Scottish MPA Project Management Options Paper

NORTH-WEST ORKNEY NATURE CONSERVATION MARINE PROTECTED AREA

JULY 2014

JNCC developed the present paper to support discussions with stakeholders about the management of activities within this Nature Conservation Marine Protected Area (MPA). The paper should only be considered a starting point for discussions around the ongoing process of developing any management necessary to deliver the conservation objectives of the designated features; the process will continue after site designation.

The paper does not attempt to cover all possible future activities and does not consider likely cumulative effects that could result from different types of activities being carried out within the MPA. However, it does consider a range of activities and developments considered to be taking place within the MPA at the point of writing, and focuses on where we consider there could be a risk of the protected features not achieving their conservation objectives.

The following documents provide further information about the protected features in terms of confidence in the evidence base and assessment of the MPA against the MPA Selection Guidelines and should be read alongside this Management Options Paper:

- Site Summary Document
- Data Confidence Assessment
- Detailed assessment against the MPA Selection Guidelines

The documents are all available at www.jncc.defra.gov.uk/page-6484

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DEVELOPMENT OF MANAGEMENT OPTIONS FOR THE NORTH-WEST ORKNEY MPA

1 Management Options Summary

This section summarises JNCC's management options for the North-west Orkney MPA. The options are being considered in order to eliminate or manage the risk of not meeting the conservation objective to conserve the protected features within the MPA. We have not included any management options for fishing activities that could impact sandeel populations because the MPA lies within a wider area where such activities are prohibited. If the current management regime is changed, it may be necessary to review the management actions needed for the MPA. The full detail on these options is provided in the subsequent sections of the Management Options Paper. Discussions between sea users, scientists and managers will be needed to develop any subsequent management measures.

Activity	Management options
Licensed activities	The potential impacts of renewable energy developments on the protected features within the MPA will be assessed through the existing EIA process on a case-by-case basis. Early dialogue with DECC and JNCC would help identify and resolve any issues at an early stage.
Telecommunication cables	Early discussions between JNCC and the operator would be welcomed for all plans relating to cables within the MPA, including installation, maintenance and removal. JNCC recommend that a voluntary Environmental Impact Assessment is undertaken to support plans for any new cable installation to assess the impacts of the associated activities on the protected features present.

2 Introduction

The North-west Orkney Marine Protected Area (MPA) lies to the north and west of Orkney (see map 1) and has been recommended by JNCC and Marine Scotland Science as an area important for sandeels, a type of burrowing fish. The MPA plays an important role in supporting wider populations of sandeels in Scottish waters. Specifically, newly hatched sandeel larvae from this region are exported by currents to sandeel grounds around Shetland and the Moray Firth. Sandeels are a key source of food for a range of marine wildlife, including many types of larger fish and seabirds. The area of the North-west Orkney MPA is approximately 4,365 km².

Further details on the MPA can be found in the North-west Orkney Site Summary Document available at www.incc.defra.gov.uk/page-6484

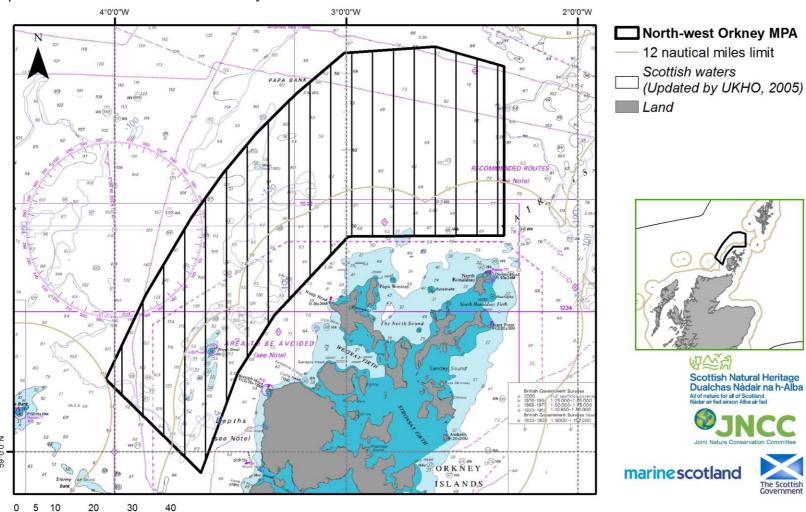
A number of fisheries exist in the region of the MPA, including trawl fisheries for *Nephrops*, demersal seine net fisheries for haddock, and creel fisheries predominantly for crab. Vessel Monitoring System (VMS) data suggests a multi-national fleet operates within the MPA, including vessels from a number of EU countries, as well as Norway and the Faroe Islands. The MPA overlaps with Sandeel Area 5 and 7 management units, for which a zero Total Allowable Catch (TAC) has been set and so no targeted sandeel fishery can currently take place in the region. Three telecommunication cables cross the MPA and the MPA also overlaps with two areas identified in the Draft Sectoral Marine Plans for offshore renewable energy.

