismissed in this site, robust evidence must be presented showing that it is not impacting on the achievement of the conservation objective for sandeels.

Socioeconomic Assessment: Yes

RSPB Scotland operates a reserve on the Island of Mousa and at Sumburgh Head, Mousa is within this proposal. These sites draw in local, national and international tourists that visit the site, specifically to see breeding seabirds. These seabirds are reliant on the health of the nearby prey stocks and, as indicated above, many are declining at Mousa and Sumburgh, as well as other colonies along the Shetland coastline.

Around 4,000 visitors are estimated to visit RSPB Scotland reserve at Mousa annually. 144 field teaching visits were made to Sumburgh head reserve in 2011, and the reserve was twice opened for free entry, once during the Shetland Nature Festival. A total of 5,253 people visited the site, 3,839 of whom were not already

³² Lohse, L., Epping, E., Helder, W., van Raaphorst, W. 1996. Oxygen porewater profiles in continental shelf sediments of the North Sea: turbulent versus molecular diffusion. *Marine Ecology Progress Series*, 145: 63-75

³³ Currie, D. R., and Parry, G. D. 1996. Effects of scallop dredging on a soft sediment community: a large-scale experimental study. *Marine Ecology Progress Series*, 134:131–150.

³⁴ Hall-Spencer, J. M., and Atkinson, R. J. A. 1999. *Upogebia deltaura* (Leach) (Crustacea, Thalassinidea) on maerl bed habitats in the Firth of Clyde. *Journal of the Marine Biological Association of the United Kingdom*, 79: 871–880

RSPB members.

Two fulltime members of staff are employed to manage the reserves, three part time staff are employed at Sumburgh Head reserve and a number of volunteers also work on the reserve during the season.

Visitors to Mousa use a ferry named 'The Mousa Boat' which is owned and operated by three members of the local community. Puffincam, a webcam placed in a puffin burrow, was cited by many visitors as their reason for visiting Shetland (this included people from California, Sweden, Switzerland and Austria). RSPB works in partnership with Promote Shetland. The importance of seabirds to the economy of the Islands should be fully considered as part of the socioeconomic baseline.

A decrease in sandeel spawning stock biomass induces a higher cannibalism for cod and whiting, leading in turn to a decrease in spawning stock biomass and yield for those predator species. This should be considered as part of the environmental baseline and a switch away from cannibalism should be considered as a benefit of designating this site.

All of the above: Yes

Strategic Environmental Assessment: The Scottish Government has obligations to conserve black guillemot, Arctic tern, storm petrel and common seal in the Mousa SSSI, as well as other species across Shetland. Significant declines have been experienced by a number of these species. Proper conservation of the sandeel stock within this MPA could assist in the achievement of obligations in the other areas.

15. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *North-east Faroe Shetland Channel* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the North-east Faroe Shetland Channel possible Nature Conservation pMPA for the protection of deep-sea sponge aggregations, offshore deep-sea muds, offshore subtidal sands and gravels, continental slope and a wide range of features of geological importance, including the Pilot Whale Diapirs - a series of deep-water mud volcanoes which measure 2-3km across and rise more than 70m above the surrounding seafloor in places. The proposed boundary is supported.

Management Options: Yes

RSPB Scotland supports the removal or avoidance of fishing gear, as advised by JNCC, to reduce the risk of not achieving the conservation objectives for offshore deep sea muds and sands and gravels to the lowest possible levels and to allow the conservation objective for deep sea sponges to be achieved.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

RSPB Scotland supports the removal or avoidance of pressures associated with licensed oil and gas activity in areas of ocean quahog, offshore sands and gravels, and deep sea sponge aggregations.

This area has also been shown to be important for cetacean species by Whale and Dolphin Conservation. Management plans must consider these species.

16. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *North-west Orkney* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of this pMPA to protect sandeels. The JNCC advice shows that the area holds one of the largest sandeel spawning grounds in Scottish waters, and Proctor et al (1998)³⁵ show that many of the spawning fish are swept into the wider North Sea where they contribute to the ecosystem function and to the prey available to foraging seabirds. As the JNCC advice states that *“no other possible MPAs for which sandeels are being considered are thought to be of equal ecological value”*, deciding to not designate this site would contradict both this advice and the Scottish Government’s Marine Protected Areas and Sandeels position paper³⁶.

The conservation objective for the sandeel feature should be set to ‘recover’. No strategic sandeel monitoring has taken place in the area and consequently the status of the species is not known. As a result, the conservation objective for the site has been set as ‘conserve (uncertain)’. However, we suggest that seabird breeding success has been so poor that the sandeels – a species many species are particularly well adapted to preying – must be in poor condition. In the past 10 years kittiwake productivity has only once been above 50%, and has not reached

³⁵ Proctor, R., Wright, P.J. and Everitt, A. 1998. Modelling the transport of larval sandeels on the north-west European shelf. *Fisheries Oceanography* 7(3-4): 347-354

³⁶ www.scotland.gov.uk/Resource/0038/00389460.doc

this level at all for common guillemot and northern fulmar during the same period. Last year, of 325 surveyed kittiwake nests, only a single chick was fledged. This would not be the case if prey availability was good, and prey availability is acknowledged as the issue in SNH's latest trend report (SNH, 2013)³⁷. The overall trend cannot be the product of a phenological mismatch (seabird breeding dates have varied throughout this 10 year window) so we infer by proxy that the sandeels in this site are in poor condition and potentially undersize as has been found in other parts of the North Sea (Wanless et al., 2004³⁸; Frederiksen et al, 2011³⁹). Because this site provides benefits to much of the North Sea, the conservation objective of this feature should be set to recover to make sure the benefits this site provides to the wider seas are restored.

Management Options: Yes

RSPB Scotland strongly supports the statement made by Marine Scotland Science and SNH that a targeted sandeel fishery should not be permitted within the pMPA.

The proposal currently suggests no additional management. This will mean that the site's designation will not have any impact, good or bad, on the health of the feature or the wider marine environment. This contradicts the ambition set out in the introduction to the Management Option Paper that "*The development of appropriate management will ensure the North-west Orkney possible MPA makes a genuine and long-lasting contribution to the protection of Scotland's marine environment*" and fails to meet the duty in the Marine Act to protect and where appropriate enhance the health of the marine environment.

Socioeconomic Assessment: Yes

Tourism is an important sector of Orkney's economy. In 2000, 81,000 summer visitors were estimated to bring tourism revenues of £18 million to the islands. RSPB Scotland estimated that £1.3 million of this spending could be attributed to Orkney's birds and wildlife, supporting 36 FTE jobs on the islands (Rayment and Dickie, 2001)⁴⁰. Orkney received an estimated 141,172 in 2009 (the most recent figures available⁴²) and RSPB Scotland also operates a reserve on the mainland opposite, at Dunnet Head, receiving around 40,000 visitors each year. The future of the tourism industry depends on the protection and management of Orkney's

³⁷ <http://www.snh.gov.uk/docs/B424907.pdf>.

³⁸ Wanless, S., Wright, P.J., Harris, M.P., Elston, D.A. 2004. Evidence for decrease in size of lesser sandeels *Ammodytes marinus* in a North Sea aggregation over a 30-yr period. *Marine Ecology Progress Series* 279:237–246

³⁹ Frederiksen, M., Elston, D.A., Edwards, M., Mann, A.D., Wanless, S. 2011. Mechanisms of long-term decline in size of lesser sandeels in the North Sea explored using a growth and phenology model. *Marine Ecology Progress Series* 432: 137–147

⁴⁰ Rayment, M. & Dickie, I. (2001) Conservation Works....for local economies in the UK. RSPB. Sandy, England.

