

Statements on conservation benefits, condition & conservation measures for South-West Deeps (West) Marine Conservation Zone

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What the conservation advice package includes

The information provided in this document sets out JNCC's current view of the site's condition, the conservation benefits which the site can provide and the measures required to support achievement of the site's conservation objectives. This forms part of JNCC's formal conservation advice package for the site and must be read in conjunction with all parts of the package as listed below:

- [Background Document](#) explaining where to find the advice package, JNCC's role in the provision of conservation advice, how the advice has been prepared, when to refer to it and how to apply it;
- [Conservation Objectives](#) setting out the broad ecological aims for the site;
- Statements on:
 - the site's protected features condition and the General Management Approach;
 - conservation benefits that the site can provide; and
 - conservation measures needed to support achievement of the conservation objectives set for the site (this document);
- [Supplementary Advice on Conservation Objectives](#) (SACO) providing more detailed and site-specific information on the conservation objectives; and
- [Advice on Operations](#) providing information on those human activities that, if taking place within or near the site, can affect it and present a risk to the achievement of the conservation objectives.

The most up-to-date conservation advice for this site can be downloaded from the conservation advice tab in the [Site Information Centre](#) (SIC) on JNCC's website.

Conservation benefits

By maintaining or achieving favourable condition for the protected features, the site will contribute to delivering:

- Clean, healthy, safe, productive, and biologically diverse oceans and seas as set out in the Government's [Strategy for contributing to the delivery of delivery of a UK network of marine protected areas](#);

- An ecologically coherent network of MPAs which are well managed under the Convention for the Protection of the Marine Environment of the North-east Atlantic ([OSPAR Convention](#)), specifically OSPAR region: III Celtic Seas; and
- Good Environmental Status under the UK Marine Strategy.

This site has been designated to afford protection to the marine species Fan mussel (*Atrina fragilis*), a range of broad-scale sedimentary habitats and the geomorphological feature 'Celtic Sea Relict Sandbanks', which include some of the largest examples of relict sandbanks on Earth. The broad-scale habitats protected within the site include Subtidal coarse sediment, Subtidal sand, Subtidal mud and Subtidal mixed sediments which are representative of the seabed within the Western Channel and Celtic Seas ([Charting Progress 2 biogeographic region](#)). Fan mussel (*Atrina fragilis*) is a species Feature of Conservation Importance, considered to be one of the most endangered animals of its kind in UK waters.

This site provides conservation benefits to the wider marine environment and society by affording protection to Fan mussel and a range of broad-scale habitats and their associated biological communities and consequently the provision of the following ecosystem services:

Fan mussel (currently under review and considered DRAFT)

- Scientific study: The study of *Atrina* shells provides information about changes in sea temperatures in the mid-Piacenzian (c.3.3–3.0 Ma);
- Regulatory processes: Providing a benthic-pelagic link by removing plankton and detritus from the water column;
- Ecosystem engineering: Fan mussels can provide habitats for benthic communities acting as a substrate for their settlement, increasing their diversity and providing safe areas from predators. They can also promote the growth of species relevant to the fisheries sector. For example, juvenile Pectinids attached to *Atrina* shells; and
- Climate change regulation: Fan mussels take up carbon from the environment during the process of shell growth.

Broad-scale sedimentary habitats (Subtidal coarse sediment, Subtidal sand, Subtidal mud and Subtidal mixed sediments):

- Nutrition: Different sediment types offer habitat for breeding and feeding for various commercial species, which in turn are prey for larger marine species, including birds and mammals;
- Bird and whale watching: Foraging seals, cetaceans and seabirds may also be found in greater numbers near some Subtidal sedimentary habitats due to the common occurrence of prey for the birds and mammals; and
- Climate regulation: Providing a long-term sink for carbon within sedimentary habitats.

Further detail on ecosystem services the features can provide is available in the Supplementary Advice on Conservation Objectives (SACO) under structure and function.

Managing activities that affect the protected features of the site to maintain them at or recover them to, favourable condition, will support the site's provision of the benefits and delivery of obligations listed above.

Site Condition

Table 1 below sets out JNCC's view on the overall condition of the site's protected features based on our understanding of the feature. Please contact [JNCC](#) for further information if required. In summary, a feature is considered to be in unfavourable condition either where evidence indicates it needs to be recovered or where recovery is not considered to be possible through human intervention. Conversely, a feature is considered to be in favourable condition where evidence indicates it is not being adversely affected.

Table 1. JNCC’s view on the condition of the protected features in the site.

| Protected feature | View of condition and General Management Approach (GMA) |
|---------------------------------------|--|
| A5.1 Subtidal coarse sediment | The feature is in unfavourable condition. The GMA is to recover the feature to favourable condition |
| A5.2 Subtidal sand | The feature is in unfavourable condition. The GMA is to recover the feature to favourable condition |
| A5.3 Subtidal mud | The feature is in unfavourable condition. The GMA is to recover the feature to favourable condition |
| A5.4 Subtidal mixed sediments | The feature is in unfavourable condition. The GMA is to recover the feature to favourable condition |
| Fan mussel (<i>Atrina fragilis</i>) | The feature is in unfavourable condition. The GMA is to recover the feature to favourable condition |
| Celtic Sea Relict Sandbanks | The feature is in favourable condition. The GMA is to maintain the feature at favourable condition |

The conservation measures listed below set out JNCC’s view as to which, if any, human activities may require additional management to maintain or recover the features within the site.

Conservation measures

As set out in Table 1 above, the broad-scale habitats (Subtidal coarse sediment, Subtidal sand, Subtidal mud and Subtidal mixed sediments) and Fan mussel need to be recovered to favourable condition.

Using evidence available about the site and information contained within the Advice on Operations for this site (hyperlink is provided in the box at the top of this document), we consider that the activities listed below are capable of significantly affecting the qualifying features of the site. These activities should be managed to recover the broad-scale habitats and Fan mussel by minimising the impact of associated pressures from:

- Mobile demersal fishing.

As set out in Table 1, the geological feature 'Celtic Sea Relict Sandbanks' is considered to be in favourable condition. Based on best available evidence, JNCC do not consider that activities taking place are capable of affecting this protected feature. However, this does not preclude the need for management in the future.

Management of the site should be informed by the sensitivity of protected features to pressures associated with human activities. The Advice on Operations provides an initial assessment of whether a proposed plan or project (or ongoing activity) may have an impact on a protected feature in the site. The Advice on Operations identifies pressures associated with the most commonly occurring marine activities, and provides a detailed assessment of feature sensitivity to these pressures. A human activity is considered capable of affecting a feature where the feature is known to be sensitive to associated pressures. The sensitivity assessments provided in the Advice on Operations workbook and the guidance within, should be used at an early stage of a plan or project when considering potential impacts of an activity.

The simple presence of such human activities would not necessarily significantly affect the site were they to occur. Advice on Operations should be used in conjunction with the specific details of a proposed plan or project (e.g. indirect and/or additive impacts, activity duration, time of year, scale etc.) and the Supplementary Advice on Conservation Objectives (SACO) to develop assessments of impacts to features within the site. You may also find the information available in the Activities and Management tab of the site's [Site Information Centre](#) useful.