

**Scottish MPA Project  
Management options**

**WEST SHETLAND SHELF POSSIBLE MPA**

This is a working draft which has been produced to support early discussions with stakeholders about management.

Following a decision by Scottish Ministers this site may be subject to formal consultation, at which point it will become a possible MPA. This document is largely aimed at supporting discussions during the formal consultation process and therefore we have used the term 'possible MPA' throughout.

**Document version control**

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Version 0.2	11/03/2013	I Marengo	Instalment of first maps
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## DEVELOPMENT OF MANAGEMENT OPTIONS FOR THE WEST SHETLAND SHELF POSSIBLE MPA

### Management Options Summary

The following table summarises the management options considered for the West Shetland Shelf possible MPA. The options are being considered to eliminate or manage the risk of not meeting the conservation objectives for the proposed protected features. For more detail on these options, please read the full Management Options Paper. It is recommended that discussions take place between sea users, scientists and managers to determine which of these management options is the most appropriate.

Activity	Management options
<b>Fishing activity: Bottom contacting mobile gear</b>	<b>No additional management:</b> No mobile gear fisheries currently take place within the possible MPA due to the overlap with an area (the “Windsock”) currently closed to mobile gears under Common Fisheries Policy regulations for cod recovery. If this measure were to be lifted in the future, management would need to be considered to ensure the conservation objective for <b>offshore subtidal sands and gravels</b> is achieved.
<b>Fishing activity: Bottom contact static gear</b> (e.g. creeling and potting)	<b>No additional management:</b> This option is considered to be sufficient to achieve the conservation objective for <b>offshore subtidal sands and gravels</b> .
<b>Licensed activities</b> (e.g. oil and gas activity)	<p><b>No additional management or reduce/limit pressure:</b> These two options are likely to be similar in their effect as before issuing a licence the licensing authority would need to be satisfied (by the applicant) that there is no significant risk of the activity hindering the <b>offshore subtidal sand and gravel</b> feature achieving its stated conservation objective. Early dialogue with Marine Scotland and relevant statutory nature conservation body would help identify and resolve issues at an early stage.</p> <p><b>Remove/avoid pressures:</b> This option would reduce the risk of not achieving the conservation objective for <b>offshore subtidal sand and gravels</b> to the lowest possible levels.</p>
<b>Telecommunication cables</b>	Early discussions with the operator would be welcomed for all plans relating to cables within the possible MPA, including installation, maintenance and removal. It is recommended 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 proposed protected features present. Industry best practice should be used to avoid the most sensitive areas within the possible MPA where feasible.

## Introduction

The West Shetland Shelf possible Marine Protected Area (MPA) is located in offshore waters to the north of Scotland. The possible MPA overlaps with an area (the “windsock”) closed to bottom contacting mobile gears under Common Fisheries Policy regulations for cod recovery. A diverse range of sand and gravel habitats are present within the possible MPA, providing important examples of the northern extent of their range on the continental shelf. The area of the West Shetland Shelf possible MPA is 4,047 km<sup>2</sup>.