⁴¹ http://www.orkney.gov.uk/Files/Business-and-Trade/Economic_Review_2010.pdf

⁴² http://www.orkney.gov.uk/Files/Business-and-Trade/Economic_Review_2010.pdf

outstanding natural and historic environment, including the conservation of the marine environment which at a real risk of becoming extinct⁴³ – for example no kittiwake bred on Mull Head on Orkney last year.

RSPB Scotland operates 10 seabird reserves on Orkney that are reliant on the health of the nearby prey stocks. Three reserve staff are employed at these centres.

A decrease in sandeel spawning stock biomass induces a higher cannibalism for cod and whiting, leading in turn to a decrease in spawning stock biomass and yield for those predator species. This should be considered as part of the environmental baseline and a switch away from cannibalism should be considered as a benefit of designating this site.

All of the above: Yes

Strategic Environmental Assessment: Spawning sandeels originating at this site are spread into the North Sea and the Moray Firth where some will become prey for a number of other species. Those that settle will provide their own spawn to settle and provide prey to species further 'downstream'. This site therefore has massive importance for the north sea ecosystem and should be acknowledged as a positive impact of designation in the SEA.

There are a number of national and international designations for seabirds along the Orkney coast which would benefit from the conservation of this site. The Scottish Government is already obliged to protecting these populations but is currently failing to do so. These duties must be considered when making decisions about the potential protection.

17. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *North-west sea lochs and Summer Isles* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this pMPA.

RSPB Scotland also note the importance of the area to breeding seabirds, including Priest Island, a European storm petrel colony holding around 2.6% of the UK population of this species adding further justification for the designation.

RSPB Scotland supports the inclusion of seagrass beds as a protected feature in the pMPA. Although the distribution of *Zostera marina* in south-east Gruinard Bay

⁴³ https://www.rspb.org.uk/Images/watchedlikeneverbefore_tcm9-133081.pdf

is patchy, together with the beds in Loch Gairloch these are described as 'possibly the richest examples on the mainland coastline of northern Scotland from at least Loch Alsh to the Moray Firth.'⁴⁴

Management Options: Yes

Licensed Activities

RSPB Scotland supports the removal or avoidance of marine disposal from areas of tall sea pen.

We support the commitment to further research to understand the interactions between anchorages and the flame shell beds. If there is found to be an adverse impact, RSPB Scotland would support the removal or avoidance of the pressure.

We support the removal or avoidance of mooring from areas of flame shell beds throughout the site. Current proposals suggest this should be focused around the straits at Loch Broom but we would support this removal wherever there is found to be an adverse impact within this site.

Fishing

We support the exclusion of towed/active gear from areas of flame shell beds maerl beds, burrowed mud habitats and maerl or coarse gravel with burrowing sea cucumbers. We disagree that similar measures are not needed for Northern feather star aggregations and kelp and seaweed communities. The FEAST tool states that Northern feather star are intolerant to abrasion and that larval dispersal distances are relatively small so recovery can be slow, so we urge that management decisions consider these sensitivities.

We support the reduction or limitation of static gear on burrowed mud and on maerl beds throughout the site.

We support the removal or avoidance of diver operated hydraulic gear from areas of flame shell beds, maerl beds and maerl or coarse gravel with burrowing sea cucumbers.

Aquaculture

We support the removal or avoidance of shellfish farms and finfish farms from areas of maerl beds, northern feather star aggregations, flame shell beds and maerl or coarse shell gravel with burrowing sea cucumbers. We also support the reduction or limitation of pressures associated with aquaculture from all areas of burrowed mud and circalittoral muddy sand communities. We would support relocation of farms causing damage to protected features and also note that some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

⁴⁴ http://www.snh.org.uk/pdfs/publications/commissioned_reports/422.pdf

Socioeconomic Assessment: Yes

The pMPA lies adjacent to the 'Coigach Assynt Living Landscape' a unique community partnership project and one of the largest landscape restoration projects in Europe, which aims to bring environmental and economic benefits to the Coigach and Assynt region of north west Scotland. Designation of this MPA will likely contribute to the economic benefits associated with tourism this initiative hopes to achieve.

Inclusion of seagrass beds as a protected feature in this MPA could have additional socioeconomic benefits as they are important spawning grounds for herring and nursery habitat for small scallops, lobsters and crabs and small cod.

18. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Noss Head* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the Noss Head possible Nature Conservation MPA to protect horse mussel beds. We support the position of the boundary. We note that the extent is currently predictive and therefore, given the importance of this site as the largest known UK horse mussel bed, support the boundary providing a buffer around the predicted distribution.

Management Options: Yes

RSPB Scotland supports the removal or avoidance of pressures associated with mobile bottom gear, the disposal of dredged material and cable infrastructure within this site based on the vulnerability and rarity of the protected features.

RSPB Scotland also supports the reduction or limitation of static fishing gear within this site. Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

Socioeconomic Assessment: Yes

The potential value of the Noss Head pMPA to divers and anglers has been

estimated at £4.7million to £9.9million based on willingness-to-pay measures (Kenter *et al*, 2013)⁴⁵.

19. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Papa Westray* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of the Papa Westray pMPA to protect black guillemot. The proposed site boundaries hold a significant proportion of Scotland's black guillemot population and have been established based on scientific evidence endorsed by the RSPB.

Management Options: Yes

RSPB Scotland strongly supports the management option to remove or avoid set nets from within the site, and throughout the site.

Monitoring and compliance of set net activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

Should a fishing practice thought to cause seabird bycatch or mortality commence, recommendations from the EU's Action Plan for reducing incidental catches of seabirds in fishing gears must be adopted (COM(2012) 665)⁴⁶.

RSPB Scotland strongly supports the management measure to reduce or avoid the spread of mammalian predators and would strongly support the development of biosecurity plans for the terrestrial breeding habitat adjacent to each of the pMPAs which include black guillemot as a protected feature. RSPB Scotland shall be developing biosecurity best practice guidelines and will welcome discussion regarding the application of these guidelines within colonies adjacent to pMPAs.

Given the close association between black guillemot and kelp beds (and other habitats rich in algae), RSPB Scotland suggests that this MPA is considered in the parallel draft seaweed policy statement consultation, and particularly with regards to guidance developed for the harvest of wild seaweed.

⁴⁵ Kenter, J.O., Bryce, R., Davies, A., Jobstvogt, N., Watson, V., Ranger, S., Solandt, J.L., Duncan, C., Christie, M., Crump, H., Irvine, K.N., Pinard, M., Reed, M.S. (2013). The value of potential marine protected areas in the UK to divers and sea anglers. UNEP-WCMC, Cambridge, UK.

⁴⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0665:FIN:EN:PDF>

Socioeconomic Assessment: Yes

This site is already important for seabird and wildlife tourism. RSPB Scotland operates a reserve at North Hill on Papa Westray. This site receives 500 – 1,000 visitors each year, the majority of whom come to the reserve as part of a package tour organised by the local community ('Peddie Package'). The designation and appropriate management of this site will contribute to ensuring these socioeconomic benefits continue.

All of the above: Yes

Strategic Environmental Assessment: By establishing biosecurity on the islands, this site would also be contributing safeguards to populations of other seabirds breeding on Papa Westray. Most notably, it would also be providing protection to the population of Arctic tern and Arctic skua listed as designated features in the SPA. However, unlike black-guillemot, these two species are in decline and so for the biosecurity to offer additional benefits to these species, protection of at-sea feeding areas will also be required.

20. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Rosemary Bank Seamount* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this proposed MPA on the basis that the site captures an important seamount feature, and the oceanographic hotspot it provides. **Seabird survey data in Pollock et al (2000)⁴⁷ shows that the area is also used by a higher abundance of birds than other surrounding areas.**

Management Options: Yes

Given that the site designation has been suggested based on the wider functional significance of the site, and in particular the seamount's significance as a spawning ground for blue ling and blue whiting, management options should be established in ways that maintain or enhance this overall function. The 'seamounts' protected feature has not been included in the development of management options, nor the FEAST tool at all. RSPB Scotland see this as failure to enact the duties of the Marine (Scotland) Act 2010, in particular the duty to notifying and not permitting

⁴⁷ Claire M. Pollock, Roderick Mavor, Caroline R. Weir, Ailsa Reid, Richard W. White, Mark L. Tasker, Andy Webb, & James B. Reid. 2000. The distribution of seabirds and marine mammals in the Atlantic Frontier, north and west of Scotland. JNCC.

activities that would present a significant risk of achieving “*the stated conservation objectives for the Nature Conservation MPA.*” RSPB Scotland suggests that this must be rectified before site designation if this site is to make the “*genuine and long-lasting contribution to the protection of Scotland’s marine environment*”, as is the stated aim in the Management Option paper.

RSPB Scotland supports the removal or avoidance of pressures associated with mobile bottom contact gear, and of set netting from areas of deep sea sponge aggregations and of seamount communities. RSPB Scotland seek further clarity on the geographic extent of these management measures, given that both deep sea sponge aggregations and seamount communities have only been presented as point locations, as a result of point locality sampling undertaken on the seamount.

Monitoring and compliance of fishing activity in this site, as in other sites where fisheries management is necessary, will be of paramount importance to ensure the conservation objectives are achieved. Full engagement with the fishing industry and other stakeholders (including environmental groups) will be necessary.

Socioeconomic Assessment: Yes

By properly protecting features of wider ecosystem function, this site clearly has the opportunity to provide benefits to the Scottish marine area more widely, for example, the detailed assessment against site selection criteria indicates that 40% of blue ling population engaged in spawning there. These wider benefits must be considered when deciding whether to designate the site and which management options to establish.

21. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Small Isles* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of this pMPA. The proposed site boundaries hold a significant proportion of Scotland’s Black Guillemot population and have been established based on scientific evidence endorsed by RSPB.

Fan mussel aggregations must be designated with a ‘recover’ conservation objective. Marine Scotland’s report to Parliament states that “A recover objective will be used where evidence exists that a species or habitat of an MPA is declining and/or damaged, to the point where it is not considered to be in good condition.” Given that habitat for fan mussel extends well beyond its present distribution, it is likely that this is a remnant population that has declined and been damaged. The fan mussel beds support a range of species, many of which will provide benefits to the wider seas through trophic interactions, and so recovering this feature is a

direct opportunity to improve the health of Scotland's seas.

Management Options: Yes

RSPB Scotland strongly supports the management option to remove or avoid set nets from within the site, and throughout the site.

Monitoring and compliance of set net activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

Should a fishing practice thought to cause seabird bycatch or mortality commence, recommendations from the EU's Action Plan for reducing incidental catches of seabirds in fishing gears must be adopted (COM(2012) 665)⁴⁸.

RSPB Scotland strongly supports the management measure to reduce or avoid the spread of mammalian predators and would strongly support the development of biosecurity plans for the terrestrial breeding habitat adjacent to each of the pMPAs which include black guillemot as a protected feature. RSPB Scotland shall be developing biosecurity best practice guidelines and will welcome discussion regarding the application of these guidelines within colonies adjacent to this MPA.

RSPB Scotland welcomes the overlap between this pMPA and SPA extensions for Canna and Rum SPA. Because no management measures yet exist in the SPA extension, and that this already constitutes a failure to meet the obligations set out in the Birds Directive, we suggest management measures are established for the MPA and SPA extension together, in a way that provides benefits to the entire feature assemblage across the SPA and MPA.

Given the close association between black guillemot and kelp beds (and other habitats rich in algae), RSPB Scotland suggests that this MPA is considered in the parallel draft seaweed policy statement consultation, and particularly with regards to guidance developed for the harvest of wild seaweed.

Management of bottom impacting mobile gear must extend beyond the Sound of Canna. The Stage 3 assessment concluded that *"the size and shape of the possible MPA reflects the distribution and extent of the range of proposed biodiversity and geodiversity protected features"*. The results of this assessment arrived at the proposed Small Isles MPA boundaries. RSPB Scotland supports these proposed boundaries. To only implement management in the Sound of Canna, a small part of the site and the distribution of the biodiversity protected features, will undermine the effectiveness of this MPA.

⁴⁸ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0665:FIN:EN:PDF>

Socioeconomic Assessment: Yes

The area is already important for seabird and wildlife tourism; RSPB Scotland has a reserve on Coll, relatively close (around 30Km) to the Small Isles pMPA. Despite its remote location, the reserve has around 1,500 visitors per year. It is estimated that nature-based tourism is worth £1.4 billion per year to Scotland and supports 39,000 FTE jobs (<http://www.snh.gov.uk/docs/B726802.pdf>). Given the popularity amongst tourists of watching seabirds (up to 400,000 people visited seabird sites in 2005⁴⁹ - designation of the Small Isles pMPA for seabirds would help promote wildlife tourism in the area and help boost the local economy, the BRIA document states that “tourism may benefit from the designation of the MPA as an added attraction to the destination”.

22. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *South Arran* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the South Arran pMPA. The proposed site is a good example of a community led third party proposal underpinned by sound scientific information.

Scotland’s Marine Atlas shows the pMPA to have a significant seabird population within foraging distance from the Ailsa Craig SPA, designated for northern gannet (23,000 pairs 8.7% of the world biogeographic population) and lesser black-backed gull (1,800 pairs, 1.4% of the total population). It regularly supports 65,000 seabirds including nationally important populations of the following species: common guillemot (3,350 pairs, 0.5% of the GB population), black-legged kittiwake (3,100 pairs, 0.6% of the GB population) and herring gull (2,250 pairs, 1.4% of the GB population).

Management Options: Yes

Given the importance of this area to seabirds and the continued declines (SNH, 2013)⁵⁰ we urge that decisions regarding the site’s management plan consider its potential benefits to Scotland’s seabirds and the wider marine environment.

We strongly support the management measure to reduce or avoid the spread of mammalian predators. The RSPB shall be developing biosecurity best practice guidelines as part of a parallel project and we welcome discussion regarding the application of these guidelines within these colonies. Such consideration is

⁴⁹ https://www.rspb.org.uk/Images/watchedlikeneverbefore_tcm9-133081.pdf

⁵⁰ <http://www.snh.gov.uk/docs/B424907.pdf>

essential here if this site is to realise the aim stipulated in the management option paper; to “*make a genuine and long-lasting contribution to the protection of Scotland’s marine environment*”.

We support the removal of pressure of anchorages, mobile and static fishing gear and diver operated hydraulics where these impacts on protected features of the site. Removal or reduction of fishing activity should be fully discussed with the fishing industry in the area and other stakeholders (including environmental and wider community stakeholders, not just fishing interests). Monitoring and compliance of fishing activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

The management option paper notes that information on the use of the pMPA by such fishing methods is unknown. More work must be carried out to assess the usage and impact.