JNCC produced the present document to provide background information on the development of management options for the North-west Orkney MPA, and will use it to support ongoing stakeholder discussions.

The document describes the known location and extent of protected features and our current knowledge of where activities take place within the MPA. It also presents the management options for each of those activities that JNCC currently consider capable of delivering the conservation objectives for protected features. The document encourages stakeholders with an interest in the area to input to the development of appropriate management measures that will ensure the North-west Orkney MPA makes a genuine and long-lasting contribution to the protection of Scotland's marine environment.

Nautical Miles

Map 1 Location of the North-west Orkney MPA



Map projected in Mercator (World) projection, geographic coordinate system WGS1984. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass, Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. MPA © JNCC and SNH, 2014. All rights reserved. Admiralty Chart © Crown Copyright, 2013. All rights reserved. License No. EK001-20130405. NOT TO BE USED FOR NAVIGATION

3 Roles

JNCC provides conservation advice to Scottish Government on how it might be possible to achieve the conservation objectives for the protected features in MPAs. JNCC's advice includes possible management options for controlling human activities in the North-west Orkney MPA.

Marine Scotland lead the discussions on developing appropriate management actions with stakeholders, taking account of JNCC's and others' advice, identify the preferred management option and develop specific management measures 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. Marine Scotland expected that licensed activities taking place within, or nearby, the MPA will continue to be managed through the existing licensing system. For MPAs in offshore waters, Marine Scotland expect the process under the Common Fisheries Policy that is already in place for delivering any fisheries management requirements for Special Areas of Conservation will be followed.

Stakeholders can provide additional evidence to support the development of management measures including local knowledge of the environment and of activities. Discussions with stakeholders will be one way of highlighting the implications of any management measures to JNCC, Scottish Government, and other regulators. Such input will contribute to the development of well-designed and effective management measures.

4 Protected features and conservation objectives

The North-west Orkney MPA has been designated as part of a network of Nature Conservation MPAs that is being established to help conserve a range of Scotland's important marine habitats, wildlife, geology and landforms. The North-west Orkney MPA has been designated for the following protected features, as shown in map 2:

- Sandeels
- Geodiversity features sediment wave fields, sand banks and sand wave fields.*

*Sediment wave fields, sand banks and sand wave fields represent features under the Marine Geomorphology of the Scottish Shelf Seabed category, and are predominantly formed by the action of tidal currents. As long as current patterns and flow rates are maintained, these features are likely to be maintained over time, even if subject to physical disturbance¹. As such, JNCC do not consider there to be a significant risk of features not achieving their stated conservation objectives and so the features have not been considered further in the context of the management options presented below.

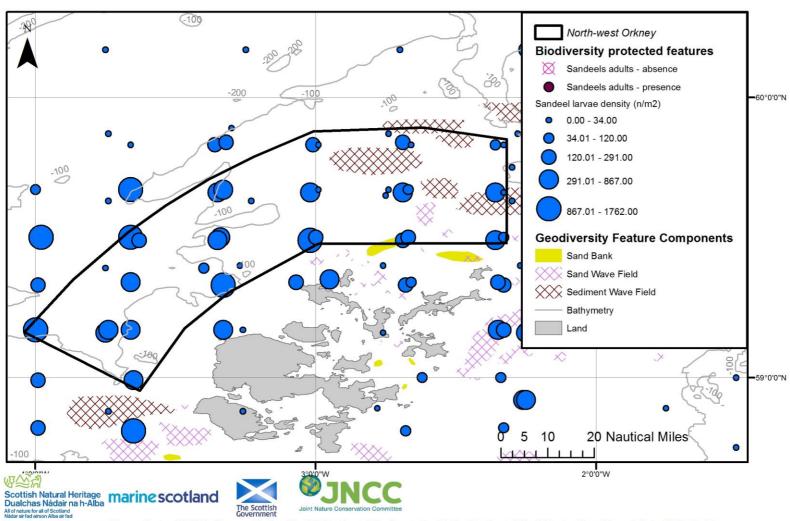
Conservation objectives set out the desired quality of the protected features within each MPA. JNCC recommend that the conservation objectives for the protected features within the North-west Orkney MPA are 'conserve' for all features.