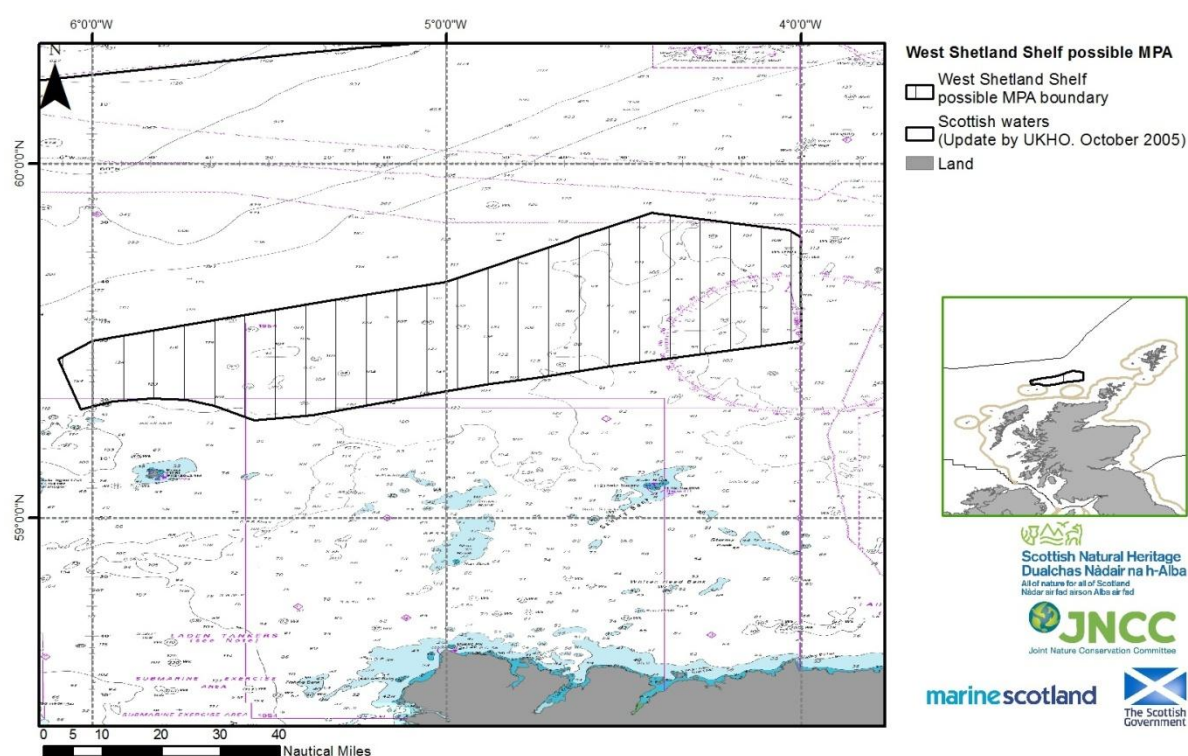
Further details of the possible MPA can be found in the West Shetland Shelf site summary document.

The main activity that overlaps with the possible MPA is a creel fishery for edible crab. Due to the ban on mobile bottom contact gear put in force since 2001, and subsequently following the EU [Cod Recovery Plan](#), trawling and seine netting are not operational in the area. However, based on the evidence pre-closure and on prevailing fishing patterns close to the boundary of the possible MPA, a demersal trawl whitefish (cod, saithe, hake, haddock, monk, whiting) fishery could occur across the possible MPA if the Cod Recovery Plan fishing closure were to be lifted. A small area in the north-east of the possible MPA overlaps with a Department of Energy and Climate Change (DECC) area of possible development for oil and gas and a telecommunications cable skirts across the possible MPA in a similar area.

This document has been produced to provide background information on the development of management for the West Shetland Shelf possible MPA. It will be used during discussions as part of the formal consultation. The aim of these discussions is to explore current and future activities and the potential interactions that these may have with the proposed protected feature.

The document describes the known location and extent of proposed protected features and the current knowledge of where activities take place. It also presents the management options for each of those activities that are considered capable of having an effect on the proposed protected feature. The document provides those with an interest in the area a chance to input into the early stages of developing appropriate management of activities to ensure that the West Shetland Shelf possible MPA makes a genuine and long-lasting contribution to the protection of Scotland’s marine environment.

**Map 1** Location of the West Shetland Shelf possible MPA



## Roles

The role of JNCC is to advise Scottish Government on management options for the West Shetland Shelf possible MPA. In doing this, we aim to ensure that the conservation objective for the proposed protected feature is met.

Marine Scotland will lead the discussions on management with stakeholders. They will consider JNCC's advice and will lead on the development of specific management measures. They will be responsible for making recommendations to Scottish Ministers on these measures. Scottish Ministers will decide whether to implement these measures.

