



SEAS OFF ST KILDA PROPOSED SPECIAL PROTECTION AREA

ADVICE TO SUPPORT MANAGEMENT

Questions on the document should be addressed to: <u>seabirds@jncc.gov.uk</u>

For further information on marine SPAs visit: <u>http://jncc.defra.gov.uk/page-1414</u>

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Further information on Special Protection Areas, the wider network and protected areas management is available at <u>http://jncc.defra.gov.uk/page-162</u>. The following documents provide further information about the features, evidence and assessment of the Seas off St Kilda pSPA and should be read alongside this paper: • Site Selection Document • Draft Conservation Objectives and Advice on Operations For the full range of site documents and more on the fascinating range of marine life to be found in Scotland's seas, visit -<u>http://jncc.defra.gov.uk/SPAconsultation</u>

1. Purpose of this document

Marine Protected Areas (MPAs) are an environmental management tool available to help conserve marine ecosystems whilst supporting sustainable development. Sea users are understandably nervous that any proposal for a new MPA may affect their use of an area. If and how a new MPA may affect sea users, public authorities and the wider public (collectively called stakeholders) influences how people respond to a proposal, particularly through their responses to a public consultation.

This document provides information to support discussions with stakeholders about potential future management of activities associated with the Seas off St Kilda proposed Special Protection Area (pSPA) during the formal consultation. The document describes our current knowledge of where activities that could potentially affect those features take place within the pSPA. It sets out the conservation objectives for the qualifying bird features, as detailed in the draft Conservation Objectives and Advice on Operations document, that provide the starting point for public authorities to consider whether additional management action is required for activities. The document also presents possible management options for each of those activities that are currently considered likely to influence whether the conservation objectives of the protected features are achieved. These options are based on our current understanding of the sensitivities of the qualifying bird species and their supporting habitats to marine activities. The development of site management is an ongoing, iterative process that will continue after classification, building on and adapting to knowledge gained from management actions and their monitoring.

The paper covers a range of different activities but is not exhaustive. It does not attempt to cover all possible future activities or eventualities (e.g. as a result of accidents) and does not consider likely cumulative effects that could result from different types of activities being carried out within the pSPA.

The document encourages stakeholders with an interest in the area to engage with the formal consultation, so that a full understanding can be gained of activities occurring within the pSPA and how these might interact with the listed features. Such knowledge will help ensure that any management actions are proportionate and based on the best available information, such that the Seas off St Kilda pSPA makes a genuine and long-lasting contribution to the protection of Scotland's marine environment.

2. Management Options Summary

This section summarises the management options for the Seas off St Kilda pSPA. It focuses on where we consider there could be a risk in terms of achieving the conservation objectives for the protected features. The options aim to *minimise the risk* of the protected features *not meeting their conservation objective* within the pSPA. The full detail on these options is provided in the subsequent sections. Discussions between sea users, scientists and managers will be needed to develop any management measures deemed necessary.

Activity	Management options
Fishing activity: Line fishing gear (long lines)	No change to existing management: There is a risk that northern fulmar will not achieve its conservation objectives.
	Reduce/limit pressures : This option would reduce, but may not entirely eliminate, the risk that northern fulmar will not achieve its conservation objectives. Appropriate management of long line fishing activity to protect northern fulmar could include technical measures designed to make hooks inaccessible to birds.
	Remove/avoid pressures : This option would minimise the risk of northern fulmar not achieving its conservation objectives. Evidence suggests this might be achieved through technical measures (such as streamers, offal management and weighted lines), which have proved very effective in other fisheries.
Military activity	No change to existing management : The Ministry of Defence (MoD) seeks to manage its activities in a manner that minimises environmental impact. However, without any dialogue there is a risk that the MoD Environmental Protection Guidelines do not sufficiently consider the sensitivity of features to a range of military activities.
	Reduce/limit pressures : Updating the MoD Environmental Protection Guidelines to encompass this site and any seasonal sensitivities would increase the likelihood that the site's features would meet their conservation objectives.
	Remove/avoid pressures : Due to the strategic importance of MoD activities it may not always be possible to remove or avoid these pressures. However dialogue with the MoD should seek to reduce or limit these pressures as described above.