Improved evidence on the condition of these features will be collected as part of the six-year reporting cycle required under the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009, or through provision of other evidence, and may result in modifications to JNCC's recommendations for the management actions needed to achieve the features' conservation objectives.

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¹ Brooks, A.J., (2013). Assessing the sensitivity of geodiversity features in Scotland's seas to pressures associated with human activities. *Scottish Natural Heritage Commissioned Report No. 590.*

Map 2 The known distribution of protected features within the North-west Orkney MPA



Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162(© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved.

5 Overview of activities

Table 1 below lists the human activities that are believed to take place within or close to the North-west Orkney MPA. Further discussions with those who use the area are required to improve our understanding of these activities (e.g. distribution and intensity etc.).

Those activities to which the protected features are sensitive are explored in detail in the next section. Activities to which the protected features are not thought to be 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 the appropriate management actions.

Table 1: Overview of existing activities believed to take place within or close to the Northwest Orkney MPA

Activities considered capable of affecting the protected features	Activities <i>not</i> considered capable of affecting the protected features*
Licensed activities: Overlap with draft renewables areas OWN1 and TW2	Shipping • Commercial shipping
Telecommunications cables	Fishing activities**: • Line fishing • Pelagic trawling and purse seining • Creeling and potting • Demersal seine netting • Otter trawling

^{**} Although several different fisheries currently exist within the MPA, none of these fisheries are currently considered likely to affect the sandeel feature. Furthermore, the MPA overlaps the Sandeel Area 5 and 7 management units, for which a zero Total Allowable Catch (TAC) has been set and so no targeted sandeel fishery can currently take place within the region. Consequently, JNCC consider no additional management of fishing activity is necessary at the current time to achieve the conservation objective for the sandeel feature. However, if the TAC was changed and a targeted sandeel fishery developed in the future, appropriate management options would need to be considered to ensure the sandeel feature achieved its conservation objective.

The likely effects on the feature condition and the risk to the conservation objectives were assessed using the evidence described in the <u>JNCC/SNH MPA fisheries management guidance</u>.

6 Development of management options

JNCC developed management options for each MPA 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 that ongoing activities will prevent the protected features achieving their conservation objective. To do this, we have used existing data and information on protected features and relevant activities, and also our understanding of the relationships between the protected features and activities. JNCC expect on-going discussions with stakeholders during the development of any management actions.

Our management options focus on the activities that cause a pressure to which a protected feature is sensitive. Pressures can be physical (e.g. abrasion of the seabed), chemical or biological. Different activities may cause the same pressure, e.g. fishing using bottom gears and aggregate dredging both cause surface abrasion which can damage the seabed although the scale and intensity of the pressure can vary between activities. Thus, the protected features of a MPA are considered sensitive to those activities that could adversely affect their conservation value, especially if they are unable or are very slow to recover from damage.

The Features Assessment Sensitivity Tool (FeAST) reflects our current understanding of the interactions between activities, pressures and features and supports the first steps of the assessment of risk to the features not achieving their conservation objectives in the MPAs. The tool highlights that activities can give rise to a range of pressures, to which the protected features of the MPA may be sensitive. The online tool provides more detailed information including the evidence that has been used in developing these recommendations.

Risks of not achieving the conservation objectives have been identified where there is an overlap between protected features and those activities associated with any pressures to which the features are sensitive. We have recommended management options to manage this risk. Specific details of the recommended management options for each activity are provided in the following sections. The overlap between different activities and/or planned developments and the protected features is described and where appropriate, mapped. 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 the MPA.

JNCC identify the following three management options:

- no additional management required
- management to reduce/limit pressures
- management to remove/avoid pressures

All of the management options provided are based on the best available evidence of existing activities taking place within the MPA. The options do not preclude the introduction of management measures in the future for new activities.

7 Management options

Management options have been considered by activity. Please click on the activities below to be directed to the relevant section:

Licensed activities

Telecommunication cables

7.1 Licensed activity

The North-west Orkney MPA overlaps with the OWN1 and WN2 areas identified in the Draft Sectoral Marine Plans that formed part of the Planning Scotland Seas consultation. The wind, wave and tidal power Sectoral Marine Plans are still in draft, and therefore the boundaries and locations of the areas remain provisional at this time (July 2014).

