Joint Recommendation regarding the protection of reef features within the Wight-Barfleur Reef Site of Community Importance under the Habitats Directive 92/43/EEC of 21 May 1992 under Article 11 and Article 18 of Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy (the Basic Regulation).



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Joint Recommendation

1. Introduction

This joint recommendation contains a proposal for the regulation of fisheries activity and is initiated by the United Kingdom (UK) and submitted to the European Commission jointly by the UK and the following Member States, France, Belgium, Germany, Denmark and The Netherlands; being those Member States having a direct management interest affected by the joint recommendation.

The overall aim of this joint recommendation is to ensure the protection of reef structures (habitat type H1170) within the Wight-Barfleur Reef Site of Community Importance (SCI) from fisheries, thereby contributing to the obligation of restoring this habitat type to favourable condition in accordance with Article 6 of the Habitats Directive¹.

It is the intention of the UK government (as the initiating Member State) to take forward measures in respect to fisheries activities exercised by all vessels including fishing vessels carrying the flag of other Member States of the EU.

2. The Recommendations to be Implemented

The following recommendations are proposed for adoption:

- the exclusion of demersal towed gears (Table 1) to protect Annex I reef (H1170) feature within the site and an increased reporting zone around the site (see Section 8 of Annex B).

Table 1: Gear types that are prohibited in the site.

Gear Types that are to be	Gear code Annex XI in EU	International Standard
prohibited in within the SCI	Regulation No 404/2011	Classification of Fishing Gears
Beam Trawl	ТВВ	ТВВ
Bottom Trawl/Otter Trawl	OTB, OTT, PTB,TBN,TBS,TB	ОТВ,ОТТ,ОТ,РТВ,ТВ
Seines	SDN, SSC, SX, SV	SB, SPR, SDN, SSC, SX, SV

¹ Council Directive 92/43/EEC, of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1992L0043:20070101:EN:PDF

Dredges	DRB	DRB, DRH

The coordinates of the site (Table 2) and management boundary (Table 3) are as follows:

Table 2: Site boundary co-ordinates of the Wight-Barfleur Reef SCI

Point	Latitude	Longitude
1	50° 22' 34.162" N	1° 2' 58.633" W
2	50° 17′ 33.084″ N	1° 2′ 18.285″ W
3	50° 12′ 16.348″ N	1° 2′ 27.815″ W
4	50° 10′ 39.345″ N	1° 11′ 0.141″ W
5	50° 9′ 9.695″ N	1° 28′ 44.713″ W
6	50° 9′ 12.343″ N	1° 39′ 17.373″ W
7	50° 14′ 4.832″ N	1° 46′ 55.995″ W
8	50° 14′ 5.043″ N	1° 50′ 50.148″ W
9	50° 15′ 26.801″ N	1° 56′ 48.068″ W
10	50° 20′ 14.383″ N	1° 57′ 17.421″ W
11	50° 22′ 45.770″ N	1° 49′ 35.068″ W
12	50° 23′ 36.536″ N	1° 40′ 47.249″ W
13	50° 22′ 1.241″ N	1° 18′ 56.289″ W

Table 3: Coordinates of the site boundary and the proposed management boundary for Wight-Barfleur Reef SCI

Point	Latitude	Longitude
1	50° 22' 34.162" N	1° 2' 58.633" W
2	50° 17′ 33.084″ N	1° 2′ 18.285″ W
3	50° 12′ 16.348″ N	1° 2′ 27.815″ W

4	50° 10′ 39.345″ N	1° 11′ 0.141″ W
5	50° 9′ 9.695″ N	1° 28′ 44.713″ W
6	50° 9′ 12.343″ N	1° 39′ 17.373″ W
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9	50° 15′ 26.801″ N	1° 56′ 48.068″ W
10	50° 20′ 14.383″ N	1° 57′ 17.421″ W
11	50° 22′ 45.770″ N	1° 49′ 35.068″ W
12	50° 23′ 36.536″ N	1° 40′ 47.249″ W
13	50° 22′ 1.241″ N	1° 18′ 56.289″ W

3. Control and enforcement of the proposed fisheries management measures

Control and enforcement of the proposed fisheries management measures will be based on the risk-based systems in accordance with the model developed by the UK's Marine Management Organisation (MMO).

Key provisions which should be included in an EC regulation to facilitate control enforcement and compliance include:

- A prohibition on any demersal towed gears, dredges and seines being deployed within the SCI.
- Establishment of a 1nm (1.852km) reporting zone around Wight-Barfleur Reef SCI. All fishing
 vessels within this area shall be required to record or report vessel positions at minimum
 10minute intervals. This area shall be defined by the reporting zone and coordinates
 displayed in Annex E.
- A requirement for all fishing vessels entering the reporting zone to have a system for recording and reporting vessel position which meets prescribed specifications (see Section 8.2 of Annex B for minimal requirements) and is installed and operative. Any fishing vessel

entering Wight-Barfleur Reef SCI or the reporting zone without such a system will be committing an offence.

- A requirement for all fishing vessels transiting the prohibited area carrying prohibited gears to have all prohibited gears on board lashed and stowed.
- A requirement for all fishing vessels transiting the restricted area carrying prohibited gears
 to ensure that the speed during transit is not less than six knots except in the case of force
 majeure or adverse conditions². In such cases the master shall inform the fisheries
 monitoring centre (FMC) of the flag member state which shall then inform the UK (FMC).

The proposal on which gears types to prohibit is formulated in terms of Gear Codes in Annex XI in EU Regulation 404/2011 and is explained in more detail in Section 8 of Annex B.

The ongoing management needs of the site will be assessed on an annual basis. If changes to the current management status are required the UK will coordinate such a requirement in accordance with Article 11 and Article 18 of the Basic Regulation and in collaboration with those Member States with a direct management interest in the Wight-Barfleur Reef SCI.

² Article 50 4(b) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:343:0001:0050:EN:PDF

Joint Recommendation regarding the protection of reef features within the Wight-Barfleur Reef Site of Community Importance under the Habitats Directive 92/43/EEC of 21 May 1992 under Article 11 and Article 18 of Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy (the Basic Regulation).

Supporting Documentation

1. Introduction

1.1 General Remarks

Wight-Barfleur Reef was submitted to the European Commission as a possible Site of Community Importance (SAC) in August 2012 and approved by the Commission as a Site of Community Importance (SCI) in November 2013.

Under Article 6 of the Habitats Directive, Member States have a duty to take appropriate steps to avoid the deterioration of natural habitats for which SACs have been designated.

The Conservation Objective for Wight-Barfleur Reef SCI is to restore Annex I Bedrock reef to Favourable Condition. Commercial fishing has been identified as an activity which could adversely impact the integrity of this site's features and as such required to be assessed and, if necessary, managed to reduce its impact.

As the proposed management area of the Wight-Barfleur Reef site falls beyond 12 nautical miles (nm) of the UK coastline, all Member States have access to the site. However, the UK, France, Germany, Belgium, The Netherlands are currently the only Member States with an active fishing interest in the site although Ireland and Denmark had recorded minor VMS reports in the site. It is the intention of the UK government (as the initiating Member State) to take forward measures in respect to fisheries activities exercised by all vessels including fishing vessels carrying the flag of other Member States of the EU.

This document covers the 11 information items of the Commission's guidelines from 2008³ concerning development of proposals for fisheries management measures in marine Natura 2000 areas within the scope of the Common Fisheries Policy.

1.2 Overall aim of the present proposal

The overall aim of the present proposal is to ensure adequate protection of designated reef structures from fishing activities and thereby to contribute to the obligation of achieving favourable conservation status for the Annex I Reefs (H1170) in accordance with Article 6 (2) of the Habitats Directive; which states that Member States shall take appropriate steps to avoid the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated.

The Conservation Objective for the Wight-Barfleur Reef SCI is, subject to natural change, to ensure that Annex I Reefs (H1170) is to restore to Favourable Condition. Except where direct evidence of condition is available, feature condition is typically based on a proxy assessment of feature sensitivity and the presence of activities to which the features may be sensitive.

According to advice provided by the JNCC, the UK Government's statutory scientific advisor for offshore habitats, where fishing using demersal towed gears overlaps with the feature it may pose a risk to achievement of the conservation objectives for the site.

Management measures may focus on the removal of pressures (in order to reduce the risk of not achieving the conservation objectives to the lowest possible level), or the reduction of pressures (in order to reduce the risk of not achieving the conservation objectives).

The UK is proposing to restrict fishing activity with demersal towed gears across the entire site due to the risk posed to the achievement of the conservation objectives. Where there is uncertainty regarding the impacts of fishing on the features, an "adaptive management" approach is proposed, which would allow the site to move toward achieving its conservation objective while providing the opportunity to improve our understanding of the impacts and subsequently adapt management accordingly. The content of the proposed fisheries management measures is explained in more detail in section 7 of Annex B.

³ http://ec.europa.eu/environment/nature/natura2000/marine/docs/fish_measures.pdf

The proposal has been reviewed by CEFAS (see section 3.5).

1.3 Recommendations to be implemented

The following recommendations are proposed for adoption:

- the exclusion of demersal towed gears (Table 4) within the proposed management boundary (Figure 1 and co-ordinates in Table X) to protect the listed features and an increased reporting zone around the site (see Section 8 of Annex B).

Table 4: Gear types to be prohibited within the Wight-Barfleur Reef SCI as shown in Figure 1

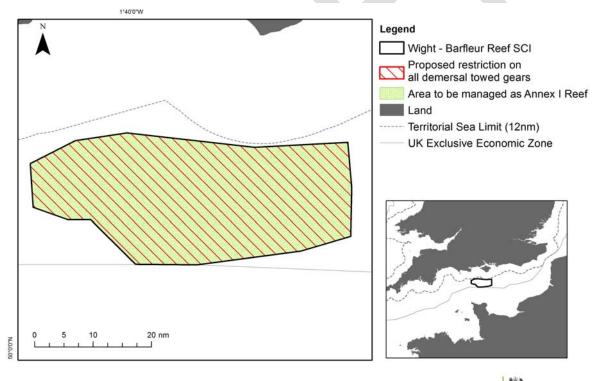
Gear Types to be prohibited	Gear code Annex XI in EU	International Standard
with the SCI	Regulation No 404/2011	Classification of Fishing Gears
Beam Trawl	ТВВ	ТВВ
Bottom Trawl/Otter Trawl	OTB, OTT, PTB,TBN,TBS,TB	ОТВ,ОТТ,ОТ,РТВ,ТВ
Seines	SDN, SSC, SX, SV	SB, SPR, SDN, SSC, SX, SV
Dredges	DRB	DRB, DRH

The coordinates of management boundary is as follows:

Table 5: Coordinates for the Wight-Barfleur Reef SCI management boundary for all demersal towed gears.

Point	Latitude	Longitude
1	50° 22' 34.162" N	1° 2' 58.633" W
2	50° 17′ 33.084″ N	1°2′ 18.285″ W
3	50° 12′ 16.348″ N	1°2′ 27.815″ W
4	50° 10′ 39.345″ N	1°11′ 0.141″ W

5	50° 9′ 9.695″ N	1°28′ 44.713″ W
6	50° 9′ 12.343″ N	1°39′ 17.373″ W
7	50° 14′ 4.832″ N	1°46′ 55.995″ W
8	50° 14′ 5.043″ N	1°50′ 50.148″ W
9	50° 15′ 26.801″ N	1°56′ 48.068″ W
10	50° 20′ 14.383″ N	1°57′ 17.421″ W
11	50° 22′ 45.770″ N	1°49′ 35.068″ W
12	50° 23′ 36.536″ N	1°40′ 47.249″ W
13	50° 22′ 1.241″ N	1°18′ 56.289″ W



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Figure 1: Wight-Barfleur Reef SCI site map including protected features for which management is being proposed.

2. Legal framework

2.1 Common Fisheries Policy

The Common Fisheries Policy (Regulation No 1380/2013 (The Basic Regulation) Article 11) states that Member States are empowered to adopt conservation measures not affecting fishing vessels of other Member States that are applicable to waters under their sovereignty or jurisdiction and that are necessary to comply with the obligations under Article 6 of Directive 92/43/EEC and Article 13(4) of 2008/56/EC.