Shipping hazardous cargoes	No change to existing management: If no changes are made to the existing management practices, a residual risk remains that an unforeseen incident or accident from the shipping of hazardous cargo may impact the conservation objectives for the site.
	Reduce/limit pressures : Implementing measures to minimise the risk of oil spill in and around the pSPA e.g. through planning measures such as delineating Areas To Be Avoided (ATBA), would reduce the risk that an unforeseen incident or accident would impair the site features' ability to meet their conservation objectives.
	Remove / avoid pressures : The risk of an incident or accident affecting the pSPA cannot be entirely removed, however appropriate planning measures such as identifying ATBA would reduce risk of impact to the site's features from an incident involving ships carrying hazardous cargoes.

3. Site Summary

The Seas off St Kilda pSPA is located about 50 km northwest of North Uist in the Western Isles of Scotland. It covers 3,995 km² of mainly offshore waters and encloses the St Kilda archipelago, consisting of the four islands of Hirta, Dun, Soay and Boreray, and the seastacks of Stac an Armin, Stac Lee and Levenish (see Figure 1).

In the site, water depths range mainly between 40m and 410m; shallow areas of less than 100m depth occur only in the east of the site, while depths of more than 250m are reached only in the northwest (see Figure 1). The bathymetry shows that Seas off St Kilda pSPA lies very close to the continental shelf edge, with water depth quickly increasing to the west and to the north of its site limits. Shelf-break fronts are a typical phenomenon at the shelf edge and, like almost all fronts, are regions of enhanced plankton production, leading to a higher fish production (Mann and Lazier 1991). Shelf edges might also have a function in concentrating marine organisms both in acting as a barrier to species confined to shallower waters, and as a geological feature guiding the migration of fish species (pers. comm. D. Tobin).

In the southwest of the site, rock and reef habitats are prevalent, while the northwest is dominated by a mosaic of subtidal coarse sediments, sand and muddy sand habitats (McBreen *et al.* 2011).

A number of human activities take place in the area within and around the Seas off St Kilda pSPA. Fishing activity within the site includes the use of both mobile and set (fixed) fishing gear types, including otter trawling, seines (encircling) nets, line fishing gears, static nets, creeling and potting. There is a military base on the island of Hirta and some military activity takes place in the area surrounding St Kilda. The seas around St Kilda do not have a high volume of shipping traffic, however it is an environmentally sensitive area. The International Maritime Organisation (IMO) recommended routes for shipping either pass through the Minches to the east of the Outer Hebrides or through the deep-water route between St Kilda and Outer the Hebrides. Recreational activities such as RYA cruising routes occur within the site.

The Seas off St Kilda pSPA has been identified alongside a wider network of SPA proposals that have been established to help conserve important marine areas for seabirds. This proposal has been identified for the following protected features:

•	northern gannet,	Morus bassanus	(breeding season)
•	northern fulmar,	Fulmarus glacialis	(breeding season)
٠	European storm-petrel,	Hydrobates pelagicus	(breeding season)
٠	common guillemot,	Uria aalge	(breeding season)
•	Atlantic puffin,	Fratercula arctica	(breeding season)

Further information on how these features have been selected and how the boundary has been identified can be found in the Site Selection Document for Seas off St Kilda pSPA¹

¹ Available at: <u>http://jncc.defra.gov.uk/pdf/SAS_Departmental_Brief_St_Kilda.pdf</u>.



Proposed Special Protection Area (pSPA) [___] Territorial seas adjacent to Scotland (12NM limit)

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Figure 1: Location of the Seas off St Kilda pSPA

4. Species distribution within the site

All features of interest are considered to be present across the entire Seas off St Kilda pSPA.