Socioeconomic Assessment: Yes

We underline the statement in the BRIA document that not designating the site “*is not predicted to create any additional costs to the sectors and groups outlined above. However the societal cost of not designating the site could be both large and irreversible*”. Arran is already a popular tourist destination “*the designation of the site as an MPA, may add attraction to the site as a tourist destination*” and “*would impact positively upon the local economy*”.

23. Do you have any comments on the case for designation, management options and socioeconomic assessment for *The Barra Fan and Hebrides Terrace Seamount* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this proposed MPA on the basis of the importance of the continental slope and the seamount and its associated features to Scotland’s marine ecosystems. We support the inclusion of orange roughy as a protected feature of the MPA.

Management Options: Yes

RSPB Scotland supports the removal or avoidance of bottom contact mobile gear within areas of burrowed mud, offshore deep sea muds and offshore subtidal sands and gravels, and particularly so for seamount communities – the FEAST tool clearly indicates that deep-sea stony corals, gorgonians and black corals, sea

anemones, hydroids and sponges are highly sensitive to surface abrasion (Clark & Tittensor, 2010⁵¹; Clark et al., 2010⁵²) and this pressure must be removed if the site is to meet its conservation objectives.

In areas of seamount communities we also support the removal or avoidance of bottom static gear because of similar sensitivities related to entanglement with nets, lines or ropes. As indicated by the JNCC advice, this is the only option that would achieve the conservation objective for seamount communities. We seek further clarity on the geographic extent of those features which have been only presented as point localities, as the ability to meet the conservation objectives is influenced by the extent of the area in which the management options are applied.

Socioeconomic Assessment: Yes

By properly protecting features of wider ecosystem function, this site can provide benefits to the Scottish marine area more widely. These benefits must be considered when deciding whether to designate the site.

24. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Turbot Bank* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland strongly supports the designation of this MPA to protect sandeels. The JNCC advice indicates that the spawning sandeels from the site may be dispersed widely throughout the North Sea, where they will provide a key component of the prey availability for species including seabirds.

The site includes a population of sandeels outside of the North-east Sandeel Closure (CA1) which would benefit from the additional protection provided by this MPA.

We also endorse the importance of this area for offshore subtidal sands and gravels, and welcome the addition of this protected feature. However, **it must not be added here as an alternative to the Firth of Forth Banks Complex which is fundamentally required for the utility of this network.**

The conservation objective for the sandeel feature should be set to 'recover'. No strategic sandeel monitoring has taken place in the area and consequently the

⁵¹ Clark, M. R., and Tittensor, D. P. 2010 An index to assess the risk to stony corals from bottom trawling on seamounts. *Marine ecology*. 31: 200-211.

⁵² Clark, M. R., Rowden, A. A., Schlacher, T., Williams, A., Conalvey, M., Stocks, K. I., Rogers, A. D., O'Hara, T. D., White, M., Shank, T. M., and Hall-Spencer, J. M. 2010. The ecology of seamounts: Structure, function and human impacts. *Annual review of marine science*. 2: 253-78

status of the species is not known. However, group-0 sandeels have been shown to be undersize in other parts of the North Sea (Wanless et al., 2004⁵³; Frederiksen et al, 2011⁵⁴) and so to meet with the duty to be precautionary, the objective should be set to recover.

RSPB Scotland has collected tracking data for seabird species breeding in North East Scotland. These data show Turbot Bank is visited by black-legged kittiwake from Orkney, Fowlsheugh and Bullers of Buchan, razorbill and common guillemot from Fair Isle, and northern fulmar from Orkney and Whinnyfold. It is likely that other species and birds from other colonies are also using the site. This information provides added justification for the designation, and effective management of this site.

Management Options: Yes

RSPB Scotland strongly supports the statement made by Marine Scotland Science and SNH that a targeted sandeel fishery should not be permitted within the MPA.

The management option paper for the Mousa to Boddam MPA, which has also been proposed for sandeel, indicates that dredges cause a sub-surface abrasion pressure. RSPB Scotland suggests this pressure needs to be further understood to assist in the conservation of sandeel within these MPAs. The Turbot Bank management option paper does not discuss bottom impact on sandeels despite the fact that dredging takes place within the site. Before this pressure can be dismissed, robust evidence must be presented that shows that it does not impact on the achievement of the conservation objective for sandeels.

RSPB Scotland supports the proposal to remove/avoid pressures associated with oil and gas activities.

If offshore subtidal sands and gravels are added as a protected feature, we support the management options that reduce the risk of not achieving its conservation objective to the lowest possible level.

Socioeconomic Assessment: Yes

This area is already important for supporting seabird and wildlife tourism; RSPB Scotland owns and operates a reserve at Fowlsheugh. The reserve is entirely a seabird colony reserve and it receives around 5,000 visitors each year to see the

⁵³ Wanless, S., Wright, P.J., Harris, M.P., Elston, D.A. 2004. Evidence for decrease in size of lesser sandeels *Ammodytes marinus* in a North Sea aggregation over a 30-yr period. *Marine Ecology Progress Series* 279:237–246

⁵⁴ Frederiksen, M., Elston, D.A., Edwards, M., Mann, A.D., Wanless, S. 2011. Mechanisms of long-term decline in size of lesser sandeels in the North Sea explored using a growth and phenology model. *Marine Ecology Progress Series* 432: 137–147

breeding birds nesting on the cliffs. The reserve employs a part time member of staff, and a local business operates boat trips around the cliffs during the summer months. Designation and appropriate management of this site will contribute to ensuring these socioeconomic benefits may continue.

A decrease in sandeel spawning stock biomass induces a higher cannibalism for cod and whiting, leading in turn to a decrease in spawning stock biomass and yield for those predator species. This should be considered as part of the environmental baseline and a switch away from cannibalism should be considered as a benefit of designating this site.

All of the above: Yes

Strategic Environmental Assessment: In practice, the proposed management of this site may mitigate the impact of future oil and gas activity but will not change the current human pressure on the site or its constituent features. The SEA is based on the premise that *“The pMPAs will have benefits for biodiversity, flora and fauna, this is their key purpose, with a focus on specific features and the benefit of designation will primarily accrue to these features”*. Given that there will be no additional management provided by the current proposals, this pMPA will not have a benefit on sandeels and so either the SEA needs reviewing to clearly indicate that, unless management is strengthened, this will be the case.

Were the sandeels to be recovered, or greater protection of the offshore subtidal sands and gravels established, it is likely that the site will benefit the wider North Sea through the provision of sandeel larvae, and contribute to attaining the obligations under the Birds Directive for the seabird colonies using the site for foraging. This should be considered when making decisions about the designation of this site.

25. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Upper Loch Fyne and Loch Goil* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the Upper Loch Fyne and Loch Goil MPA.

Management Options: Yes

RSPB Scotland supports the proposed management options to removal or avoidance of pressures associated with finfish aquaculture. We would support

relocation of farms causing damage to protected features and also note that some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

We support the removal or avoidance of bottom mobile/active gears and hydraulic dredging as recommended in the management options. RSPB Scotland also recommends that pressures associated with static gear should be removed from flame shell beds, horse mussel beds and fireworks anemone aggregations.

26. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *West Shetland Shelf (formerly Windsack)* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of the West Shetland Shelf MPA to protect a wide variety of offshore subtidal sand and gravel habitats.

Management Options: Yes

RSPB Scotland notes that the pMPA overlaps with the current Windsack Fisheries Area, which currently closes the area to bottom-contact mobile fishing gear. Management must ensure that future changes to the CFP regulations do not leave the area open to such fisheries, and that prohibition of bottom-contact mobile fishing gear is maintained.