Where a Member State ("initiating Member State") considers that measures need to be adopted for the purpose of complying with the obligations referred to above, and other Member States have a direct management interest in the fishery to be affected by such measures, the European Commission shall be empowered to adopt such measures, upon request, by means of delegated acts. For this purpose cooperation between Member States having a direct management interest is foreseen with a view to formulating a joint recommendation in agreement on draft fisheries management measures to be forwarded to the Commission.

The initiating Member State shall provide the Commission and the other Member States having a direct management interest with relevant information on the measures required, including their rationale, scientific evidence in support and details on their practical implementation and enforcement. Member States shall consult the relevant Advisory Councils.

The initiating Member State and the other Member States having a direct management interest may submit a joint recommendation within six months from the provision of sufficient information. The Commission shall adopt the measures, taking into account any available scientific advice, within three months from receipt of a complete request (Reg 1380/2013, Articles 11 and 18).

The following chapters describe how the UK, as the initiating Member State, has taken the Commission's criteria for decision making into account, as well as the requirements for regional coordination in line with the new Basic Regulation.

2.2 Fisheries Access to the Wight-Barfleur Reef SCI

In accordance with the Basic Regulation the following Member States operate demersal towed gears within the proposed management zone; UK, France, Belgium, Germany, The Netherlands, Ireland, and Denmark.

Of these Member States, UK, Ireland, France, Denmark, Belgium, Germany and The Netherlands have undertaken demersal trawling within the proposed management zone in the past 6 years; from 2010 to 2015 inclusive (details of activity and gear type can be found in table 2.1). The most significant activity was from French and UK vessels with considerably lower levels of activity from German and Dutch vessels.

2.3 Designation of the Wight-Barfleur Reef SCI

The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (SI 2007/1842)⁴, as amended, provide the legal basis for the designation of Natura 2000 sites in UK offshore waters. In accordance with Regulation 7 of the above Regulations, Wight-Barfleur Reef was submitted to the European Commission as a Candidate Site of Community Importance (cSAC) August 2012 (Figure 2) and adopted by the Commission as a SCI in November 2013. In accordance with Article 4(4) of the Habitats Directive, Member States have a maximum of six years from the site being adopted as a SCI to implement the necessary management measures and formally designate the site as a SAC.

⁴ http://www.legislation.gov.uk/uksi/2007/1842/contents/made

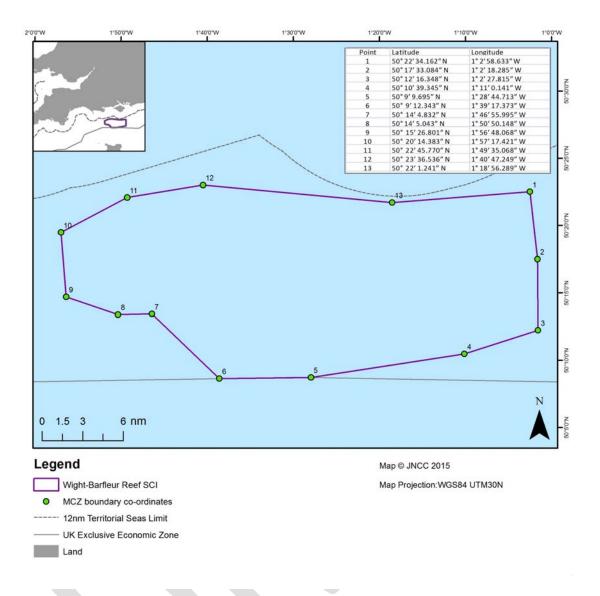


Figure 2: Site boundary for Wight-Barfleur Reef SCI

3. Process

This chapter describes the process from when the initiative to protect reef structures from fisheries activities at Wight-Barfleur Reef was commenced at a fisheries management workshop in Exeter in May 2016 jointly by the Department for Environment Food and Rural Affairs (Defra) and the Joint Nature Conservation Committee (JNCC) until submission of fisheries management measures in form of 'A Joint Recommendation' by the UK, France, Ireland, Belgium, Germany, Denmark, and The Netherlands to the European Commission.

3.1 Stakeholder workshop

A stakeholder workshop was held in Exeter on 18 and 19 May 2016. The workshop was attended by French, Irish and UK fisheries representatives as well as delegates from the French, Irish and Spanish governments and the Northwest Waters Advisory Council (NWWAC). There was also representation from NGOs and conservation organisations.

The full report of the meeting is at Annex A.

3.2 Consultation on management proposals

Draft proposals for fisheries management measures were developed using feedback from the stakeholder workshops as well as advice from the UK's statutory nature conservation bodies, the JNCC and Natural England, and offshore fisheries regulator, the MMO.

Fisheries management measures were developed in close coordination with other Member States with a direct management interest in the sites. Draft management proposals were subject to a six week period of consultation with Member States with a direct management interest in the sites and the Northwest Waters Advisory Council.

3.3 Formal agreement of Joint Recommendations

Finalised management proposals were then presented to other Member States with a direct management interest in the sites for agreement that sufficient information had been provided in order to commence the formal agreement of the proposals as Joint Recommendations. [Following this, ad hoc meetings of the Northwest Waters Article 11 sub-group were held to start formal agreement proceedings for the Joint Recommendations. Any outstanding issues were then addressed before agreement was reached on the Joint Recommendations by members of the Northwest Waters High-Level Group and they were submitted to the European Commission for adoption.]

3.4 Involvement of the North West Waters Advisory Council

The North Western Waters Advisory Council (NWWAC) attended the workshop in Exeter in May 2016 where initial proposals for management were discussed and the UK presented its rationale behind the measures proposed. In January 2017, the UK consulted the NWWAC on proposals for fisheries management measures in 12 MPAs, in line with the provision outlined in Article 11 of the

CFP. The NWWAC held a meeting on 28 February 2017 where the proposed measures were presented and discussed, which the UK attended.

On 30 March 2017, the UK replied to a response from the Secretariat covering general comments on the proposals as well as some specific comments on several of the proposals for the MPAs in question. With respect to Wight-Barfleur Reef SCI some industry member's considered the total prohibition of bottom trawl gear to be excessive. The UK responded noting that survey data showed evidence of bedrock reef distributed widely across the site, but the methodology used did not allow for the delineation of stony reef from the surrounding coarse sediment, except in some areas of the site, where full coverage acoustic data meant it was possible to delineate stony reef. Extrapolating from these areas it is likely that stony reef, or a mosaic of stony reef and coarse sediment, is widespread throughout the site between areas of bedrock reef. As a result, the reef has been defined as potentially occurring anywhere within the site and therefore the entire site is being treated as Annex I feature. Defra's approach to management for Annex I features has been to remove mobile demersal gears from all areas of reef to reduce the risk of not achieving the conservation objectives to the lowest possible level, and therefore consider it is necessary to apply this restriction across the entire site.

4. Rationale for measures

Wight-Barfleur Reef is a highly complex seabed habitat, made up of a mosaic of bedrock reef, stony reef, coarse sediment and in places sand (the sediment forms a veneer over the rock in places).

The available evidence indicates that the features designated may be sensitive to prevailing fishing activities and as such measures are proposed to reduce the level of risk to achieving the conservation objectives for the site Wight-Barfleur Reef SCI.

Demersal towed gears

Whilst it is unlikely that mobile demersal gear can affect the long-term natural distribution of Annex I bedrock and stony reef features, there is evidence to indicate that their use can impact the structure and function of the habitat and the long term survival of its associated species. The use of towed fishing gears is likely to cause damage or death of fragile, erect species, such as sponges and corals (Løkkeborg 2005, Engel & Kvitek, 1998), and reduce habitat complexity as boulders and cobbles associated with the hard substrate are moved around (Freese et al. 1999). Other species such as hydroids, anemones, bryozoans, tunicates and echinoderms may also be vulnerable (McConnaughey et al. 2000, Sewell and Hiscock 2005). Where fragile, slow growing species occur,

even low levels of fishing have the potential to change the structure and function of the habitats and may result in the loss of some characteristic species.

Demersal static gears

Mechanical impacts of static gear on Annex I bedrock and stony reef (e.g. weights and anchors hitting the seabed, hauling gear over seabed, rubbing/entangling effects of ropes) can damage some species (Eno et al.1996). Other species appear to be resilient to individual fishing operations but the effects of high fishing intensity are unknown (Eno et al. 2001). Recovery will be slow (Foden *et al.*, 2010) resulting in significant reduction or even loss of characteristic species. The individual impact of a single fishing operation may be slight but cumulative damage may be significant (Eno et al. 2001; Foden et al. 2010; Roberts et al. 2010).

5. Principles

Based on scientific advice from JNCC considering the risk associated with a range of management options and the consideration of socio-economic interest, the UK has decided to protect reef (H1170) structures from physical disturbances due demersal towed gears.

When formulating the Joint Recommendations, the following principles were applied:

1) Sound scientific basis

This proposal for fisheries management measures is based on available scientific evidence. JNCC has provided scientific advice in relation to the risk to achieving the conservation objective for the site. The proposal has also been reviewed by CEFAS. The advice from Cefas was that this approach reduces the pressures from demersal trawls, dredges and seines sufficiently to contribute to long term progress in recovering the features towards favourable condition.

2) Stakeholder involvement

An important element of the process of formulating fisheries management measures has been the involvement of stakeholders. This is outlined in further detail in sections 3.1 and 3.2.

3) Transparency

In this proposal the UK has been transparent on the data being used, the steps being taken and the methodology used, as well as the involvement of stakeholders.

4) Proportionality

An approach was sought that would deliver a regulatory proposal that delivers a key contribution to the achievement of the conservation objectives while minimising the effect on the fishing industry. A key safeguard in the process to deliver such an outcome was to follow the European Commission guidance in this regard, which described a proportional approach towards balancing sustainable exploitation of resources and the need to conserve important habitats, including a precautionary approach to fisheries management.

5) Non discrimination

The proposal will need to ensure that measures are not applied in a discriminatory manner. A coordinated approach between Member States is the only way of ensuring non discrimination for fleets affected by the proposed measures. Ultimately, a proposal is presented to the European Commission for regulation in the framework of the Common Fisheries Policy, ensuring a level playing field for the fishing sector affected.

6. Proposal scope

The management boundary of Wight-Barfleur Reef SCI encompasses the entirety of the site providing the area necessary to ensure protection of the mosaic of habitats.

List of Annexes:

Annex A – Meeting note from workshop

Annex B – Overview of the 11 information items in the Commission's guidelines from 2008

Annex C – Map of UK English MPA network

Annex D – Map and coordinates for Wight-Barfleur Reef SCI reporting zone with increased reporting



Annex A - Meeting note from workshop

Wight-Barfleur Reef SAC

Concerns were raised over the initial proposals for a full site closure due to the fact in Scottish waters a potential management boundary could be adjusted in reef sites; however in this instance the entire site is considered Annex 1 reef as there is bedrock and stony reef distributed throughout. Therefore, in accordance with the regulations, it is classified as Annex 1 reef.

In the south of the site fishing appears to be occurring despite the presence of reef. This is possibly due to Annex I reef in this area overlapping with fishable ground (noting that the definition of Annex I reef includes, amongst other considerations, patches of rock > 6 cm in diameter). The UK noted that current policy is to restrict mobile bottom contacting gears in

areas of known Annex 1 reef, and as such, mobile demersal gears will be restricted throughout the site.

It was raised that this was a known transit route for Belgian and Danish vessels.



Annex B – Overview of the 11 information items in the Commission's guidelines from 2008

The Commission has issued guidance on a consistent approach to requests for fisheries management measures under the Common Fisheries Policy⁵. Accordingly, this document provides the scientific and technical information required to support a formal request to the Commission for fisheries regulation under the Common Fisheries Policy.