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

## Proposed protected features and conservation objectives

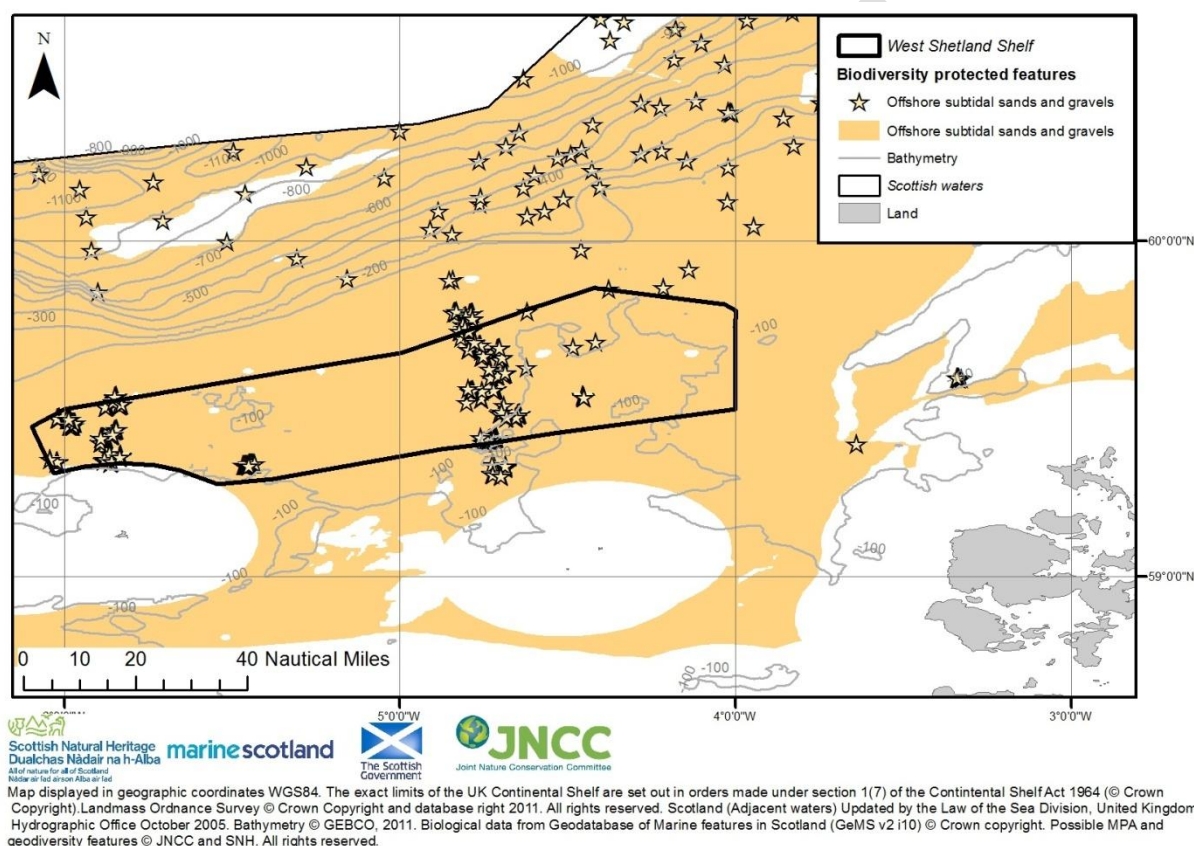
The West Shetland Shelf possible MPA is being considered as part of a network of new Nature Conservation MPAs. These are being established to help conserve a range of Scotland's important marine habitats, wildlife, geology and landforms. The West Shetland Shelf possible MPA is being considered for the following proposed protected feature, as shown in map 2:

- Offshore subtidal sands and gravels

Conservation objectives set out the desired quality of the proposed protected features within each Nature Conservation MPA. They will form part of the designation order for Nature Conservation MPAs and will therefore be in place at the time that a site is formally

designated. It has been recommended that the conservation objectives for the proposed protected features within the Hatton Rockall Basin possible MPA are ‘conserve’ for all features. The condition of the proposed protected features has not been verified so the conservation objectives are uncertain, in acknowledgement of the uncertainty in feature condition. Improved evidence on the condition of these features 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, may result in modifications to recommendations for management to support the achievement of the feature conservation objectives.

**Map 2** *The distribution of proposed protected features within the West Shetland Shelf possible MPA*



## Overview of activities

Table 1 below lists the activities<sup>1</sup> which take place within or close to the West Shetland Shelf possible 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 which the proposed protected features are sensitive to are explored in detail in the next section. Activities which the proposed protected features are not thought to be sensitive to (i.e. any interaction between the activity and the features is considered to be minimal) will not be considered further within this document. Future or other activities not identified within the table would need to be considered on a case-by-case basis.