5. Roles

JNCC and Scottish Natural Heritage (SNH) jointly provide conservation advice to Scottish Government and other public authorities on how it might be possible to achieve the conservation objectives for the protected features within the pSPA. The scientific advice will include possible options for managing human activities in the Seas off St Kilda pSPA to enable the features achieve their conservation objectives.

Marine Scotland lead the discussions on developing appropriate management actions with stakeholders and other public authorities who have powers to regulate activities, taking account of JNCC's and others' advice. The preferred management option will be identified, and if required, specific management measures would then be developed with relevant authorities. Marine Scotland is responsible for making recommendations to Scottish Ministers on these measures and any review of site management in the future. Scottish Ministers will decide whether to implement these measures. It is expected that licensed activities taking place within, or nearby, the pSPA will continue to be managed through the existing licensing system.

6. Conservation Objectives

The conservation objectives set out the essential elements needed to ensure that the qualifying features of the site make an appropriate contribution to the EC Birds Directive. They form the framework for establishing appropriate management options and assessing all future plans and projects that have the potential to affect the qualifying features of the site.

Conservation objectives are set for all protected features within each pSPA. It is recommended that the conservation objectives for the protected features within the Seas off St Kilda pSPA are:

To avoid significant deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long term and makes an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.

This contribution would be achieved through delivering the following objectives for each of the sites qualifying features:

- A. Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term;
- B. Maintain the habitats and food resources of the qualifying features in favourable condition.

More information on the conservation objectives can be found in the Seas off St Kilda pSPA Draft Conservation Objectives and Advice on Operations document².

² Available at: <u>http://jncc.defra.gov.uk/pdf/SAS_Conservation_Objectives_and_Reg_18_St_Kilda.pdf</u>

7. Management Options

The management options set out below provide a starting point for discussing any management actions that might be required for all the site's features to achieve their conservation objectives. Should the site be classified, discussions on any management will be led by the relevant authority and will involve stakeholders.

This document does not represent any formal management advice or decisions on management actions. Instead it presents general options based on an assessment of the sensitivities of species to pressures and existing activities/exposure levels. Management options were developed for each pSPA where we consider that some form of active management intervention may be necessary to achieve the conservation objective for each protected feature. We adopted a risk-based approach to identify appropriate management options; i.e. our advice is focused where we believe there is a risk of the protected features not achieving their conservation objective due to ongoing activities. The best available evidence and information on protected features and relevant activities have been used, and also our understanding of the relationships between the protected features and activities. The management options may be further informed by discussion with stakeholders. If new information becomes available during the consultation, the management options may be revised.

The presented information (at pre-classification stage) is general and not exhaustive, and is provided to assist and focus stakeholders and authorities in their consideration of the management of these operations. All of the management options provided are based on the best available evidence of existing activities taking place within the pSPA. All new plans and projects will still need to be considered by the relevant competent authority, and detailed advice will be provided on such proposals on a case-by-case basis. Any impact on the site's features will depend on the location, scale, nature and intensity of the relevant activity.

Sensitivities of protected features to activities

The management options focus on those activities that cause a pressure to which a protected feature has a medium or high sensitivity³, and if that activity is likely to be relevant in scale to the features of the site. The protected features of a pSPA are considered sensitive to activities that could adversely affect their conservation value, especially if they are unable or are very slow to recover from the effect. Pressures can be physical, chemical or biological (e.g. removal of non-target species). Different activities may cause the same pressure, e.g. shipping and military activities can both disturb seabirds although the scale and intensity of the disturbance pressure can vary between activities.

An assessment of sensitivity of bird features to various pressures and activities is provided in a <u>Sensitivity Assessment for Bird Features database</u>. This database provides an assessment of species specific seabird sensitivity to anthropogenic activities that can occur in the marine environment. Similar assessments for supporting habitat features are provided in the Feature Activity Sensitivity Tool (FEAST)⁴ available on the Marine Scotland website. These sensitivities reflect our current general understanding of the associations between activities, pressures and features, and support the first steps of the assessment of risk to the features in the pSPA. Authorities should use this tool when considering the management of any activity that is impacting upon the site's features or supporting habitat features, along with the supporting databases.