1 Comprehensive description of the natural features including distribution within the site

Wight-Barfleur Reef SCI is a highly complex seabed habitat, made up of a mosaic of bedrock reef, stony reef, coarse sediment and in places sand (the sediment forms a veneer over the rock in places). It is located in the Eastern English Channel Regional Sea (JNCC, 2004; Defra, 2004), between St Catherine's Point on the Isle of Wight and Barfleur Point on the Cotentin Peninsula in Northern France. The site is approximately 65km long (east to west) and up to 26km wide. The depth within the site ranges from 25m to 100m, with the deepest areas to the south, and within the palaeochannel which runs along the south-east part of the SCI.

The bedrock reef is characterised by a series of well-defined exposed bedrock ridges, up to 4 m high, together with areas of flat, smooth mudstone and sandstone with overlying coarse sediment (gravels, cobbles and boulders) which in places forms stony reef (Barrio Froján et al. 2015). The south-eastern area of the site contains part of a large palaeochannel known as the Northern Palaeovalley. In this area the palaeochannel remains largely unfilled by sediment due to the strong currents, and is characterised by a gravel, cobble and boulder substrate which in places forms stony reef.

The bedrock and stony reef areas support a diverse range of reef fauna. There are many types of sponge present, from encrusting sponges to larger branching types. Tube worms, anemones and tunicates (sea squirts) are also common on the large boulders and bedrock.

The information to support this SCI designation comes from several sources. UKHO Digital Survey Bathymetry data was available for an extensive part of the central English Channel. This data clearly

⁵ http://ec.europa.eu/environment/nature/natura2000/marine/docs/fish_measures.pdf

shows bedform features, and was used, in combination with rock samples and seismic data, to delineate areas of different rock type (Collier et al. 2006 cited in Coggan et al. 2009).

A Defra funded project, "Broadscale mapping of hard substrates in the central English Channel", included two multidisciplinary surveys of the central English Channel conducted in summer 2006. Acoustic data was acquired along a series of corridors (spaced 4-5 km apart) to gain a broad overview of the area, and a more detailed survey was carried out over four discrete areas, targeting specific features of interest. Video tows, grab samples and beam trawls were also obtained to target specific features of interest (Coggan et al. 2009).

Additional data were collected in 2013 as part of a dedicated survey of the site seeking to gather acoustic and ground-truthing data to better delineate the extent of Annex I reef (Barrio Froján et al. 2015). The 2013 survey, carried out by Cefas on behalf of JNCC, included groundtruthing (video and where possible grab samples) at stations across the site, and collection of acoustic data in five boxes as well as on transits between sampling stations.

The survey showed evidence of Annex I reef habitat throughout most of the site, interspersed with pockets of sediment veneer. Bedrock reef was identified and delineated through terrain analysis across the whole site. However this method didn't allow stony reef to be delineated from surrounding coarse sediment, so areas away from identified bedrock reef have been classified as mosaic (including stony reef). Extrapolating the observations made within the intensely surveyed boxes (where stony reef was delineated from full multibeam and sidescan coverage), it is likely that stony reef, or a mosaic of stony reef and coarse sediment, is widespread throughout the cSAC, in between the areas of bedrock reef.

Results suggest that the benthic community of the survey area is arranged as a mosaic of assemblages, which although statistically distinct, share many of their constituent taxa, and can be considered as one coherent and interdependent benthic ecosystem. JNCC have chosen to delineate Annex I reef as being present across the whole site, without highlighting the two reef subtypes due to the difficulties in delineating stony reef accurately with the data available (Figure 1 – Images).



Figure 1: Photographs taken from the CEND0313 survey 2013 of Wight Barfleur. Annex I reef including encrusting fauna on mixed bedrock and stony substrata including the imperial anemone (*Capnea sanguinea*), elegant anemones (*Sagartia elegans*), elephant hide sponge and various encrusting sponges

2 Scientific rationale for the site's selection in accordance with the information provided in the Natura 2000 data form. Intrinsic value of its features. Specific conservation objectives

Wight-Barfleur Reef is located in the Eastern English Channel, and represents soft to hard bedrock reef and stony reef in the circalittoral and deep circalittoral zones. It is in full salinity waters, subject to moderate/high energy levels and an intermediate level of coastal influence. The bedrock reefs are of moderate topographic complexity, being formed into a series of ridges (Coggan et al, 2009). Stony reefs formed by cobbles and boulders are also present. The faunal communities present on the bedrock and stony reef are characteristic of high and moderate energy circalittoral rock. The extensive bedrock reef is an excellent example of circalittoral bedrock reef, and the only known such example in offshore waters within this regional sea.

2.1 Conservation objectives

Conservation objectives set out the desired state for the protected feature(s) of an MPA.

To achieve the conservation objectives a general approach to management for each designated feature has been set by JNCC based on current knowledge of condition. This approach considers whether management should be adopted to maintain the feature in its existing condition or whether some form of recovery is necessary to bring the feature into favourable condition.

The conservation objectives for the protected features of the Wight-Barfleur Reef SCI are:

Subject to natural change, **restore** the **reefs** to favourable condition, such that:

- The natural environmental quality is maintained;
- The natural environmental processes are maintained
- The extent, physical structure, diversity, community structure and typical species representative of bedrock & stony reef in the Central English Channel are restored

Further information on the conservation objectives and GMA for the site can be found on the relevant JNCC Site Information webpage⁶.

3 Basis for the spatial extent of the site boundary clearly justified in terms of conservation objectives

The site boundary for Wight-Barfleur Reef cSAC/SCI has been defined using JNCC's marine SCI boundary definition guidelines. The cSAC boundary is a simple polygon enclosing the minimum area necessary to ensure protection of the Annex I habitats. The bedrock reef feature was derived from UKHO survey bathymetry, interpreted following detailed acoustic and biological surveys in the area (Figure 2).

The boundary has been chosen to include the bedrock types in the area that include Annex I reef, based on interpretation of digital survey bathymetric acoustic data and ground-truthing with video. Stony reef has also been recorded in the south-western part of the site, but due to the inherently patchy distribution of stony reef, it is not possible to precisely delineate the extent of reef area here.

The south-east section of the SCI boundary has been drawn along the southern edge of the palaeochannel, to include all recorded occurrence of reef within the channel.

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⁶ http://jncc.defra.gov.uk/page-6544

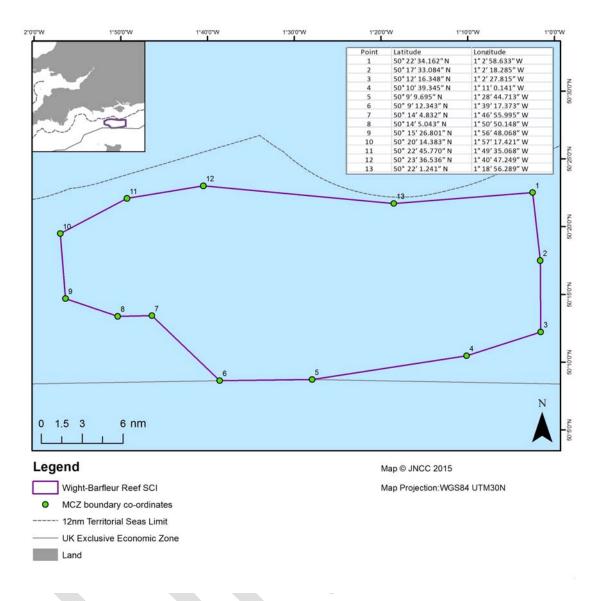


Figure 2: Site boundary for Wight-Barfleur Reef SCI

Threats to the long-term natural distribution, structure and functions of the habitats and the long-term survival of associated species from different types of fishing gear. List of other human activities in the area that could damage the habitats

4.1 All demersal towed gears (including scallop dredges, beam trawls otter trawl and seines)

Whilst it is unlikely that demersal towed gears can affect the long-term natural distribution of Annex I bedrock and stony reef features, there is some evidence to indicate that the use of bottom contacting mobile gears can impact the structure and function of the habitat and the long term survival of its associated species.

The use of towed fishing gears is likely to cause damage or death of fragile, erect species, such as sponges and corals (Løkkeborg 2005, Freese et al. 1999). Other species such as hydroids, anemones, bryozoans, tunicates and echinoderms may also be vulnerable (McConnaughey et al. 2000, Sewell and Hiscock 2005). Recovery is likely to be slow (Foden et al. 2010). Where fragile, slow growing species occur, even low levels of fishing have the potential to change the structure and function of the habitats and may result in the loss of some characteristic species.

4.2 All demersal static gears (including gillnets, trammel nets, longlines, pots and traps)

Mechanical impacts of static gear on Annex I bedrock and stony reef (e.g. weights and anchors hitting the seabed, hauling gear over seabed, rubbing/entangling effects of ropes) can damage some species (Eno et al.1996). Other species appear to be resilient to individual fishing operations but the effects of high fishing intensity are unknown (Eno et al. 2001). Recovery will be slow (Foden *et al.*, 2010) resulting in significant reduction or even loss of characteristic species. The individual impact of a single fishing operation may be slight but cumulative damage may be significant (Eno et al. 2001; Foden et al. 2010; Roberts et al. 2010).

4.3 Other Human activities

Cables are largely an unregulated activity in offshore waters depending upon the type of cable being laid (or maintained), where it is being laid between and whether the cable is part of a larger development (which may be regulated). Any cable not directly associated with an energy installation does not require a marine licence beyond 12 nautical miles. JNCC encourages early discussion from operators regarding any plans related to new or existing cables, and encourages the undertaking of non-statutory Environmental Impact Assessments for new or existing cable projects to assess their effect on the protected features of the MPA.

Under international law, ships have a right of passage at sea including in areas designated as MPAs (unless management specifies the restriction of ship transiting as outlined through an International Maritime Organisation measure). The pressures associated with shipping activity within Wight-Barfleur Reef cSAC/SCI are not considered likely to impact the protected features of the site.

Fleet activity in the area and in the region, distribution of fleets (by nation, gear, and species), and information on target and bycatch species over 6 years from 2010 to 2015 inclusive.

5.1 Validity of data

In the section below relevant fleet statistics for the years 2010- 2015 are provided as requested by the European Commission guidance. The UK, as the initiating Member State, analysed fishing from Member States active in the area of Wight-Barfleur Reef SCI over a six year period. This approach is consistent with other management proposals methodology across Member States. A four year dataset is considered to be representative of the contemporary fisheries carried out in the area and thus valid for the purposed of underpinning the current proposal.

Overall, the fisheries have been changing since early 2000s as a result of changes in fishing conditions, e.g. fuel process and the introduction of individual transferable quota (ITQ) systems⁷ in various forms. Fishing fleets have been reduced in number of vessels and fishing effort has decreased. Fishing opportunities are dictated by stock status, market conditions, fuel prices and technological opportunities, as well as quota availability. In addition, policy decisions on alternative use of the marine habitat, sustainable exploitation and environmental policies will influence fishing opportunities.

The fisheries are dynamic and sound judgement is required when using the data. However, more recent datasets are expected to improve our understanding of the structure of the fisheries.

Vessels from six Member States in additional to the UK have been present within the relevant area according to VMS reports or "pings". However, French vessels routinely report every hour and not every two hours like all other Member States' vessels. The data concerning the number of French vessels will be accurate but their activity through pings may appear distorted. To maintain consistency across all vessels and Member States' data, the information on French vessels has been displayed as it was received to the MMO FMC; therefore it has not been altered to reflect possible one hour vessel pings as this could alter the validity of the data further. To establish which vessels specifically report at a higher level would require additional processing and information.

To note, unknown gear classification related to a specific VMS report which does not have valid corresponding log book information.

⁷ Individual transferable quotas (ITQs) are a type of catch share system, which is a tool used by some governments to manage fisheries

5.1.1 Data analysis

Data presented has been analysed by applying the standard methodology used to identify whether or not vessels have been active in a specified spatial area to the information. VMS reports ("pings") were used to indicate vessel fishing activity based on the speed of the vessel as contained in the VMS report. Each ping was classified as indicative of fishing activity if the speed was greater than or equal to zero knots and less than or equal to six knots⁸.