RSPB Scotland supports the recommendation to remove or avoid pressures associated with oil and gas licensed activities from offshore subtidal sands and gravels but seek further clarification of the distribution of this protected feature, for which only limited distributional information is available.

Socioeconomic Assessment: Yes

The socioeconomic impact data presented in the BRIA indicates a relatively small displacement impact (£1.4 - £2.6 million) in relation to the ecological and natural value gains offered by the pMPA.

RSPB Scotland believe that the relatively small overall costs estimated on the basis of designating this site will be outweighed by the medium to long term benefit of protecting the ecological integrity of the pMPA and the ecosystem services it provides to Scotland's offshore waters.

27. Do you have any comments on the case for designation, management options and socioeconomic assessment for the *Wyre and Rousay Sounds* possible Nature Conservation MPA?

Designation: Yes

RSPB Scotland supports the designation of this proposed MPA. Kelp and seaweed communities on sublittoral sediment and maerl beds are important habitats for Scotland's marine environment and can provide foraging habitat to Scotland's seabirds.

Management Options: Yes

RSPB Scotland supports the proposed management options to removal or avoidance of pressures associated with finfish aquaculture. We would support relocation of farms causing damage to protected features and also note that some pressures associated with finfish aquaculture, such as pollution, are not limited to the activities 'footprint' and that they may have an indirect or remote impact on MPA features. Management must therefore consider the entire area and not specific areas where aquaculture takes place.

We support the proposed management options to remove/avoid pressures associated with the commercial anchorage in Rousay Sound.

We support the removal of maerl extraction from the site.

We support the removal of demersal mobile/active fishing activity from the entire site, as outlined in the management options paper. This should be fully discussed with skippers in the area and other stakeholders (including environmental and wider community stakeholders, not just fishing interests). Monitoring and compliance of mobile, static and diver fishing activity in this site will be of paramount importance to ensure the conservation objectives are achieved.

Choices to represent features in the MPA Network

28. Recognising the scientific advice from JNCC included alternatives for representing offshore subtidal sands and gravels, ocean quahog and shelf banks and mounds in the Southern North Sea, do you have a preference or comments on the following combinations to represent these features, bearing in mind Turbot Bank will need to be designated to represent sandeel in this region:

Firth of Forth Banks Complex

Turbot bank and Norwegian Boundary Sedimentary Plain

Or Firth of Forth Banks Complex, Turbot bank and Norwegian Boundary Sedimentary Plain

RSPB Scotland strongly supports the designation of the Firth of Forth Banks Complex proposed MPA. However, sandeels must be added as a protected feature to the Firth of Forth Banks Complex.

We support the designation of this site based on the value provided by a mosaic of sands and gravels within this area, which are not replicated by the proposed alternative of Turbot Bank. By including sandeels as a protected feature in the Firth of Forth Banks Complex we understand that sandeel replication and representivity may be met without Turbot Bank. RSPB Scotland welcomes further discussion with Scottish Government regarding this.

Scientific advice provided by JNCC and SNH state that alternatives to Firth of Forth Banks Complex are of “*lower biodiversity conservation value*”, and this view is supported by the findings of scientific literature used in identifying and describing the site (Daunt et al., 2008⁵⁵; McConnell et al., 1999⁵⁶; Camphuysen et al., 2011⁵⁷).

Tracking data collected by RSPB Scotland also show that more than half of black-legged kittiwake tracked from Isle of May in 2012 and 2013 (n = 39), of common guillemot from Fowlsheugh in 2012 (n = 10), and 93% of black-legged kittiwake from St Abbs head (n = 15) were using the site for some part of their foraging during breeding. Other species also tracked within this area were razorbill, puffin and gannet.

On the basis of these results, and the above information, designating alternative sites would contradict the Cabinet Secretary’s commitment to “*rely on science*” as stated to Scottish Parliament’s Rural Affairs, Climate Change and Environment Committee on 5th May, 2013. Scotland’s east coast seabirds are suffering from

⁵⁵ Daunt, F., Wanless, S., Greenstreet, S.P.R., Jensen, H., Hamer, K.C. and Harris, M.P. 2008. The impact of the sandeel fishery closure in the northwestern North Sea on seabird food consumption, distribution and productivity. *Canadian Journal of Fisheries and Aquatic Sciences* 65, 362-381.

⁵⁶ McConnell, B.J., Fedak, M. A., Lovell, P., and Hammond, P.S. 1999. Movements and foraging areas of grey seals in the North Sea. *Journal of Applied Ecology* 36(4), 573-90.

⁵⁷ Camphuysen, K., Scott, B. and Wanless, S. 2011. Distribution and foraging interactions of seabirds and marine mammals in the North Sea: a metapopulation analysis

chronically poor breeding, largely because of lack of prey species, and most of these populations are reliant on the Firth of Forth Banks for foraging. This proposed MPA must be designated to address this national biodiversity crisis; the Norwegian Boundary Sediment Plain will do nothing for them and so should be disregarded. Management must be established in ways that help protect and restore seabirds' prey species and help them be resilient to very complex changes in the marine environment. The designation of this site is absolutely vital for the effectiveness of the network.

29. Do you have any comments on the case for designation, management options and socioeconomic assessments for the preference you have indicated in the question above, regarding alternatives for representing offshore subtidal sands and gravels, ocean quahog and shelf banks and mounds in the Southern North Sea?

Designation:

Sandeels must be added as a protected feature to the Firth of Forth Banks Complex if the network is going to make an effective contribution to protecting the health of the marine environment. The area is a highly significant sandeel spawning ground which receives very few sandeel larvae from outside the area. It is therefore very vulnerable to damage. Sandeels are protected from direct fishing in the area by the North-east Sandeel Closure (CA1) but being listed as a protected feature would ensure appropriate assessment is made for any activity undertaken in the area. This sandeel population is known to support much of the east coast marine ecosystem, including its seabirds. Research has already shown that the group-0 sandeels in this area are undersize and of significantly less energy content. It is critical that they are properly protected in this area to ensure the health of the Scottish east coast ecosystem.

We note that the JNCC advice suggests has suggested boundaries were changed *“to focus on the extent of the shelf bank and mound large-scale features considered to be of functional significance to the health and biodiversity of Scotland’s seas”*. However, none of the references that were used to illustrate the wider functional significance actually show Marr Bank to be any less important than surrounding areas (McConnel et al., 1999⁵⁸; Camphuysen et al., 2011⁵⁹; Daunt et al., 2008⁶⁰; Lockwood and Lucassen, 1984⁶¹). Misrepresentation of scientific advice like this must not be repeated or used as a reason for designating alternatives to the Firth of Forth Banks Complex.

⁵⁸ McConnell, B.J., Fedak, M. A., Lovell, P, and Hammond, P.S. 1999. Movements and foraging areas of grey seals in the North Sea. *Journal of Applied Ecology* 36(4), 573–90.

⁵⁹ Camphuysen, K., Scott, B. and Wanless, S. 2011. Distribution and foraging interactions of seabirds and marine mammals in the North Sea: a metapopulation analysis

⁶⁰ Daunt, F., Wanless, S., Greenstreet, S.P.R., Jensen, H., Hamer, K.C. and Harris, M.P. 2008. The impact of the sandeel fishery closure in the northwestern North Sea on seabird food consumption, distribution and productivity. *Canadian Journal of Fisheries and Aquatic Sciences* 65, 362-381.