³ In this context sensitivity has been defined as a measure of tolerance (or intolerance) to changes in environmental conditions (Tillin *et al.* 2010).

⁴ See http://www.gov.scot/Topics/marine/marine-environment/FEAST-Intro

Overlap of activities with protected feature distributions

Risks to a feature not achieving its conservation objectives were identified where there is an overlap between protected features and those activities expected to exert a pressure to which the features are sensitive. Management options are recommended for each activity with specific details provided in the following sections. The text focuses on interactions in terms of physical overlap but the assessment of risk in the future should also take account of the intensity and frequency of the activities occurring within, or nearby, the pSPA.

The advice in relation to disturbance is not about preventing or reducing the disturbance of individual animals *per se*, but about ensuring that any disturbance that does occur is not at a level that disrupts or prevents the key life-cycle activities of the proposed qualifying species within the site. It will include considering whether disturbance affects a species continued access to the site and access to the resources upon which they depend to complete those key life-cycle activities.

Three management options that may be applied have been identified:

- management action to remove or avoid pressures;
- management action to reduce or limit pressures;
- no additional management action is required.

Where an option suggests to 'reduce or limit' pressures, there are choices around how this could be achieved for a given activity. For example, management action could reduce the intensity of an activity and/or limit the activity to only certain parts of a site, possibly at certain times of the year.

Stakeholders can provide local environmental knowledge and detailed information on activities, including in relation to intensity, frequency, and methods. Such additional information will help to develop more specific management options, focused on interactions between features and activities. Marine Scotland and the relevant regulatory body will agree any management measures for the pSPA with stakeholders following classification of the SPA.

Overview of activities

Table 1 below lists those human activities that are thought to currently take place (May 2016) within or close to the Seas off St Kilda pSPA. Those activities to which the protected features are thought to be sensitive are explored in detail, activities to which the protected features are thought to be not sensitive (i.e. any interaction between the activity and the protected features is considered to be minimal) will not be considered further within this document. Any future change in the activities listed in Table 1, or the introduction of other activities not identified within the table, would need to be considered on a case-by-case basis to establish any appropriate management actions. Future improvements to our understanding of the sensitivity of features to pressures might mean that existing activities which are not considered likely to affect the protected features would need to be reconsidered.

Table 1: Overview of existing activities believed to take place within or close to the Seas off

 St Kilda pSPA.

Activities occurring which are considered likely to affect the protected features	Activities not considered likely to affect the qualifying features (other than insignificantly)
Fishing activity:Longline fishing	 Fishing activity Otter trawling Seining netting
Military activities:Disturbance caused by military activity	Static netsCreeling and potting
 Disturbance cause by shipping, but particularly the risk of accident /discharge from vessels carrying hazardous cargo (particularly oil spill) 	 Recreational activity Disturbance caused by RYA cruising/recreational boating

The initial advice provided in this document does not preclude the requirement for all new projects and plans to undergo a Habitats Regulations Appraisal (HRA) by the relevant competent authority. Equally it does not preclude the requirement for competent authorities to carry out a review of existing consents, permissions and/or licences. We would however anticipate that existing activities where we have identified no additional management based on our understanding of current operations can be scoped out at an early stage of the HRA. Early engagement with the relevant competent authority is recommended to ensure HRA requirements for plans and projects are scoped appropriately and unnecessary costs are avoided. Furthermore, management action may change where our understanding of the interaction between the listed features and activities develops over time.

1.1 Fishing activity (longline gear)

Fishing activity is regulated under the EU Common Fisheries Policy (Regulation 1380/2013/EU). Management of fisheries within the UK's 12 nautical miles territorial limit is regulated by national authorities (Scottish Government), whilst beyond this limit out to the extent of the UK Exclusive Economic Zone, fisheries management is an exclusive competence of the EU. The Seas off St Kilda pSPA straddles the 12 nautical miles limit and any management measures would therefore need to be applied under relevant inshore and Common Fisheries Policy regulations.