Each speed filtered VMS ping (0-6 knots) received from a vessel in ICES statistical rectangle 29E8 (the ICES rectangle location of the site) was extracted from the UK VMS system. Each ping will hold the following information: the vessel identity (CFR) number; position and speed; and the date and time of that ping. These fishing pings from the rectangles concerned are then processed in GIS software to identify whether the position was inside or outside Wight Barfleur Reef SCI. This provides a proportion of pings falling within the area for the vessels of each Member State.

5.1.2 Data limitations

The data provided in this section is subject to several limitations:

- 1. Data is only available from vessels that are required to carry EU VMS (i.e. vessels 12 metres and above in length). As such their pattern of activity may differ from vessels of less than 12 metres in length.
- 2. Vessel numbers derived from VMS can suggest increase over the years analysed, however it is important to note that during this period VMS was introduced to the 12m and above fleet, in addition to the 15m and above fleet.
- 3. Unless stated otherwise, all VMS data shown in this paper is over a six year period 2010-2015. Landings information is over a five year period 2010-2014, as a result of datacall to member states for information in 2015.
- 4. The speed thresholds (0-6 knots) used to make assumptions as to whether a vessel is fishing or not only provide indications, not definitive proof of fishing and may not be equally valid for all gear types.
- 5. The proportion of activity inside an area is based on the number of pings as opposed to actual fishing time.
- 6. VMS reports are sent by every fishing vessel at 2 hourly intervals, with the exception of the French VMS activity. This was witnessed at an hourly rate.

⁸ Article 50 of Council Regulation (EC) No 1224/2009: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:343:0001:0050:EN:PDF

5.2 Fleet activity by state

From 2010 to 2015 vessels from four Member States were active within and around the Wight-Barfleur Reef SCI (see table 1). Of these, the most significant activity was from French and UK vessels, with considerably lower levels of activity from German and Dutch vessels.

Table 1: Number of vessels and pings (0-6knots) associated with Wight-Barfleur Reef SCI by year and Member State.

Nationality		2010	2011	2012	2013	2014	2015
		Total	Total	Total	Total	Total	Total
Belgium	Number of vessels	6	3	8	6	6	4
	Number of pings	8	3	11	6	8	4
Denmark	Number of vessels	0	1	1	1	1	1
	Number of pings	0	1	6	1	1	1
France*	Number of vessels	65	24	57	63	50	28
	Number of pings	1812	1112	1287	1348	382	311
Germany	Number of vessels	1	2	3	3	2	1
	Number of pings	2	7	10	11	8	3
Ireland	Number of vessels	3	0	0	1	1	2
	Number of pings	4	0	0) 1	1	2
Lithuania	Number of vessels	1	0	0	0	1	1
	Number of pings	1	0	0	0	2	2
Netherlands	Number of vessels	13	1	14	12	1	8
	Number of pings	31	1	43	25	2	17
UK	Number of vessels	46	42	40	31	16	7
	Number of pings	281	262	147	655	227	434

^{*} A proportion of the French VMS data showed vessels reporting at a higher rate than the usual 2 hourly reporting period. This was not consistent across all vessels or all reports.

5.3 Fleet activity by gear (fishing days, effort)

Landings values

As shown in Tables 2.1 and 2.2 the gear groups of major importance in terms of effort (tonnage) and economic importance (value) include (1) Beam Trawls directed at demersal fish (flatfish), (2) Otter board bottom trawls for demersal fish, (3) otter board bottom trawls for demersal and semi pelagic fish. Fishing for these species occurs in the Southern Irish Sea, Celtic Sea and North East Atlantic.

The fisheries data for 2010 – 2015 inclusive in Wight-Barfleur Reef SCI involve similar gear types but only two groups are of major importance regarding effort and four regarding value as can be seen in Table 2.2. Bottom trawls and demersal trawls of 120mm mesh size or over produce the highest effort and values of all the gear types of use. Demersal trawls of 70 – 99mm mesh size, Otter trawls, dredge and beam trawls also take place within the Wight-Barfleur Re f SCI but with much lower levels of effort and landings value.

Table 2.1: Vessel nationality and gear type for vessels operating in associated ICES rectangle 29E8 of Wight-Barfleur Reef SCI by year and Member State showing effort (tonnage caught).

					ACCOUNTY .			
Sum of Quant	ity Tonnes (29E8)	Year						
Nationality	Gear	2010	2011	2012	2013	2014	2015	Grand Total
BEL	Dredge	0.00	0.00	0.00	0.00	3.85		3.85
	Otter trawl bottom	1.84	0.24	0.57	0.00	1.83		4.48
	Scottish seine	0.00	0.00	0.00	2.07	0.00		2.07
	Beam trawl	32.41	60.00	88.18	54.75	36.04		271.37
BEL Total		34.25	60.24	88.74	56.82	41.72		281.77
DEU	Pelagic trawls	1,980.30	1,140.37	1,296.38	1,084.40	313.95		5,815.40
DEU Total		1,980.30	1,140.37	1,296.38	1,084.40	313.95		5,815.40
DNK	Pelagic trawls	0.00	80.00	226.57	309.29	98.44		714.30
DNK Total		0.00	80.00	226.57	309.29	98.44		714.30
FRA	Anchored seine	0.00	0.31	0.19	0.13	0.00		0.62
	Beam trawl	0.00	0.53	0.36	0.00	0.00		0.89
	Bottom trawls	14.75	239.40	242.61	472.38	340.08		1,309.23
	Dredge	0.00	35.99	4.10	1.69	0.00		41.77
	Lines	2.51	67.84	52.88	29.91	19.15		172.28
	Nets	0.00	0.79	0.49	0.00	0.53		1.81
	Pelagic trawls	13.47	334.34	169.98	248.08	62.43		828.29
	Traps	0.00	4.84	2.97	2.56	0.87		11.24
FRA Total		30.72	684.03	473.58	754.75	423.06		2,366.13
UK	Beam trawls	3.59	1.36	2.70	2.47	2.01	0.75	12.87
	Boat dredges	29.84	22.56	6.83	19.38	7.83	3.25	89.69
	Driftnets	0.00	0.00	0.00	0.00	0.00	0.86	0.86
	Gillnets (all)	21.11	23.72	0.15	1.39	0.04	1.12	47.53

Grand Total	2,489.19	2,335.44	2,680.91	2,431.20	1,122.84	670.90	11,730.49
UK Total	443.92	370.80	595.64	225.95	245.68	670.90	2,552.89
Traps (not specified)	9.30	9.95	10.78	2.48	5.31	9.83	47.66
Scottish seines	6.03	0.00	0.00	5.47	0.00	0.00	11.49
Pots	177.69	154.89	214.23	187.83	144.74	174.82	1,054.20
Pair trawls – mid water	193.43	155.97	360.87	5.67	78.97	47.26	842.16
Pair trawls - bottom	0.00	0.00	0.00	0.14	0.00	0.00	0.14
Otter trawls – mid water	0.00	0.00	0.00	0.00	0.00	428.69	428.69
Otter trawls (Bottom and not specified)	1.08	0.34	0.00	0.00	4.75	2.78	8.96
Longlines (not specified)	0.11	0.21	0.00	0.00	0.00	0.00	0.32
Hooks and lines (not specified)	1.74	1.32	0.08	1.03	2.03	1.32	7.51
Hand lines and pole-lines (hand-operated)	0.00	0.48	0.00	0.09	0.00	0.22	0.80

Table 2.2: Vessel nationality and gear type for vessels operating in associated ICES rectangle 29E8 for Wight-Barfleur Reef SCI by year and Member State showing landings values

Sum of Value	£ (Dec2015) 29E8	Year						
Nationality	Gear	2010	2011	2012	2013	2014	2015	Grand Total
BEL	Dredge	£0	£0	£0	£0	£8,864		£8,864
	Otter trawl bottom	£4,028	£611	£1,389	£0	£10,673		£16,700
	Scottish seine	£0	£0	£0	£2,609	£0		£2,609
	Beam trawl	£81,241	£189,185	£299,247	£148,437	£109,134		£827,244
BEL Total		£85,269	£189,796	£300,636	£151,046	£128,671		£855,417
DEU	Pelagic trawls	£582,080	£381,107	£228,568	£259,901	£99,729		£1,551,385
DEU Total		£582,080	£381,107	£228,568	£259,901	£99,729		£1,551,385
DNK	Pelagic trawls	£0	£17,112	£134,324	£173,199	£44,749		£369,385
DNK Total		£0	£17,112	£134,324	£173,199	£44,749		£369,385
FRA	Anchored seine	£0	£439	£418	£200	£0		£1,057
	Beam trawl	£0	£1,421	£1,395	£0	£0		£2,816
	Bottom trawls	£20,400	£388,351	£431,117	£815,548	£430,821		£2,086,237
	Dredge	£0	£35,699	£5,344	£3,034	£0		£44,077
	Lines	£3,046	£88,917	£80,625	£33,445	£26,042		£232,074
	Nets	£0	£3,960	£2,662	£0	£3,139		£9,761
	Pelagic trawls	£66,739	£1,152,591	£515,834	£996,608	£137,528		£2,869,302
	Traps	£0	£7,265	£3,491	£4,339	£2,267		£17,363
FRA Total		£90,185	£1,678,643	£1,040,887	£1,853,175	£599,798		£5,262,687
UK	Beam trawls	£21,876	£5,873	£9,447	£7,216	£10,613	£1,467	£56,491
	Boat dredges	£34,541	£39,208	£11,821	£25,982	£13,689	£8,497	£133,739
	Driftnets	£0	£0	£0	£0	£0	£5,279	£5,279
	Gillnets (all)	£141,708	£151,859	£545	£12,830	£216	£10,394	£317,550

Grand Total	£1,583,535	£2,974,571	£2,581,085	£3,198,238	£1,440,876	£847,310	£12,625,615
UK Total	£826,001	£707,914	£876,671	£760,916	£567,930	£847,310	£4,586,742
Traps (not specified)	£13,225	£21,797	£23,532	£3,765	£10,523	£12,817	£85,659
Scottish seines	£6,865	£0	£0	£8,139	£0	£0	£15,003
Pots	£537,002	£437,254	£731,135	£656,159	£463,120	£626,045	£3,450,717
Pair trawls – mid water	£53,192	£43,018	£99,238	£33,235	£21,717	£19,547	£269,948
Pair trawls - bottom	£0	£0	£0	£2,190	£0	£0	£2,190
Otter trawls – mid water	£0	£0	£0	£0	£0	£137,309	£137,309
Otter trawls (Bottom and I	not specified) £6,474	£2,211	£0	£0	£26,095	£9,315	£44,096
Longlines (not specified)	£766	£1,768	£0	£0	£0	£0	£2,534
Hooks and lines (not speci	fied) £10,351	£3,639	£953	£11,106	£21,957	£13,963	£61,968
Hand lines and pole-lines ((hand-operated) £0	£1,286	£0	£293	£0	£2,679	£4,258

5.4 Annual variation in fishing activity

Fishing effort is indicated by the number of VMS reports at speeds indicative of fishing (from 0 to 6 knots) received by the UK Fisheries Monitoring Centre. Reports are sent by every fishing vessel at 2 hourly intervals, with the exception of some French VMS activity. A portion of this was witnessed at an hourly rate.

VMS Activity, 2010-2015

Over the years analysed (VMS 2010-2015), the total volume of vessels fishing in the SCI are 396 from other Member States and 182 from the UK, making a total of 578. Vessels have been counted more than once if they enter the SCI in separate years. See Table 1.

French VMS activity has fluctuated in vessels numbers over recent years, in 2010 there were 65 vessels reported in the site, this dropped to 24 vessels the following year in 2011 before rising to 57 and 63 vessels in 2012 and 2013. The numbers then decrease a second time from 50 vessels in 2014 and 28 in 2015. The number of pings has decreased over the years, from 1812 pings in 2010 to 311 in 2015. The location of the French activity seems to be predominately occurring outside of the site, with lower levels of activity in the southern and western portion of the site.