⁶¹ Lockwood, S.L., Lucassen, W. 1984. The recruitment of juvenile plaice (*Plueronectes platessa*) to their parent spawning stok. *ICES Journal of Marine Science*. 41:268-75

Management:

RSPB Scotland supports the management options that have the lowest probability of not achieving the management option for each of the activities identified as impacting on the protected features.

However, because these proposed management measures will relate to the extent of the protected features, and because these have only been presented as point localities and not areas, the effectiveness of the management remains unclear.

RSPB Scotland supports the implementation of each proposed management option throughout the entirety of this proposed MPA.

Socioeconomics:

Estimates of the cost incurred by designating Firth of Forth Banks Complex are £0.086m – £48.269m, compared to £0.029m - £2.268m for its alternative. The upper estimate for Firth of Forth Banks Complex is based on an estimated cost to the renewable energy generation in the area, specifically the cost is suggested to come from a requirement to use graded scour protection around the turbines. The origins of this are unclear – it does not feature in the management options for the site, it is not indicated in the FEAST tool as something necessary in the response to a pressure, and there is no mention of wider benefits provided by its use to the wider environment. We welcome further discussion on the application of this mitigation and how it may conserve the protected features and provide benefits to the wider ecosystem. However, until this has been clearly stated, we consider the significant cost estimation irrelevant and inappropriate for ministers' consideration.

RSPB Scotland owns and operates a reserve at Fowlsheugh. The reserve is entirely a seabird colony reserve and it receives around 5,000 visitors each year to see the breeding birds nesting on the cliffs. The reserve employs a part time member of staff, and a local business operates boat trips around the cliffs during the summer months.

RSPB Scotland operates Seabird Cruises to visit the Firth of Forth islands during the summer. 200 visitors were taken on these tours in 2013, the trips are facilitated by a locally owned and operated business

The North Berwick Seabird Centre offers trips to a number of the Forth Islands as well as a visitor experience in North Berwick which is reliant on them. The centre supports 48 jobs (16FT, 32PT/seasonal), has round 175,000 visitors per year and has total revenue of around £1.1 million per year.

These socioeconomic benefits should be presented in the SA, and the potential to enhance, maintain, or indeed lose them as a result of choices regarding the designation or management of this site should be considered by Ministers.

Strategic Environmental Assessment:

The Firth of Forth Banks Complex is a hugely important foraging ground for seabirds across the Scottish East Coast. Designating this site, and establishing management in a way that considers the conservation of seabirds using the area and the wider marine environment would contribute to the conservation of these

populations and the achievement of Government's already existing obligations.

30. Recognising the scientific advice from JNCC included alternatives for representing the burrowed mud feature in the Fladens, do you have a preference or comments on the following combinations to represent these features, bearing in mind the part of Central Fladen (known as Central Fladen (Core)) containing tall seapen (*Funiculina quadrangularis*) will need to be designated to represent tall seapen in this region:

Central Fladen pMPA only

RSPB Scotland supports the option to designate the Central Fladen pMPA to protect burrowed mud and the sub-glacial tunnel valley.

31. Do you have any comments on the case for designation, management options and socioeconomic assessments for the preference you have indicated in the question above, regarding alternatives for representing the burrowed mud feature in the Fladens?

We support conservation objectives for the protected features within the Central Fladen pMPA to 'conserve' for all features. We further support and encourage designation of large zones prohibiting all forms of disturbance by mechanical and static gear to ensure sizable proportions of sensitive communities are fully protected from disturbance and have opportunity for future enhancement.

We support and encourage management options eliminating future disturbance by mining and exploration, and new oil and gas facilities, particularly with respect to Scotland's vision for a full shift to sustainable energy and reduction in carbon footprint. Limiting these activities will ensure the Central Fladen and Central Fladen (core) PMFs are fully protected from disturbance in perpetuity, and have the opportunity for future enhancement.

Proposed licensed activities must be managed through a stringent consenting process, as directed by the Marine and Coastal Access Act and Marine (Scotland) Act. Expansion of licensed activities in pMPAs should be avoided if alternative sites can be located.

The socioeconomic impact data presented in the BRIA indicates that cost of displacing commercial fisheries and oil & gas sector activities is lower in the Central Fladen - Central Fladen (core) option (£5 - £12 million) compared to the Central Fladen (core) - Western Fladen option (£8 - £17 million) with a slightly higher displacement cost estimated when compared to the Central Fladen (core) - Southeast Fladen option (£3 - £8 million).

32. Recognising the scientific advice from JNCC included alternatives for representing offshore subtidal sands and gravels, offshore deep sea mud, and burrowed mud in OSPAR Regions III and V, do you have a preference or comments on the following combinations to represent these features:

Geikie slide and Hebridean slope

RSPB Scotland supports the designation of the Geikie Slide & Hebridean Slope MPA. This site offers the most significant representation of NW continental shelf slope species and communities, such as burrowed mud, offshore deep sea muds, and offshore subtidal sands and gravels and also holds high proportions of cetacean sightings. Because this are overlaps one of the candidate SPAs identified by Kober et al (2010)⁶², RSPB Scotland prefers this designation over the alternative South -west Sula Sgeir and Hebridean slope.

33. Do you have any comments on the case for designation, management options and socioeconomic assessments for the preference you have indicated in the question above, regarding alternatives for representing offshore subtidal sands and gravels, offshore deep sea mud, and burrowed mud in OSPAR Regions III and V?

We support conservation objectives for the protected features within the Geikie Slide & Hebridean Slope pMPA to 'conserve' for all features. We further support and encourage designation of large zones prohibiting all forms of disturbance by mechanical and static gear to ensure sizable proportions of sensitive communities are fully protected from disturbance and have opportunity for future enhancement. The information presented to the possible impacts (if any) of gill netting and line fishing is insufficient to make informed comment. However, this highlights the need for greatly improved fisheries management protocols, monitoring and surveillance for these activities.

The socioeconomic impact data presented in the BRIA indicates that cost of displacing damaging activities is not significant between the Geikie Slide & Hebridean Slope pMPA option (£5 - £7 million) compared to the South-west Sula Sgeir and Hebridean Slope pMPA option (£5 - £6.5 million). We argue that these displacement costs of restricting damaging activities will be outweighed by the medium to long term benefit of protecting the ecological integrity of Geikie Slide & Hebridean Slope pMPA so it can continue to provide ecosystem services to Scotland's offshore waters.

⁶² Kober, K., Wilson, L.J., Black, J., O'Brien, S., Allen, S., Win, I., Bingham, C. and J.B. Reid, 2012. The identification of possible marine SPAs for seabirds in the UK: The application of Stage 1.1 – 1.4 of the SPA selection guidelines. JNCC Report No 461.

Sustainability Appraisal

34. Do you have any comments on the Sustainability Appraisal of the MPA network as a whole?

RSPB Scotland strongly argues that the information provided in the Sustainability Appraisal is flawed and, as written, should not be used to inform the ministerial decisions regarding individual site designations.

Socio-Economic Assessment and BRIAs

Attempts to assess the socio-economic costs of the MPAs proposals are based on some false assumptions, and little effort has gone into quantifying the potential benefits of a well managed marine environment.

1. False assumptions on management costs

The cost scenarios make use of supposed management scenarios for the proposed MPAs, most of which have not been presented in the Government's proposals, nor are they likely to be implemented once sites are established.

One example is the cost estimates developed for commercial fisheries. The upper estimates are often based on complete closures throughout the proposed MPA. However, in most instances this is not an option presented in the management option paper. In some cases these irrelevant estimates cause significant inflation in the cost estimates which make the designation of a site seem extremely costly for very little actual restriction. The costs and management should be made to conform and estimates recalculated, or the costs should be ignored entirely.