In the period from 2009 to 2013, fishing effort with longline gear was concentrated in the western part of the pSPA as shown in Figure 2.

Longline hooks are baited when they are set. Birds can be caught by a hook while attempting to scavenge the bait when the line is set, the catch while the line is being hauled, or any offal discarded during the setting or hauling of lines. The foraging behaviour of some species makes them more susceptible to such bycatch by this means. Evidence suggests northern fulmar is susceptible to bycatch in longline fisheries (ICES 2013).

Northern fulmar is considered to be the primary seabird bycatch from longline fisheries in the northeast atlantic (Brothers *et al.* 1999, Dunn and Steel 2001, Løkkeborg 2003, 2008, Tasker *et al.* 2000). Quantitative estimates of bycatch are not available but there is a risk that mortality could be sufficient to have a significant effect on northern fulmar populations.

We have provided options to reduce bycatch of northern fulmar. The mitigation measures in the management options follow current best practice in reducing seabird bycatch in longline fisheries (Birdlife International 2013, Løkkeborg 2008).

Management Options Fishing activity: (longline gear)	No change to existing management: For most of the fishing activity taking place within the site at the present time (May 2016), no change to existing management measures have been identified. However, due to the evidence of fulmar by-catch in longline fisheries, no management presents a risk of northern fulmar not achieving its conservation objectives in the site.
	 Reduce/limit pressures: Fisheries managers may wish to consider a range of actions that could be used to reduce the risk of northern fulmar bycatch within the site. These actions could include: Technical measures designed to make hooks inaccessible to birds (e.g. setting streamers, weighting lines) Follow best practice guidelines (e.g. minimise offal discards during setting or hauling of lines) Temporal measures (e.g. night time setting of lines). However such measures would require further investigation of the specific temporal foraging strategies of fulmar and any differences in the attraction of fulmars to vessels fishing at night.
	Remove/avoid pressures: Actions under this option would

minimise the risk of northern fulmar not achieving its conservation objectives by eliminating the risk of fulmar bycatch. Evidence suggests this action might be achieved through technical measures (such as streamers, offal management and weighted lines), which have proved very effective in other fisheries.



Figure 2: Location of long line fishing activity in relation to protected features

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1.2 Military activity

Some military activity occurs in the area of the Seas off St Kilda pSPA. Discussion with the Ministry of Defence (MoD) suggests the level of activity around this area is limited. The MoD will incorporate the Seas off St Kilda pSPA into their Environmental Protection Guidelines for the Marine Environment. These guidelines help the MoD manage military activities in a way that will reduce risk of the features not achieving their conservation objectives.

Some military activity such as low-flying aircraft, firing munitions and exploding ordinance, high speed vessel manoeuvres or military exercises could cause disturbance to marine birds. Some further dialogue with the MoD may be appropriate to ensure that contingency arrangements are in place to avoid excessive disturbance, coordinated through the Ministry of Defence Environmental Protection Guidelines.

As part of its Marine Environment and Sustainability Assessment Tool (MESAT), the Royal Navy produce a layer for its electronic charts to provide advice to personnel on how military activities in the vicinity of designated marine protected areas may impact features. These electronic charts are used by Navy Commanders and other operational planners to ensure that military activities in the marine environment minimise their environmental impact. Environmental Protection Guidelines (Maritime) (latest version of the EPG(M)⁵) have been developed over the past few years in consultation with JNCC on behalf of the UK Statutory Nature Conservation Bodies (SNCBs). These charts offer guidance for the whole UK marine area.