UK VMS activity has decreased in vessel numbers over recent years, starting with 46 vessels in 2010, decreasing each year down to 7 vessels in 2015. However the number of VMS pings has fluctuated in those years. In 2010 there were 281 pings, dropping to 262 and 147 in 2011 and 2012. In 2013 the number dramatically increased to 655 pings before dropping to 227 in 2014, finally rising to 434 pings in 2015. The location of the UK activity seems to be predominately occurring outside of the site, with lower levels of activity in the southern and western portion of the site.

The activities from the other Nationalities are of lower levels in terms of number of vessels recorded in the site against the volume of pings recorded. See Table 1.

Landings information, 2010-2014

The values (£) and landings (tonnes) effort taken within the MCZ vary between each member state.

French landings within ICES rectangle 29E8 has fluctuated over the recent years. In 2010 there was 30 tonnes landed with an approximate value of £90,185. The landings then increased in 2011 to 684 tonnes with approximate value of £1.6million. In 2012 the landings decreased 473 tonnes with approximate value of £1million. This then increased to 754 tonnes with approximate value of £1.8million before dropping to 423 tonnes with an approximate value of £599,798. These totals had been generated primarily by two main gear types, Bottom trawls and Pelagic trawls.

UK Landings within ICES rectangle 29E8 has fluctuated over recent years in terms of tonnes landed and value taken. In 2010 there was 443 tonnes landed with an approximate value of £826,001, this decreased to 370 tonnes in 2011 with approximate value of £707,914. In 2012 this increased to 595 tonnes and £876,671 value, before decreasing to 225 tonnes and £760,916 value. In 2014 and 2015

the landings rose again to 245 tonnes and 670 tonnes respectively with an approximate value of £760,916 and £847,310. These totals had been generated primarily by three main gear types, mid water otter trawls, mid water pair trawls and potting.



Figure 3: VMS reports indicating all fishing activity in Wight-Barfleur Reef SCI 2010 by Nationality

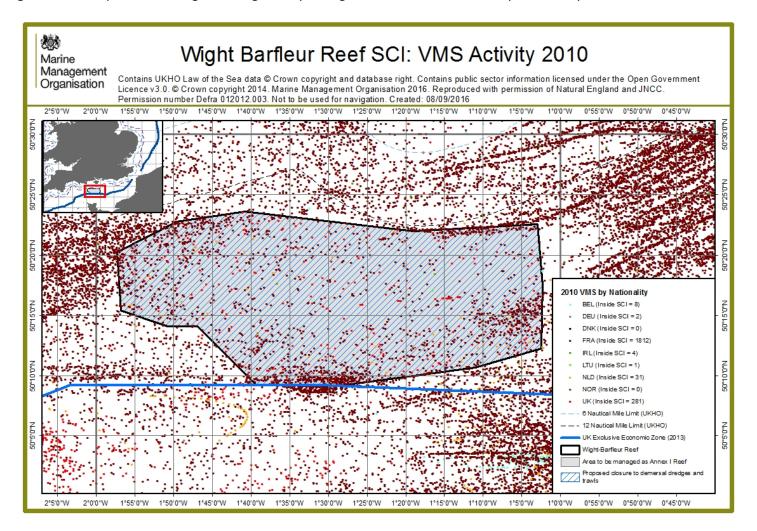


Figure 4: VMS reports indicating all fishing activity in Wight-Barfleur Reef SCI 2011 by Nationality

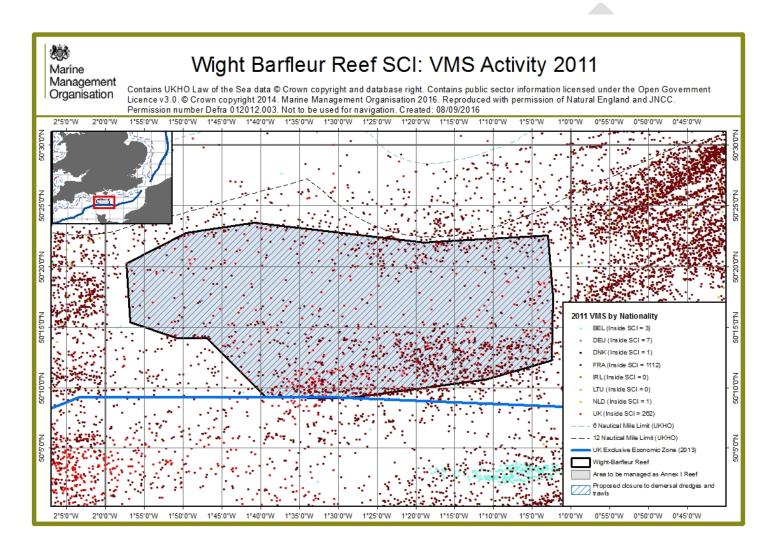


Figure 5: VMS reports indicating all fishing activity in Wight-Barfleur Reef SCI 2012 by Nationality

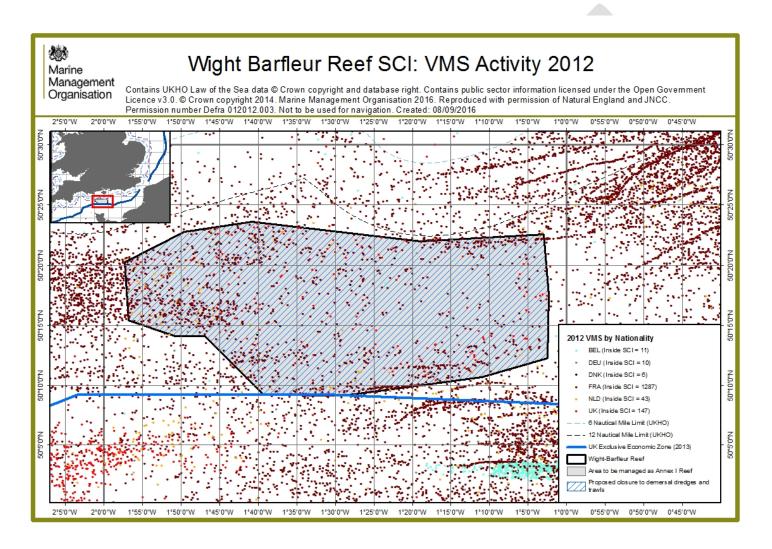


Figure 6: VMS reports indicating all fishing activity in Wight-Barfleur Reef SCI 2013 by Nationality

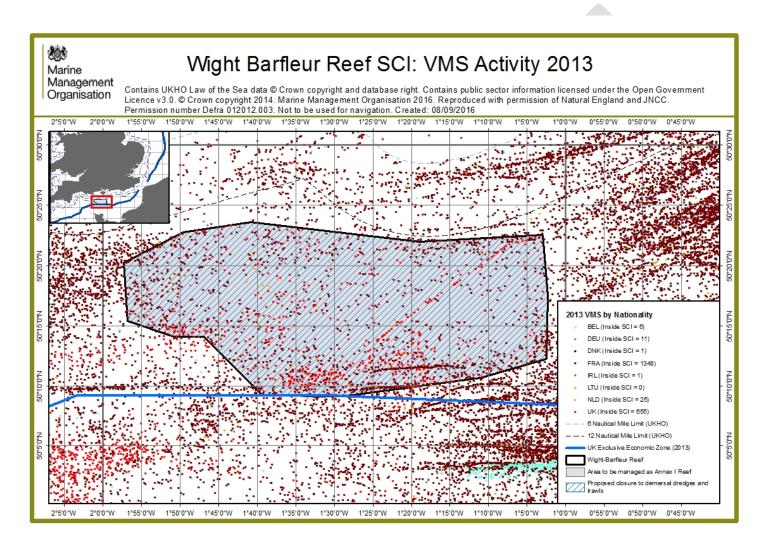


Figure 7: VMS reports indicating all fishing activity in Wight-Barfleur Reef SCI 2014 by Nationality

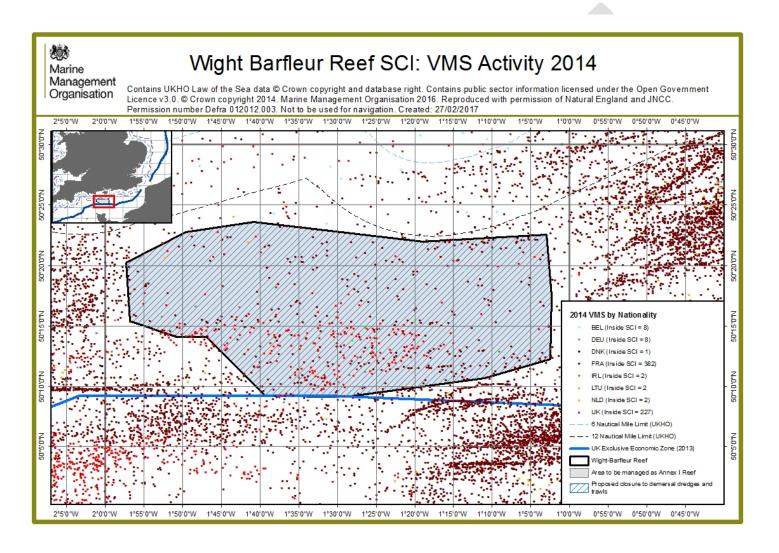
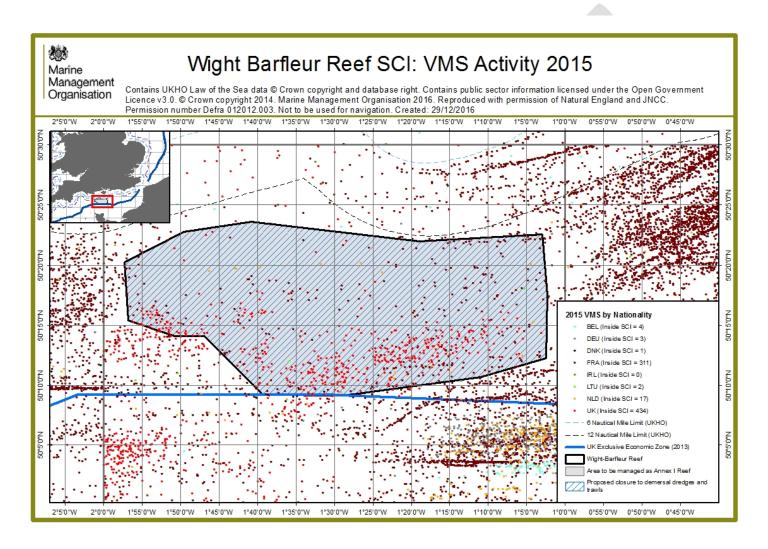


Figure 8: VMS reports indicating all fishing activity in Wight-Barfleur Reef SCI 2015 by Nationality



5.5 Fleet activity by gear group – Geographical distribution

In the figures depicted below (figures 7 to 12), demersal gears have been classed as all gear types which are to be excluded from the closed area(s) as stipulated in the gear table on page 7. The charts show all demersal and non-demersal gear types for each year and each Member State and where possible, the specific gear type recorded has been included.