<sup>1</sup> Initial lists do not include <15 m vessel activity. Information on fishing activity from the <15 m fleet is not routinely recorded and we are keen to improve our understanding of relevant activity with this possible MPA through discussions with stakeholders

**Table 1:** Overview of existing activities believed to take place within or close to the West Shetland Shelf possible MPA

Activities considered capable of affecting the protected features	Activities <i>not</i> considered capable of affecting the protected features
Fishing activities: <sup>2</sup> <ul style="list-style-type: none"> <li>Creeling and potting</li> </ul> Oil and gas activity <ul style="list-style-type: none"> <li>DECC area of possible development</li> </ul> Telecommunications cables	Shipping <ul style="list-style-type: none"> <li>Commercial shipping</li> </ul>

### Development of management options

Management options are being developed for each possible MPA where it is considered that some form of management may be necessary to achieve the conservation objectives for each proposed protected feature. The approach to identifying management options for each activity will be risk-based i.e. advice will be focused on where it is believed there is a risk to achieving the conservation objective for the proposed protected features. To do this, we are using existing data and information on proposed protected features and relevant activities, and also our understanding of the relationships between the proposed protected features and activities. The management options may be informed by discussion with stakeholders. If new information becomes available during the consultation, the management options may be revised.

Management options are focussed on the activities that cause pressure(s) that a proposed protected feature is sensitive to. 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 abrasion which can damage the surface of the seabed. The proposed protected features of a possible MPA are considered sensitive to activities that could adversely affect them (because of the associated pressures) especially if they are unable to or are very slow to recover.

The online sensitivity tool ([insert weblink](#)) reflects current understanding of the interactions between activities, pressures and features and supports the first steps of the assessment of risk to the features in the possible MPAs. The tool highlights that activities can give rise to a range of pressures, which the proposed protected features of the possible MPA may be sensitive to. The online tool provides more detailed information including the evidence that has been used in developing these recommendations.

Risks to achieving the conservation objective have been identified where there is an overlap between proposed protected features and activities associated with pressures the features are sensitive to. 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/planned developments and the proposed 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 activities within the possible MPA.

<sup>2</sup> Vessels >15m, based on Vessel Monitoring System (VMS) data from 2006 – 2009.



The following range of management options have been identified, including:

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

All of the management options provided are based on knowledge of the existing activities taking place within the possible MPA. The options do not preclude introducing management in the future for new activities, or future management where there is an increased intensity of activities beyond levels currently taking place.

We recognise that stakeholders can provide local environmental knowledge and more detailed information on activities, including in relation to intensity, frequency, and methods. This additional information may help to develop more specific management options, focussed on interactions between features and activities.

### **Management options**

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

1. [Fishing activity](#)  
[Mobile bottom contact gear](#)  
[Static bottom contact gear](#)
  - [Creeling and potting](#)
2. [Licensed activities](#)
3. [Telecommunication cables](#)

### **Fishing activity**

JNCC has evaluated management options to support achievement of the conservation objectives for the proposed protected features of the West Shetland Shelf possible MPA. A gradient of management options have been considered to reduce exposure to pressures, these have been described under three potential management option categories below. Proposed protected features may require a combination of these options to ensure that they achieve their conservation objective.

#### **a) No additional management**

**b) Additional management to reduce/limit pressures** – where fisheries managers may wish to consider a range of measures that could be used to reduce the risk to features by reducing fishing pressure or preventing its increase to unacceptably high levels. These could include:

- Area restrictions (e.g. permanently closing some or the entire extent of the feature)
- Temporal restrictions (e.g. closing parts of the extent of the feature on a rotational basis)
- Seasonal restrictions
- Gear restrictions (e.g. restriction on the use of more damaging gears)

Ideally, any measures would generally apply only to the part of the site where the feature is present. However, there may be circumstances in which it could be desirable to extend management measures beyond the known area of feature distribution, for example, where conditions are suitable for a feature to exist but there are insufficient data to confirm its presence.



**c) Additional management to remove/avoid pressures** – where fishing activities known to adversely affect the feature would be excluded and prevented from occurring in the future. Such exclusion would generally apply only to the part of the site where the feature is present, unless it was necessary to apply to the whole MPA.

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

JNCC have used all available data to evaluate the extent of fishing activities within all offshore possible MPAs. Where possible this data has been presented in accompanying maps. However, to ensure anonymity of the data source, discrete VMS ping data is only presented in instances where it is not considered disclosive to do so (i.e. there are multiple vessels operating in the same area).