Marine Scotland Licensing Operations Team (MS-LOT), as the regulator for renewable energy operations in Scotland's seas, would be responsible for making the decision on

whether a proposed activity and/or development is capable of affecting (other than insignificantly)² the protected features of a Nature Conservation MPA.

For those activities and/or developments that MS-LOT considers require an EIA, JNCC is willing to engage at an early stage with MS-LOT and the developer to discuss the specific details of the proposed operation and/or development and offer advice on any potential effects. In so doing, JNCC will make reference to information on the sensitivity of the protected features to proposed activities and/or developments that is publicly available through 'FEAST' – The FEatures, Activities, Sensitivities Tool (Marine Scotland, 2013).

JNCC will consider the nature, scale, timing and duration of activities when providing its advice. Early engagement will facilitate discussions on the information we require to advise on possible implications to the protected features achieving their conservation objectives. If JNCC identify a potentially significant effect, mitigation measures may be advised. Any such advice provided as part of the licensing process will need to be development specific. On this basis, the information JNCC provides as part of the (present) Management Options Paper is necessarily generic and therefore indicative.

Further information on the regulatory framework concerning renewable energy activity within Nature Conservation MPAs is included in the MPA Management Handbook.

Further consideration may need to be considered regarding sandeels in the area and their interaction with licensed activities, e.g. infrastructure and change in hydrographic processes that may influence importance of the area to the species.

Management options Renewables activity:

The potential impacts of renewable energy developments on the protected features within the MPA will be assessed through the existing EIA process on a case-by-case basis. Early dialogue with DECC and JNCC would help identify and resolve any issues at an early stage.

7.2 Telecommunication cables

Three telecommunication cables cut across the south-west and north-east boundaries of the MPA, as shown in map 3. Telecommunications cables are not subject to assessment under the EIA regulations (2009) and therefore do not, in general, go through the marine licensing process. As such, it is not possible to develop specific management options for unlicensed activities such as cable installation and maintenance. Instead, discussions with operators would be welcomed at the earliest opportunity regarding plans for new cable installations, or for the maintenance or removal of existing cables.

Management options
Telecommunication cables:

Early discussions between JNCC and the operator would be welcomed for all plans relating to cables within the MPA, including installation, maintenance and removal. JNCC recommend that a voluntary Environmental Impact Assessment is undertaken to support plans for any new cable installation to assess the impacts of the associated activities on the protected features present.

Telecommunications cables North-west Orkney MPA Biodiversity protected features -200 Sandeels adults - absence -60°0'0"N Sandeels adults - presence Sandeel larvae density (n/m2) 0.00 - 34.00 34.01 - 120.00 120.01 - 291.00 291.01 - 867.00 867.01 - 1762.00 Telecommunication cables Bathymetry -59°0'0"N 20 Nautical Miles 2°0'0"W Scottish Natural Heritage Dualchas Nàdair na h-Alba Ald nature for al of Scotland Nàdar af da diren Alba af da direction of Natural Heritage Dualchas Nàdair af da direction Alba as fraid

Map 3: Location of telecommunication cables in relation to protected features

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved. Licensed activities ©UKCPC 2011.

8 Conclusions and further recommendations

Marine Scotland will be responsible for making recommendations to Scottish Ministers on any management measures that may be required. These measures will be developed through discussion with stakeholders following MPA designation. Any statutory measures will be subject to consultation and the processes normally required by the legislation will be utilised. Where fisheries management measures are necessary and the Nature Conservation MPA is located where Scottish Ministers do not have exclusive competence, then the intention is that an application will be made to the European Commission for measures using the mechanisms provided by the Common Fisheries Policy. This process will include consultation on the measures at the EU level.

9 Further information

The following documents are available for background information:

- SNH and JNCC MPA network advice (December 2012) www.jncc.defra.gov.uk/page-5510
- The MPA Management Handbook www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork/engagement/ManagementHandbook
- FEatures Activities Sensitivity Tool (FeAST) www.marine.scotland.gov.uk/FEAST/Index.aspx
- JNCC and SNH Fisheries Management Guidance www.jncc.defra.gov.uk/page-6498

The following documents about the North-west Orkney MPA are also available at www.jncc.defra.gov.uk/page-6484:

- Site summary
- Data confidence assessment
- Detailed assessment against the MPA Selection Guidelines