Figure 9: VMS reports indicating demersal towed fishing activity in Wight-Barfleur Reef SCI 2010 all nationalities

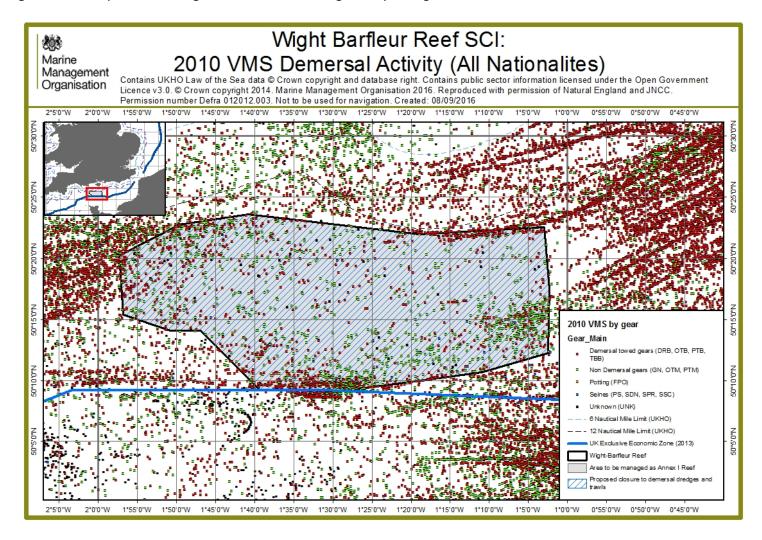


Figure 10: VMS reports indicating demersal towed fishing activity in Wight-Barfleur Reef SCI 2011 all nationalities

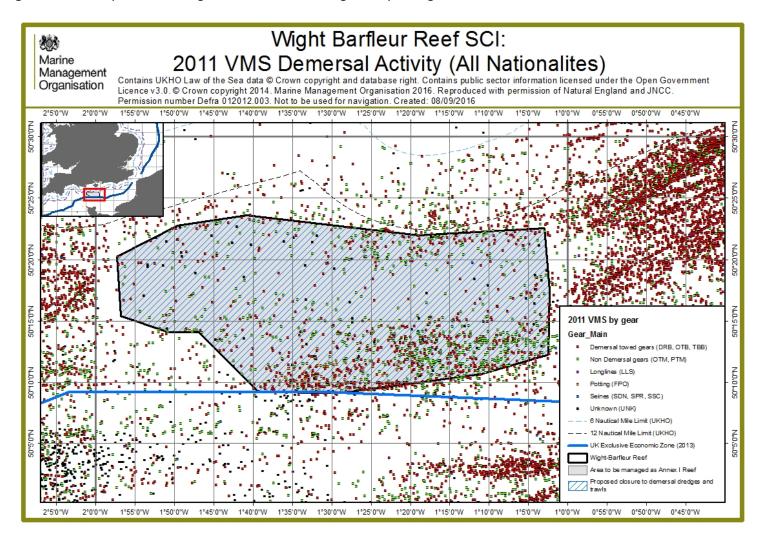


Figure 11: VMS reports indicating demersal towed fishing activity in Wight-Barfleur Reef SCI 2012 all nationalities

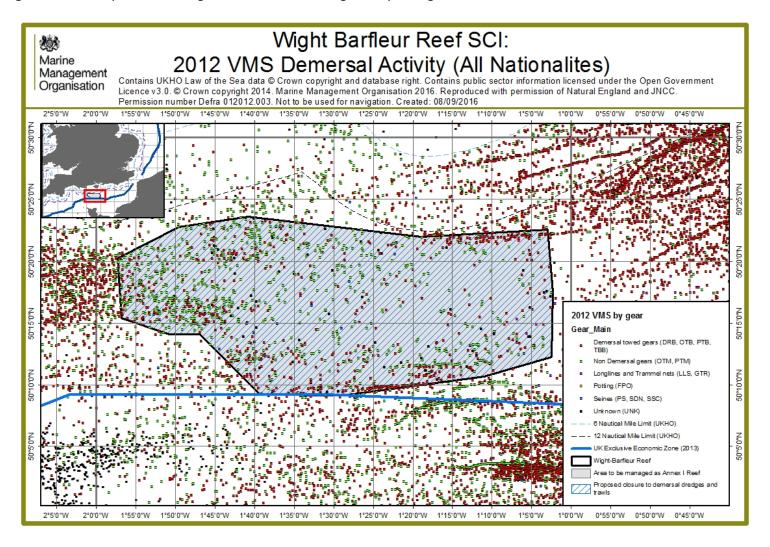


Figure 12: VMS reports indicating demersal towed fishing activity in Wight-Barfleur Reef SCI 2013 all nationalities

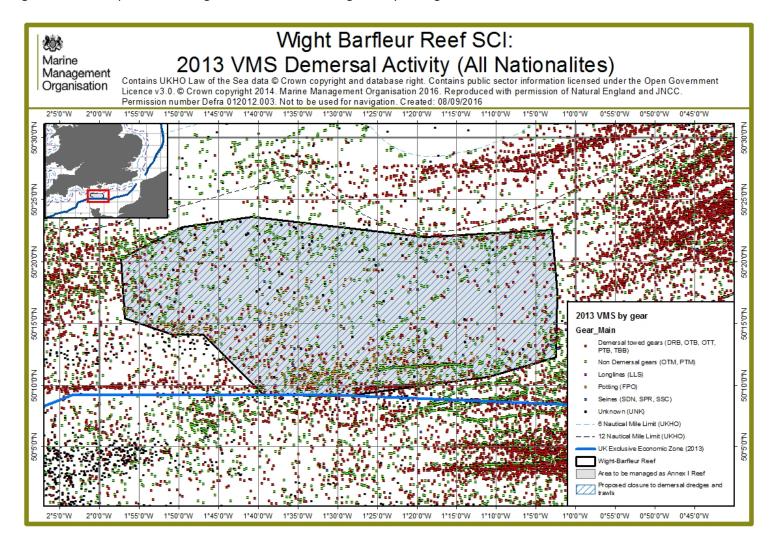


Figure 13: VMS reports indicating demersal towed fishing activity in Wight-Barfleur Reef SCI 2014 all nationalities

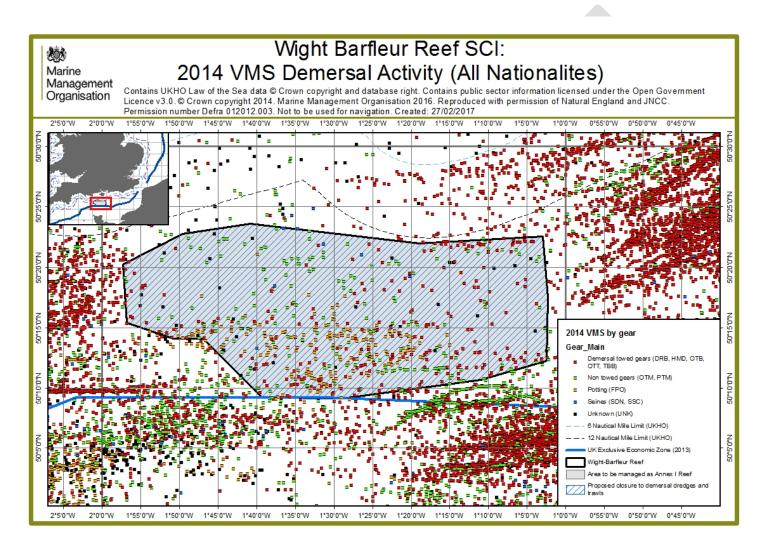
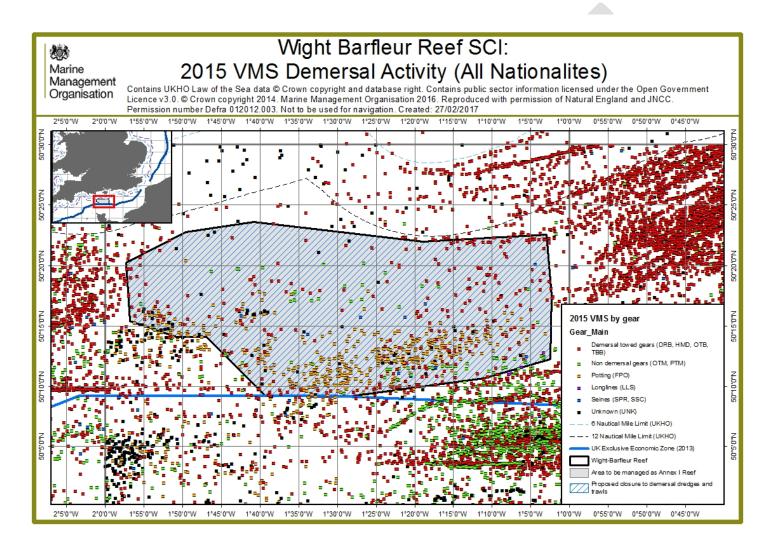


Figure 14: VMS reports indicating demersal towed fishing activity in Wight-Barfleur Reef SCI 2015 all nationalities



5.6 By-catch

Bottom (demersal) trawling, pelagic trawling and potting are the most common activities taking place in the site based on landings associated with the ICES rectangle. Bottom (demersal) trawling, pelagic trawling and potting being the most common activities recorded in the site based on VMS activity. The demersal activity in the Channel mainly targets sole, plaice, bass, whiting and cod to name a few. The flatfish fisheries (beam and bottom otter board trawl) land a number of other species as by-catch (e.g. cod, lemon sole). Where these species are landed these are included in the total gross landing value statistics. Additional species may also be caught as bycatch but are not landed and there are no current systematic statistics available for these catch components.

The fishery focuses on all four species group, Pelagic, Mollusc, Demersal and Crustacean.

- UK top species landed in terms of weight are Crabs, Herring, Lobsters, Scallops, Cuttlefish,
 Bass and Mackerel.
- Other member states generally land Mackerel, Herring, Sole, Whiting, Plaice, Cod, Scallops and Squid

With the introduction of Common Fisheries Policy reform, which includes a landing obligation (namely a ban on the discard of certain species by certain vessels/within certain circumstances), it could become possible in the future to collate information on bycatch that could contribute to the overall catch and landings statistics in certain areas. A ban on demersal fish discards was introduced at the end of 2015, following a discard ban on pelagic fish introduced at the end of 2014, with a ban on discarding all other quota species by 2016.⁹.

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⁹ http://ec.europa.eu/fisheries/cfp/fishing rules/discards en

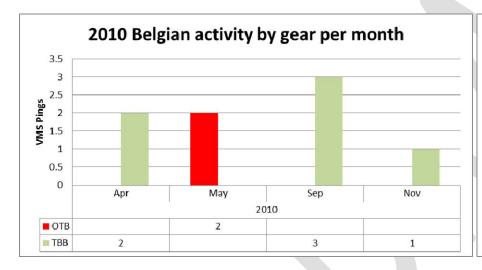
6 Seasonal trends in fisheries over 6 years 2010 to 2015 inclusive

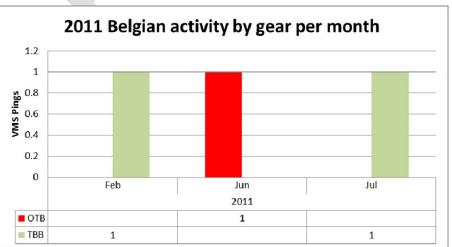
One vessel from Lithuania was recorded in the site through VMS in 2010, 2014 and 2015 but with very few reports.

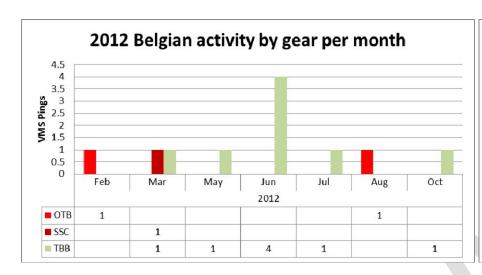
Very low numbers of Danish vessels recorded in the site over the years analysed with one VMS report in March 2011 (bottom otter trawl), six reports in October 2012 (purse seines), one report (mid water otter trawl) in November 2013, one report in November 2014 and one report in February 2015.

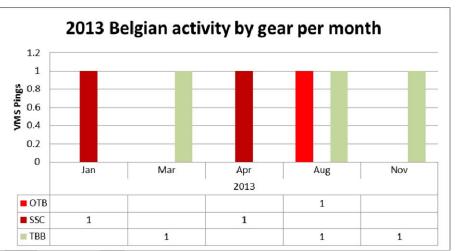
Very low numbers of Irish vessels recorded in the site over the years analysed with four reports in 2010, one in 2013 and two in 2014.