This error is not exclusive to the fishing sector. A further example is an estimate for the use of graded scour protection in the proposed Firth of Forth Banks Complex MPA. The use of this specialist measure has significantly higher cost implications than 'basic' scour protection and yet there is no clear indication why this cost must be considered and whether it will make the make achievement of the conservation objectives more likely.

In some instances, these irrelevant cost estimates may relate to activities that have already been scoped out of proposed management. An estimate of cost (£0.02m) to ports and harbours in East Caithness Cliffs pMPA is provided in the Socioeconomic Assessment. However, ports and harbours were "*not considered to be capable of affecting the protected features*" in the management options paper.

In those instances where there is a restrictive management proposed in the management option paper, the estimated impact of this is inconsistent with the SEA. Cost estimations for commercial fishing make the assumption that all effort currently falling within an MPA will be lost. This is a direct contradiction to the SEA which assumes all effort is displaced. That both of these are presented side by side, reflecting both the socioeconomic cost of the loss and the environmental cost of the displacement, is misleading and incorrect. We do not believe informed

decisions can be made on the basis of this flawed information.

We also question the assumption that a reduction in employment in the commercial fishing sector will cause an increase in crime. We believe the Scottish public are able to adapt to changes in employment in responsible ways. A recent report for Marine Scotland's Marine Analytical Unit *'The Impact of Sea Fishing on Social Well-being in Scottish Fishing Communities'* concluded that *"fishing income and employment do not appear to be key drivers of social change, because fishing is a small economic component as other sectors have taken up the slack as well household responses eg holding two or more jobs are preventing deprivation."*

2. False assumptions on baseline

The documents contributing to the Sustainability Appraisal refer to a baseline that is neither accurate nor appropriate. In particular, it assumes that if no MPAs are designated, the current situation would continue and, as such, there would be no cost to any activity. Given that parallel consultations are under way on a National Marine Plan which aims to increase aquaculture and offshore renewable installations and other marine activities; this is clearly not the case. In fact, the Scottish marine environment, and the economic benefits flowing from it, will change dramatically depending on the level of protection provided. The declining health of Scotland seas will cost many of our marine sectors dearly.

The Scottish Government's own Marine Atlas highlights a general deterioration in the marine environment. This deterioration has been particularly stark for seabirds and in SNH's latest biodiversity indicators report this has been attributed to food availability, weather conditions, and the impact of predators. Marine Protected Areas have been promoted, through the Marine (Scotland) Act 2010, as well as other internationally policies, to halt or recover from this. This Sustainability Appraisal must account for this decline in baseline so that the real value proposed MPAs might provide in addressing this could be considered.

RSPB Scotland is concerned that much of the socioeconomic impact data used for the BRIA reports is erroneous and therefore impact-estimates presented are flawed. These data should not be used to influence designation or management options decisions of the pMPAs which are required for the greater benefit of Scotland's marine environment for future generations. A more balanced socioeconomic assessment using an ecosystem goods and services matrix approach is required to present the benefit of services these areas, and their constituent PMFs, provide to Scotland's seas (Potts et al., 2013).

Value of visiting seabird reserves

Scotland's marine wildlife tourism sector has not been considered in this sustainability appraisal even though, based on the Scottish Government's own figures, it contributes £63 million to Scotland's economy annually⁶³. In just one of

⁶³ <http://www.scotland.gov.uk/Resource/Doc/311951/0098489.pdf>

many examples, we estimate that, in 2000, £1.3 million of tourism spending could be attributed to Orkney's birds⁶⁴.

Last year, as part of the MPA process, RSPB Scotland put forward a third party proposal for a site 'Abby Foot to Balcary Point' to protect fulmar, guillemot and razorbill. This site is near two RSPB reserves, Mull of Galloway and Mersehead. These two reserves have a combined visitor total of around 30,000 people per year. Together with the thousands of visitors to the Galloway Kite Trail, which brought in nearly £6 million to the local economy in 2009⁶⁵ wildlife tourism makes up an important part of the Dumfries and Galloway economy. The addition of RSPB Scotland's proposed site for seabirds, and further protection for seabirds across the network, will enhance the ecological coherence of the network as well as providing economic benefits.

RSPB Scotland has reserves at Colonsay, Oronsay, the Oa and Loch Gruinart which are visited by around 10,000 people every year. We are also involved with white-tailed eagle tourism in Mull. Wildlife tourism on Mull is worth around £5 million per year to the local economy⁶⁶ This type of tourism is mainly focused on white-tailed sea eagles, but seabirds and other wildlife are also an important draw for tourists. Designating the Loch Sween and Loch Sunart to Sound of Jura MPA gives the west coast of Scotland more special places tourists can visit, boosting local economies. The BRIA document states that *"tourism may benefit from the designation of the MPA as an added attraction to the destination"*.

RSPB Scotland has a reserve on Coll, relatively close (around 30Km) to the Small Isles pMPA. Despite its remote location, the reserve has around 1,500 visitors per year. It is estimated that nature-based tourism is worth £1.4 billion per year to Scotland and supports 39,000 FTE jobs (<http://www.snh.gov.uk/docs/B726802.pdf>). Designation of the Small Isles pMPA for seabirds would help promote birdwatching and wildlife tourism in the area and help boost the local economy.

RSPB Scotland has a reserve at the UK's most northerly mainland location, Dunnet Head. This reserve is an important area for seabirds and has around 40,000 visitors annually. With seabirds declining in Scotland, particularly in the north (<http://www.snh.gov.uk/docs/B424907.pdf>), the designation of the North West Orkney pMPA and East Caithness Cliffs pMPA for seabirds would enhance the ecological coherence of the network as well as providing economic benefits associated with tourism.

The Scottish Seabird centre is a major tourist attraction and employer in North Berwick. The centre supports 48 jobs (16FT, 32PT/seasonal), has around 175,000 visitors per year and has a total revenue of around £1.1 million per year.

Environmental Report

RSPB Scotland supports the findings of the Strategic Environmental Assessment. However, the basic assumption that *"the benefit of designation will primarily accrue*

⁶⁴ http://www.rspb.org.uk/Images/localvalue seabirds_tcm9-258550.pdf

⁶⁵ http://www.rspb.org.uk/Images/GKT%20Economic%20impacts%20FINAL_tcm9-283517.pdf

⁶⁶ http://www.rspb.org.uk/Images/wildlifeatwork_tcm9-282134.pdf

to [the search features]” is only true if (i) there is adequate management, compliance and enforcement throughout the designations, and (ii) additional measures protect all protected features, not just those currently threatened by activities in sites. Some proposals have been put forward with no additional management suggested, as is the case for most sandeel proposals. Although such management proposals may protect features from future threats, they offer no direct benefit in their present form and therefore invalidate the overall assumption made in the SEA. Most of the current management proposals protect the *status quo* in most areas. We support strong management throughout MPA sites.

As discussed above, the SEA assumes displaced fishing effort, even though this may not be the case in many sites.

Final Thoughts

35. On the basis of your preferences on which pMPAs should be designated, do you view this to form a complete or ecologically coherent network, subject to the completion and recommendations of SNH’s further work on the 4 remaining search locations?

No

RSPB Scotland does not believe this network, as currently proposed, to be complete or ecologically coherent.