An estimation of fishing activity taking place within the region of the possible MPA was derived from Vessel Monitoring System (VMS) data, with an average 2 hourly ping rate. VMS data for UK vessels were linked to skipper logbook information, which was used to determine the location of the ping and the fishing gear being employed. For non-UK registered vessels where logbook information was not available, information on fishing gear employed was obtained from the 'primary gear' listed on the EU vessel register. All data were filtered using a simple speed rule of between 1 and 6 knots to indicate fishing activity for all gear types. Between 2006 and 2009, generalised values for intensity of effort were estimated by aggregating VMS data to a 0.05 x 0.05 decimal degree grid scale. This method has the advantage of enabling the quantification of effort at a discrete spatial scale (hours per grid per year), however, it precludes analysis of patterns of activity below the resolution of the pre-defined grid. As a result, independent "pings" were analysed for the period 2009 to 2011. To ensure anonymity of the data source, discrete VMS ping data is only presented in instances where it is not considered disclosive to do so (i.e. there are multiple vessels operating in the same area).

#### **Fishing activity: Mobile bottom contact gear**

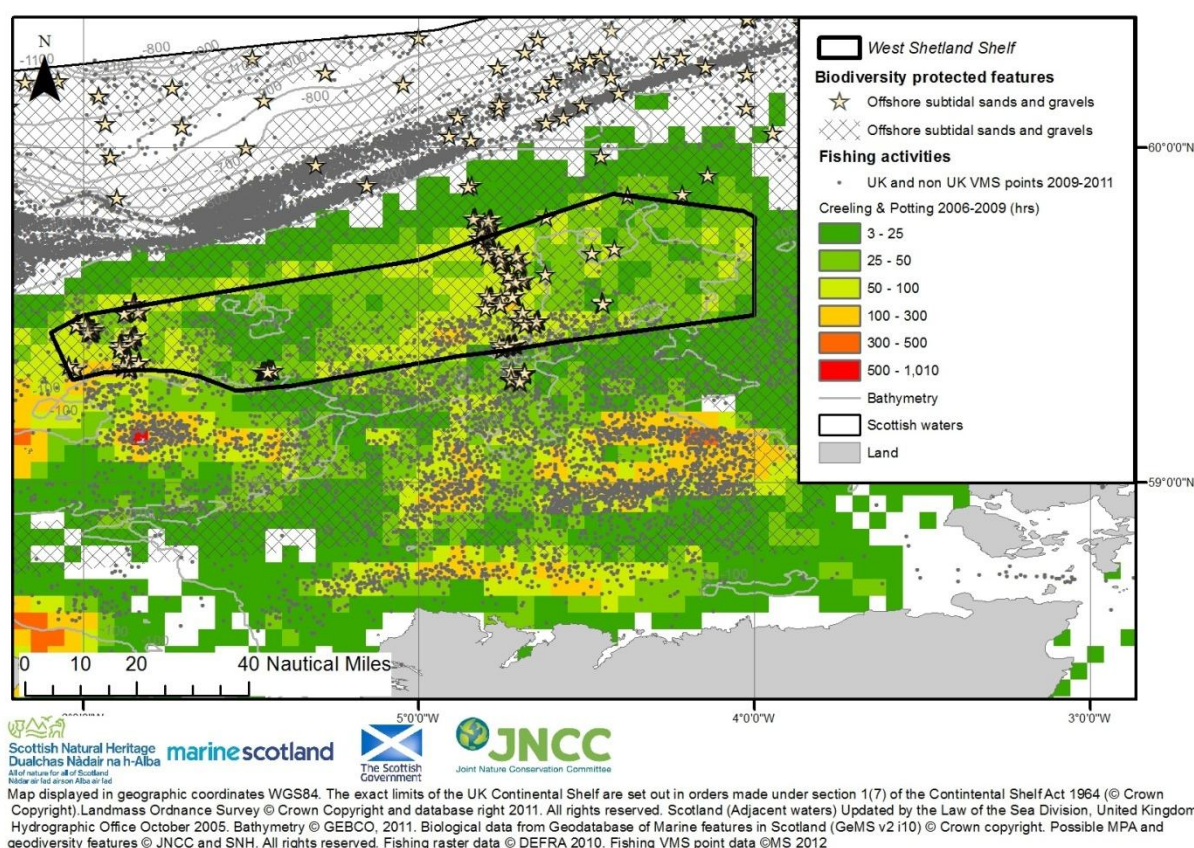
Due to the ban on bottom contact gear put in force since 2001, and subsequently following the EU [Cod Recovery Plan](#), trawling and seine netting are not operational in the region at the current time.