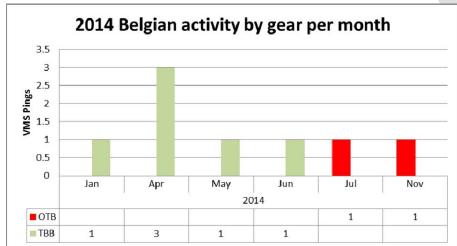
Charts 6.1: Belgian seasonal fishing activity (all gears) in Wight-Barfleur Reef SCI

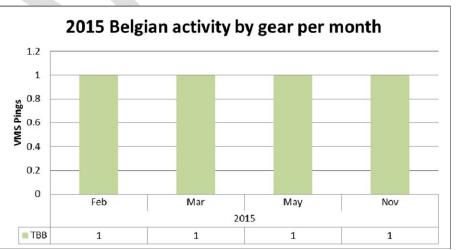






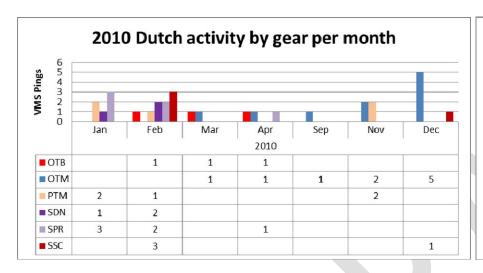


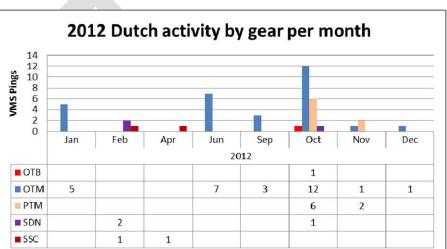


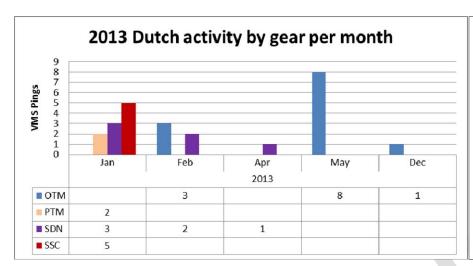


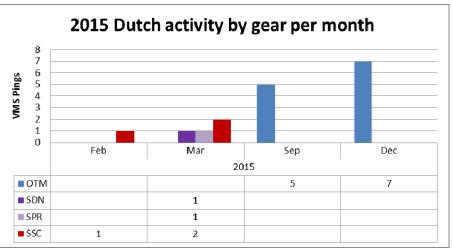
Charts 6.2: Dutch seasonal fishing activity (all gears) in Wight-Barfleur Reef SCI (No Danish activity recorded in 2010)

Only showing years where Dutch vessels were more active. One Dutch VMS report from a seine (Danish) registered vessel in February 2011 and one VMS report from a midwater otter trawl vessel in October 2014.

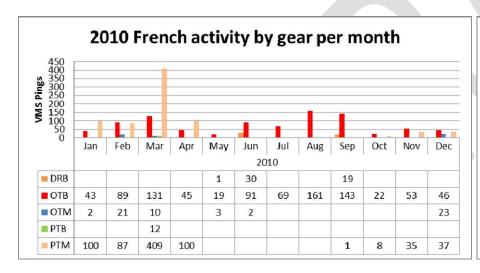


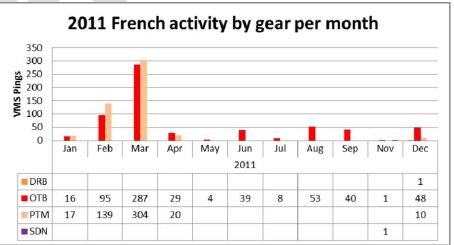


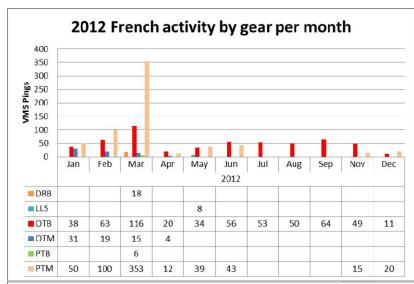


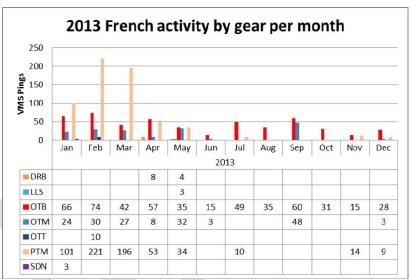


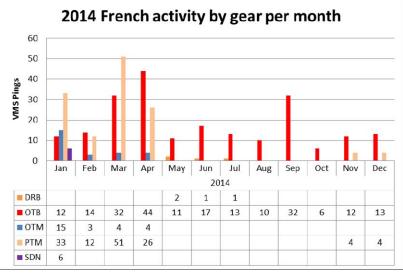
Charts 6.3: French seasonal fishing activity (all gears) in Wight-Barfleur Reef SCI

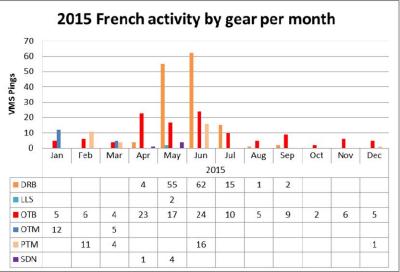




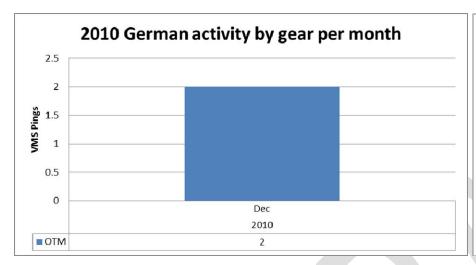


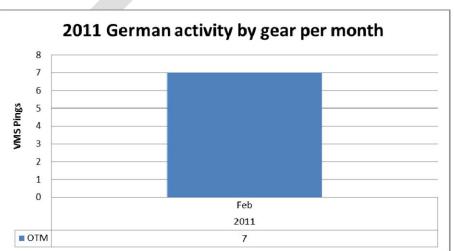


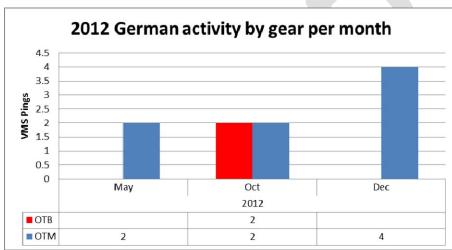




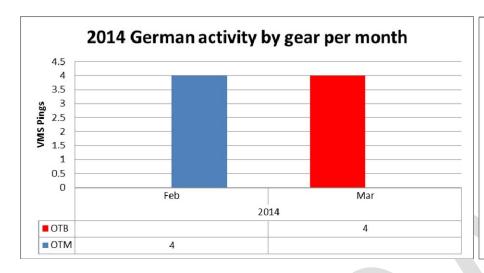
Charts 6.4: German seasonal fishing activity (all gears) in Wight-Barfleur Reef SCI

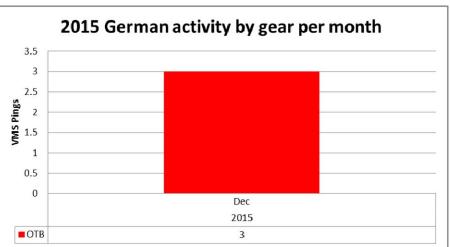




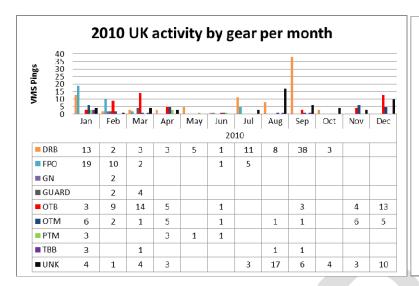


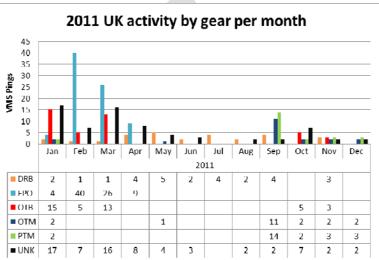


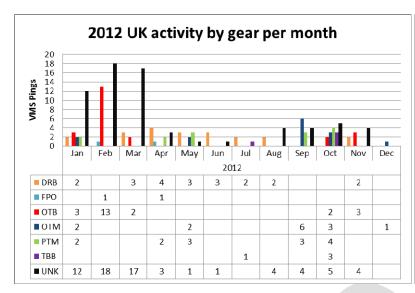


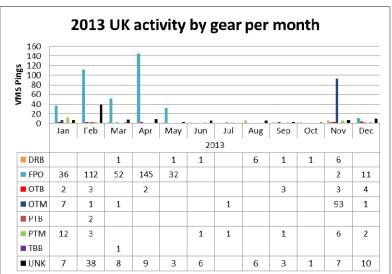


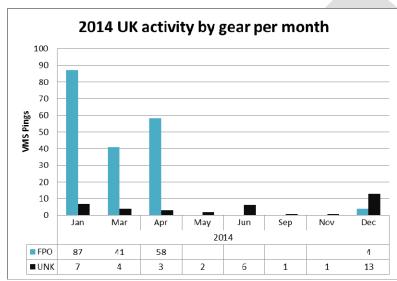
Charts 6.5: UK seasonal fishing activity (all gears) in Wight-Barfleur Reef SCI

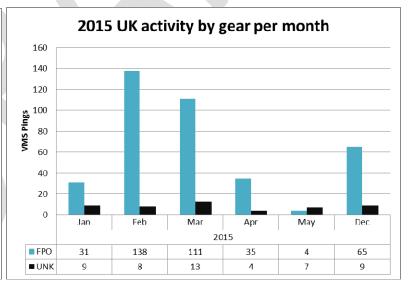












Proposed fisheries management measures to maintain the habitat feature in favourable condition. Are they proportionate and enforceable? Other conservation measures that apply to the area

6.1 Options for fisheries management

A range of MPA fisheries management options are available to managers, differing in the degree of restriction they would play on fishing operations, and the risk they would pose to achieving the conservation objectives. These have been grouped into three broad categories of possible management: No additional management, additional management to reduce/limit pressures and additional management to remove pressures.

Although it is not generally possible to quantify the degree of risk to achieving the conservation objectives posed by each option, it is possible to identify where risks may exist, and where this could be reduced through the introduction of management measures.

Risks have been evaluated using existing data and information on protected features and our understanding of the relationships between the feature and relevant activities.

Broad management options categories

- specific fisheries management where fisheries managers choose to apply no additional site specific fisheries management within a site. For some gear/feature combinations, where the feature is not considered sensitive to the pressures associated with demersal fishing activity, this management option may pose little or no risk to achievement of the conservation objectives. For features which are considered sensitive to the pressures associated with certain demersal fishing activities, the risk posed to achieving the conservation objectives will increase as the sensitivity of the feature increases. As outlined in the features fisheries impacts section, this will vary between features and gear types.
- 2) 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 posed by fishing activity to achieving the conservation objectives. These could include:
 - Area restrictions: This would involve closing some or all of a specific feature's area.

 Restrictions could be permanent in some cases or temporary/adaptive in others. The risk of the conservation objectives not being met will increase as the size of areas restricting

pressure decrease, or if the pressure reduction across the site relative to natural change is low.

 Gear restrictions: This could involve restricting the use of gears to which a feature is more sensitive.

In situations where there is high uncertainty regarding the impacts of fishing on features, management measures to reduce/limit pressures could be "adaptive", i.e. changes in the feature's condition following the introduction of management measures will be monitored and future management may be adapted accordingly.

3) Additional management to remove pressures – where managers choose to exclude fishing activities known to adversely affect a feature. Such exclusions may apply to the parts of the site where the feature is present, or to an entire site. This would reduce the risk of not achieving the conservation objectives to the lowest possible level.

6.2 Proposed management option

Management measures proposed for Wight-Barfleur Reef SCI

The proposed management option is to reduce/limit pressure by restricting fishing activity with demersal towed gears across a proportion of the site to include each protected feature (Figure 11).