The Scottish Government is obligated under various laws and commitments to designate an ‘ecologically coherent’ network of MPAs. However, these proposed MPAs will only offer direct protection to 39 species and habitats, a tiny proportion of the 6,500 species and many important habitats found in Scotland’s seas. This runs entirely contrary to the OSPAR recommendations which ask that network areas include ‘the range of species, habitats and ecological processes (for which MPAs are a suitable measure)’. **An MPA network that does not represent the full range of seabirds cannot be considered ecologically coherent at any geographic scale.** Not only does this mean the Scottish Government will fail to meet a duty under its own Marine Act, but it will also fail to meet international commitments including those under the OSPAR Convention, the World Summit on Sustainable Development, and the EU Marine Strategy Framework Directive.

The OSPAR Commission considers an ecologically coherent network of MPAs to be one which interacts with and supports the wider environment. Scotland’s network, as currently proposed, will provide protection for only 39 species and habitats – despite the fact that the consultation document states that Scotland holds around 6,500 marine species and Eunis level 3 predictions show at least 15 broad scale habitats. **Scotland’s proposed network will explicitly protect less than 1% (~0.6%) of the species and habitats present in the Scottish marine area.** Therefore, the proposed network will neither support nor interact with the wider environment in general, and seabirds in particular, in any significant way, and so does not meet with OSPAR guidance for ecological coherence (OSPAR 2006).

If fact, testing this 0.6% proportional representivity against the OSPAR Commissions assessment guidelines for representivity, Scotland's proposed network falls far short of the OSPAR requirement of a minimum of 10%.(OSPAR, 2007).

RSPB Scotland supports the advice from JNCC and SNH that completion of the Natura programme of work and the continued protection of existing measures must be met to improve the network's likelihood of meeting ecological coherence. However, we strongly disagree that these are the only pieces of work required. A much broader suite of species and habitats – specifically, nationally important seabird aggregations - must be included in the network for it to be considered representative and coherent. On land, European designations (SPAs) are supported by a complementary network of national designations (SSSIs) to help meet the duties of the Birds Directive. At sea, national MPAs for seabirds at sea must offer this complementary protection to marine SPAs. The inclusion of serpulid reefs in the current proposals has already set a precedent of including Natura features in national MPAs so this should not be used as an excuse.

JNCC and SNH's advice on the network's ecological coherence misinterpreted the application of the OSPAR guidelines by testing how well features are *“represented within the Scottish MPA network in the OSPAR regions considered to be important for the feature”*. Only regarding the very small subset of features already chosen is a serious misinterpretation of the intended use as it ignores the aim to protect and conserve areas that best represent the range of species, habitats and ecological processes in the OSPAR area.

At the point of this process when MPA search features were defined, SNH and JNCC stated that these search features were to be used for the identification of candidate MPAs but that *“[Additional] features which are considered to add to the broader representivity of the network may also be designated as protected features”*⁶⁷ Only 3 species were added during this later consideration, none of which are seabirds.

A working definition of an ecologically coherent network produced by SNH commissioned research suggests *“as a way of encompassing the varying definitions and legal requirements”* that *“all critical areas for rare, highly threatened and endemic species are included”*. That a number of Scottish seabird species meet these criteria and but have not been included in the proposals yet again shows the lack of consideration given to seabirds in this entire MPA process. MPAs have shown to be a suitable conservation measure for seabirds in numerous pieces of research including research commissioned by DEFRA. Therefore, there is absolutely no scientific justification for seabirds to be disregarded and excluded.

All of the above points to the failure of the Scottish Government, SNH and JNCC to ensure that Scotland's evolving MPA network is ecologically coherent and makes an appropriate contribution to the OSPAR commissions'

⁶⁷ 2011; <http://www.scotland.gov.uk/Resource/Doc/295194/0114024.pdf>

aspiration to establish an ecological coherent network for the wider NE Atlantic.

36. Do you have any other comments on the case for designation, management options, environmental or socioeconomic assessments of the pMPAs, or the network as a whole?

Yes

The six MPAs proposed to protect black guillemot must be designated and effectively managed to meet the conservation objectives set out for each site. Because black guillemot populations are not in decline, few management measures have been proposed by Government. RSPB Scotland supports precautionary restrictions to 'set net' fishing in the areas (to protect against entanglement) and to implement biosecurity best practice to stop invasive species, for example rats populating islands preying on eggs and chicks.

The three sites proposed to protect sandeels – a prey species heavily relied upon by our seabirds - must be designated and managed effectively. These include North-west Orkney which holds a spawning stock important to much of the North Sea ecosystem. An 'optional' site, the Firth of Forth Banks Complex, must be designated and include sandeels as a protected feature. This area is one of the most important sandeel areas on the Scottish east coast.

The continued delay in the designation of MPAs for seabirds causes unnecessary costs for developments at sea due to regulatory uncertainty. In May, RSPB Scotland and Scottish Environment LINK joined with the oil and gas, fishing industries and others to ask Government to follow good science to select MPAs so that multiple benefits can flow from the improved health of our seas and avoid unnecessarily prolonging the designation process.

Management of MPAs must achieve the protection and, where appropriate, enhancement of the health of Scotland's seas as is a duty in the Marine (Scotland) Act 2010. The current management proposals protect the status quo in most areas. We support strong management throughout MPA sites.

The SPA process has currently failed to provide adequate protection for seabirds at sea and is unable to do so for nationally important seabird aggregations. We welcome the preliminary results of the JNCC's research (Kober et al., 2010)⁶⁸ on SPAs, but identifying sites based on international importance clearly fails to represent some known important areas for Scotland's seabirds, and will undermine Scotland and the UK's ability to conserve these species. One example of how internationally-set SPA criteria are not appropriate for Scotland's

⁶⁸ Kober, K., Wilson, L.J., Black, J., O'Brien, S., Allen, S., Win, I., Bingham, C. and J.B. Reid, 2012. The identification of possible marine SPAs for seabirds in the UK: The application of Stage 1.1 – 1.4 of the SPA selection guidelines. JNCC Report No 461.

seabirds is black-legged kittiwake, the largest Scottish colony SPA for which is Fowlsheugh, holding roughly 1.1% of the biogeographic population. Based on these numbers, for a foraging ground to be designated as a black-legged kittiwake SPA under the 1% criteria, it would require 91% of this population to be in it. Seabirds forage over large distances and parents take turns in foraging during incubation and chick rearing, therefore it is unlikely that these criteria will ever be met. In fact, the results of JNCC's analysis did not find any area that met the 1% criteria for kittiwake, and only four very small areas that may qualify under SPA criterion 1.4. Given that kittiwake are highly mobile it is likely that (i) these sites do not capture an appropriate proportion of the behaviour, (ii) they will not be large enough to maintain the integrity of the species using the site, and (iii) they will not be effective in achieving the conservation objective. Instead, considering the area's importance to national populations would ensure the site is appropriate and better able to conserve the species.

RSPB Scotland holds expertise that is able to identify nationally important aggregations of seabirds from tracking data. Methods developed by RSPB's international partner, BirdLife International, have successfully done this for over 40 species throughout the world. The methods have been peer reviewed, and quantify representativeness, interannual variability and accuracy of results and have been used to inform SPAs in Spain. RSPB now also host an increasing database of tracking data and work in close collaboration with other data collectors. RSPB Scotland welcome further discussion about how to input into the identification of nationally important aggregations of seabirds. Data from RSPB's seabird tracking work shows the search locations of Southern Trench, Skye to Mull, East Shiant Bank and the to the Eye Peninsula Butt of Lewis to be important for seabirds.

The MPAs proposed in this consultation, and the search locations which will be consulted on in 2014, would considerably add to the protection of seabirds in Scotland. **We recommend in the strongest terms that the Scottish Government commits to protecting seabirds through Scotland's national MPAs.**