Management options Military activity: (e.g. practice areas)	No change from existing management: The MoD seek to manage its activities in a manner that minimises environmental impact. However, without any further
	a range of military activities is not sufficiently addressed within the MoD Environmental Protection Guidelines, thus creating a risk that the features may not achieve their conservation objectives.
	Reduce / limit pressures : Update the MoD Environmental Protection Guidelines to encompass the Seas off St Kilda pSPA, noting any seasonal sensitivities of the protected features to minimise the risk that the features may not achieve their conservation objectives.
	Remove / avoid pressures : Due to the strategic importance of MoD activities it may not always be possible to remove or avoid these pressures. However dialogue with the MoD should seek to reduce or limit these pressures as described above.

⁵ www.jncc.defra.gov.uk/pdf/Environmental%20Protection%20Guidelines%20(Maritime)%20v2.1.pdf



Figure 3: Location of the Ministry of Defence practice area in relation to the Seas off St Kilda pSPA.

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1.3 Shipping – carriage of hazardous cargoes

In the area of the Seas of St Kilda pSPA, the primary concern is the shipping of oil (the hazardous cargo). The management options described below aim to minimise the risk of oil spill in and around the pSPA. The existing management actions are likely to achieve this outcome as current regulation and best practice seek to ensure the safety of shipping at sea and minimise environmental impact (IMO 2004, Resolution MEPC 121(52)⁶). Nevertheless, there remains a residual risk from oil discharge by unforeseen incidents or accident.

To further reduce the risk of oil spill from an unforeseen incident or accident, planning measures such as identifying and promoting Areas To Be Avoided (ATBA) could be applied. Areas To Be Avoided are defined as areas within defined limits in which navigation is either particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships, or by certain classes of ships⁷. ATBA are voluntary measures however previous experience suggests compliance with such voluntary measures is very high.

Existing International Maritime Organisation (IMO) routing measures are in place: recommended shipping routes pass through the Minches to the east of Outer Hebrides and a deep water route passes between the dSPA and Outer Hebrides (Figure 4). A report commissioned by The Highland Council in 2005 investigated shipping traffic routing through the Minches and the Deep Water Route west of the Hebrides and identified measures to reduce the risk of a significant pollution incident in the study area⁸. The management options consider management measures around the pSPA for the purpose of minimising risk to this environmentally sensitive area.

⁶ RESOLUTION MEPC. 121(52)

⁷ http://www.imo.org/OurWork/Safety/Navigation/Pages/ShipsRouteing.aspx

⁸ http://www.cne-siar.gov.uk/harbourmaster/documents/minchtraffic.pdf

Management options Shipping: (hazardous cargo)	No change from existing management: If no changes are made to the existing management practices, the shipping of hazardous cargoes are unlikely to impact the conservation objectives for the site however there remains a residual risk of discharge from an unforeseen incident or accident in the vicinity of the site.
	Reduce / limit pressures : Implementing measures to minimise the risk of oil spill in and around the pSPA e.g. through planning measures such as delineating Areas To Be Avoided (ATBA), would reduce the risk that an unforeseen incident or accident would impair the site features' ability to meet their conservation objectives.
	Remove / avoid pressures : The risk of an incident or accident affecting the pSPA cannot be entirely removed without prohibiting shipping in or adjacent to the site. However applying appropriate planning measures such as identifying ATBA would significantly reduce risk of impact to the site's features from an incident involving ships carrying the most hazardous cargoes.





8. Conclusions and further recommendations

Where management measures are required, the development of these would be undertaken via discussion with the relevant industries and scientific organisations. The relevant authority will lead the development of specific management measures.

Marine Scotland will make recommendations to Scottish Ministers on any management measures that may be required for the protected features to achieve their conservation objectives. Any such measures will be developed through discussion with stakeholders following classification of the SPA. Any statutory measures will be subject to consultation and the processes normally required by the legislation will be used. Where fisheries management measures are necessary and the pSPA is located where Scottish Ministers do not have exclusive competence, an application will be made for appropriate measures using the mechanisms of the EU Common Fisheries Policy. This process will include consultation on the measures at the EU level.

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