<b>Management options</b> <b>Mobile bottom</b> <b>contact gear</b>	<b>No additional management:</b> No mobile gear fisheries currently take place within the possible MPA due to the overlap with an area (the "Windsock") currently closed to mobile gears under Common Fisheries Policy regulations for cod recovery. If this measure were to be lifted in the future, management would need to be considered to ensure the conservation objective for <b>offshore subtidal sands and gravels</b> is achieved.
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## Fishing activity: Static bottom contact gear Creeling and potting

UK potting vessels operate widely across the West Shetland possible MPA (maximum effort in any overlapping fishing grid <120 hours 2006-2009), although effort appeared to be most concentrated towards the centre and south western parts of the site, as shown in map 3. There was also evidence of potting effort (max 38 hours 2006-2009) from Irish vessels, all concentrated in the south west of the possible MPA.

Map 3: Location of creeling and potting activity in relation to proposed protected features



**Management options**  
**Static bottom contact gear**  
(e.g. creeling and potting)

**No additional management:** This option is considered to be sufficient to achieve the conservation objectives for offshore subtidal sands and gravels.

## Licensed Activities

Licensed activities taking place within, or in close proximity to, the possible MPA, will continue to be managed through the licensing process. Developers will be required to assess the possible impacts of proposed licensed activities on protected features through existing processes, such as Environmental Impact Assessment (EIA). If it can be established that the act is not capable of affecting (other than insignificantly<sup>3</sup>) the possible MPA, then no further assessment will be necessary in terms of considering the effects on the possible MPA. If this cannot be established, then assessment of the potential effects of the

<sup>3</sup> Further information and definitions are available in the Management Handbook – insert reference

activity on the proposed protected features and achievement of the features conservation objectives must be undertaken.

Regulators will be required to demonstrate that in the course of performing their duties (i.e. issuing a licence for a specific activity) it furthers the conservation objectives stated for the possible MPA, or where this is not possible, ensures the development is undertaken in a manner which least hinders the achievement of those objectives.

A gradient of management options have been outlined for licensed activities to demonstrate how the proposed protected features exposure to pressures from the activity could be reduced; these have been described under three potential management option categories. Existing licensed operations are normally expected to continue as consented within possible MPAs. The management options outlined are intended to apply to new license applications, or variations to licenses, for activities taking place within, or in proximity, to the possible MPA. The management options discussed in this paper for activities managed through the licensing process provide an indication of some of the considerations that could be recommended when planning a development project; however, applications will need to be considered on a case by case basis.

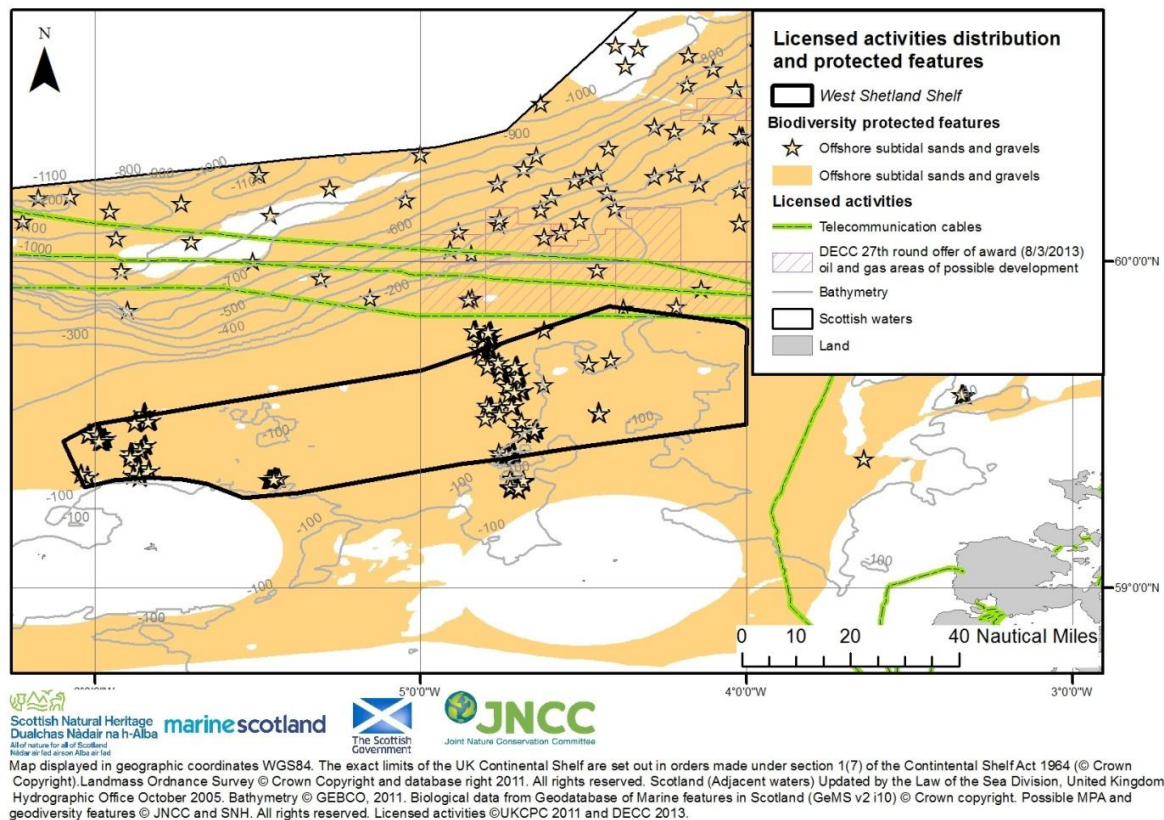
### **Oil and gas activity**

A small part of the north-east of the possible MPA overlaps with a DECC area of possible development for oil and gas activities, as shown in map 4. Although no oil and gas activity takes place within the region at the current time, it may be subject to development in the future.

Advice on any future license applications for developments within the possible MPA will be considered on a case by case basis. In order to reduce the risk of not achieving the conservation objectives, some of the considerations that could be recommended when planning a development project include:

- Careful consideration of the location of the activity in order to avoid impacts to the most sensitive features;
- Minimising or, avoiding (in particularly sensitive areas) the introduction of materials that alter the seabed habitat type;
- Appropriate treatment and disposal of waste products associated with activity;
- Adoption of industry best practice;
- Early discussions regarding any activities, including the decommissioning/removal of infrastructure.

Map 4: Location of oil and gas activity and telecommunication cables in relation to proposed protected features



**Management options:**  
**Licensed activities**

**No additional management or reduce/limit pressure:**

These two options are likely to be similar in their effect as before issuing a licence the licensing authority would need to be satisfied (by the applicant) that there is no significant risk of the activity hindering the **offshore subtidal sand and gravel** feature achieving its stated conservation objective. Early dialogue with Marine Scotland and relevant statutory nature conservation body would help identify and resolve issues at an early stage.

**Remove/avoid pressures:** This option would reduce the risk of not achieving the conservation objective for **offshore subtidal sand and gravels** to the lowest possible levels.



## Telecommunication cables

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 cables. 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.

<b>Management options Telecommunication cables</b>	Early discussions with the operator would be welcomed for all plans relating to cables within the possible MPA, including installation, maintenance and removal. It is recommended 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 proposed protected features present. Industry best practice should be used to avoid the most sensitive areas within the possible MPA where feasible.
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## Conclusions and further recommendations

Before any firm recommendations are made, discussions should be held with stakeholders to ensure that there is a good understanding of the features and the likely interactions with activities. Marine Scotland will lead the discussions on management with stakeholders. These discussions will start during the formal consultation and, if necessary, may continue after the consultation. The discussions should lead to an improved understanding of the risk to the proposed protected features. The options presented here will then be reviewed by JNCC and a preferred way forward may be recommended. This will form the basis of advice from JNCC to Marine Scotland on management requirements for this possible MPA should it be designated as a Nature Conservation MPA.

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 after the formal consultation on the possible MPA. Should any management measures require statutory underpinning, Marine Scotland will undertake further consultation.

## Further information

The following documents are available for background information:

- [SNH and JNCC MPA network advice \(December 2012\)](#)
- [Marine Scotland Report to Parliament on progress in establishing an MPA network](#)
- [The draft MPA Management Handbook](#)
- The online sensitivity matrix tool
- Draft fisheries guidance

The following documents about the possible West Shetland Shelf possible MPA are also available:

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