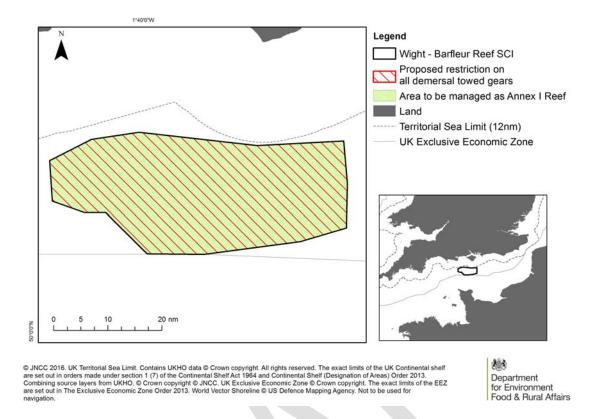


Figure 11: Wight-Barfleur Reef SCI site map including protected features for which management is being proposed.

Exclusion of demersal towed gears across the entire SCI (see section 3) is the proposed management option (option 2 described in section 7.1). This option will prohibit the use of demersal towed gear over the entirety of the SCI and therefore also the entire Annex I (H1170) reef feature.

7.3 Other fisheries measures which apply to the site

Wight-Barfleur Reef SCI is situated in the Cod Recovery Area (423/2004 Art 9). Theses recovery zones are decided monthly so are not always active. There are no recovery zones in September each year.

The Wight-Barfleur Reef SCI lies within an area where Commission Regulation (EC) 494/2002 of 19 March 2002 establishing additional technical measures for the recovery of the stock of hake in ICES sub-areas III, IV, V, VI and VII and ICES divisions VIII a, b d, e applies.

Regulation 494/2002 contains the following measures:

- Catch composition rules requiring the maximum allowed proportion of hake in a total catch for gear types.
- Gear specification requirements, including twine thickness and mesh sizes for various gear types.

- Within a specified area¹⁰ (which encompass Wight-Barfleur Reef SCI), it is prohibited to use any fixed gear of mesh size less than 120mm.
- Within a specified area (which encompass Wight-Barfleur Reef SCI), it is prohibited to use any towed net of mesh range 55 to 99mm, except for east of 7° 30′W where beam trawls of mesh range 55 to 99mm may be deployed from April to October.

8 Control measures envisaged by the Member State, possible ecological and control buffer zones to ensure site protection and/or effective control and monitoring measures

8.1 Measures envisaged by Member states for Control, Enforcement and Compliance

The proposed control, enforcement and compliance regime for Wight-Barfleur Reef SCI consists of a reporting zone around the site, increased reporting within zones, remote monitoring of vessel position and at- sea surveillance measures. Such a regime would be in line with future control and enforcement challenges of the CFP.

8.1.1 Surface surveillance

Surface surveillance of Wight-Barfleur Reef SCI will be continued under the existing surveillance plans for the Channel and South West Approaches. These plans will coordinate the at-sea surveillance capacity of the UK which may include Navy fisheries protection vessels, or other capable vessels and aerial response. Changes to surveillance will be in line with the MMO's risk based compliance and enforcement strategy.

8.1.2 Remote Vessel Monitoring

Increased Position reporting

Vessels entering the prohibited area will be subject to increased vessel position reporting (every 10mins). EU fishing vessels over 12m in length are required to report, through satellite, every two hours. Reports can be viewed in real time but this reporting frequency would allow vessels to access the prohibited area of the SCI without being identified between the two hourly reporting times. Increased repotting within the prohibited zone will reduce this risk.

 $^{^{10}}$ As defined by article 5, paragraph 1(a) of Commission Regulation (EC) 494/2002 of 19 March 2002 establishing additional technical measures for the recovery of the stock of hake in ICES sub-areas III, IV, V, VI and VII and ICES divisions VIII a, b d,e

Vessels will be allowed to transit the prohibited area. Increased reporting will allow the MMO Fisheries Monitoring Centre (FMC) to identify fishing or transiting patterns and identify non-compliance.

Increased Reporting Zone

Vessels fishing within 1nm of the prohibited zone will be subject to 10min reporting. Fishing patterns are likely to result in vessels 'clipping' the prohibited zone, or cutting across a corner rather than transiting across the entire site. A reporting zone which surrounds the prohibited area adds additional feature protection and ensures non-compliant vessels can be identified. Vessels will still be allowed to fish in the increased reporting zone.

The increased 1nm reporting zone proposed to be established around this site will cease at the meridian line between UK and French waters.

8.2 Vessel position and gear deployment monitoring

Increasing the frequency of vessel position reporting is integral to the preferred control, enforcement and compliance plan.

Increased reporting can be set up using geofences¹¹ recognised by the vessel's VMS devices, which would trigger higher frequency reporting if a vessel enters the reporting zone.

In order to improve monitoring and compliance, fishing vessels within this site and the reporting zone should be required to carry a system capable of:

- Recording high frequency position reports (up to one report per ten minute interval) when within the prohibited area or reporting zone for the site.
- Transmitting position reports via GPRS/GSM¹²(when available)
- When GPRS/GSM signal is not available: storing positions and forwarding stored reports when the signal is available

¹¹ A geofence is a spatial virtual barrier. Programs that incorporate geofencing allow an administrator to set up triggers such as increased reporting so when a device enters (or exits) the boundaries defined by the administrator it performs the trigger and if required a text message or email alert.

¹² General Packet Radio System (GPRS) and Global System for Mobile communications (GSM): These are types of mobile phone technology which meet European telecommunications standards.

- Recreate prohibited area and reporting zone coordinates and associated reporting frequency rules in the form of geofences
- Transmitting an email and/or text message alert via GPRS/GSM (when signal available) to the flag state and MMO FMC when a vessel enters a reporting or prohibited zone for the site.
- High frequency reporting would end when a vessel leaves the reporting area for the site.

Increased reporting via GPRS/GSM is recommended to reduce the reporting cost (which will be borne by the fishing vessels) as charges are made per report. Satellite reporting, currently used, is costly at high frequency.

Mobile network signal is not currently widely available for offshore sites; enforcement action using this system will therefore be retrospective.

In the UK, vessels which are fitted with a VMS+ device can meet all the above system requirements. The VMS+ device is capable of transmitting increased reporting either through satellite or GPRS/GSM. There is also development work on another device known as I-VMS (inshore vessel monitoring system), which although designed primarily for the English inshore fleet (those vessels under 12m in length), can also meet the above requirements.

Estimation of the increased reporting costings for offshore Marine Protected Areas in English waters.

This information relates to the UK estimates of the increased reporting proposals.

The cost of a VMS report through GPRS¹³ is approximately **\$0.06**¹⁴ (As of April 2015). Please find below a table of the total cost of increased after a period of X minutes.

GPRS Costs	Total duration cost after X minutes						
Reporting rate							
(X minutes)	60	120	180	240	300	360	

¹³ General Packet Radio System (GPRS) and Global System for Mobile communications (GSM): These are types of mobile phone technology which meet European telecommunications standards.

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¹⁴ GPRS values are presented in US dollars

1 minute	\$3.60	\$7.20	\$10.80	\$14.40	\$18.00	\$21.60
10 minutes	\$0.36	\$0.72	\$1.08	\$1.44	\$1.80	\$2.16
30 minutes	\$0.12	\$0.24	\$0.36	\$0.48	\$0.60	\$0.72
60 minutes	\$0.06	\$0.12	\$0.18	\$0.24	\$0.30	\$0.36

To note: The UK proposes a reporting rate of ten minutes.

Increased reporting caveats:

- These costs are based on a 'pay as you go' (PAYG) service and correct as April 2015.
- Costs will vary depending individual member states VMS service providers.
- GRPS Network roaming may affect overall costs

It should be noted that fishing vessels affected by the proposed closures may potentially modify or change their activities, along with fishing patterns as a result of the implementation of an increased reporting zone.

8.3 Key provisions to include in EC regulation to manage Wight-Barfleur Reef SCI

Key provisions which should be included in an EC regulation to facilitate control enforcement and compliance include:

- A prohibition on any demersal towed gears, dredges and seines being deployed within the SCI.
- Establishment of a 1nm (1.852km) reporting zone around Wight-Barfleur Reef SCI. All fishing vessels within this area shall be required to record or report vessel positions at minimum 10minute intervals. This area shall be defined by the reporting zone and coordinates displayed in Annex D.
- A requirement for all fishing vessels entering the reporting zone to have a system for
 recording and reporting vessel position which meets prescribed specifications (see Section
 8.2 for minimal requirements) and is installed and operative. Any fishing vessel entering
 Wight-Barfleur Reef SCI or the reporting zone without such a system will be committing an
 offence.
- A requirement for all fishing vessels transiting the restricted area carrying prohibited gears to have all prohibited gears on board lashed and stowed.
- A requirement for all fishing vessels transiting the restricted area carrying prohibited gears to have all gears on board lashed and stowed.

A requirement for all fishing vessels transiting the restricted area carrying prohibited gears
to ensure that the speed during transit is not less than 6 knots except in the case of force
majeure or adverse conditions. In such cases the master shall immediately inform the
fisheries monitoring centre of the flag member state which shall then inform the UK FMC.

The proposal on which gears types to prohibit is formulated in terms of Gear Codes in Annex XI in EU Regulation 404/2011. In general prohibited gears types are towed gears with bottom contact. Formulation of the regulation requires clear and precise definitions which distinguish allowed gear types from prohibited gear types. This includes, for trawls which can be operated both with and without bottom contact, distinguishing between these different gear riggings (if such a distinction is not feasible these gear types should be prohibited).

Management measures for the site will be periodically reviewed in line with advancements in technology, specifically the development of improved remote vessel monitoring and gear in/out technologies.

9 Measures to monitor and assess the maintenance and/or recovery of the features within the site

Cefas/JNCC are currently leading a research and development programme to develop an integrated system of monitoring for marine biodiversity. The ambition is to cost-effectively encompass Defra's policy and statutory obligations, such as the:

- · Marine and Coastal Access Act
- · OSPAR Convention;
- EC Habitats Directive; and
- EC Marine Strategy Framework Directive (MSFD)

For benthic marine habitats, the task of developing monitoring options is extremely complex. The UK has 48 offshore Marine Protected Areas designated for benthic habitats covering an area of over 126,000 km². This presents a challenge due to the diversity of benthic habitats occurring in UK waters and the number, size and geographic spread of offshore MPAs, the paucity of data on the range, extent and condition of many habitat types (especially in the offshore environment) and the underdeveloped nature of suitable state and pressure indicators for monitoring.

The draft offshore habitats monitoring options evaluate the risk of damage to habitats in UK offshore MPAs, assess the type of monitoring required for each MPA and estimate the indicators, equipment and number of samples required to assess change in the condition of the habitats within MPAs. Due to the number of UK offshore MPAs, the area of seabed encompassed within the

offshore MPAs, the diversity of offshore habitats and the cost of offshore monitoring surveys, it may not be possible to monitor every MPA within a single reporting cycle. In certain cases, monitoring studies to assess the effectiveness of management measures in one MPA may be used as a proxy for assessing the effectiveness of management measures in MPAs with similar features and management measures in the same regional sea.

10 Coordination with neighbouring Member States as appropriate

Fisheries management measures were developed in close coordination with other Member States with a direct management interest in the sites.

Draft management proposals were subject to a six week period of consultation with Member States with a direct management interest in the sites and the Northwest Waters Advisory Council.

Finalised management proposals were then presented to other Member States with a direct management interest in the sites for agreement that sufficient information had been provided in order to commence the formal agreement of the proposals as Joint Recommendations. [Following this, ad hoc meetings of the Northwest Waters Article 11 sub-group were held to start formal agreement proceedings for the Joint Recommendations. Any outstanding issues were then addressed before agreement was reached on the Joint Recommendations by members of the Northwest Waters High-Level Group and they were submitted to the European Commission for adoption.]

11 Evaluation of possible displacement of fishing effort and impact on new areas

As the SCI will be closed to demersal trawls and dredges, some displacement is likely to occur both within and outside the site.

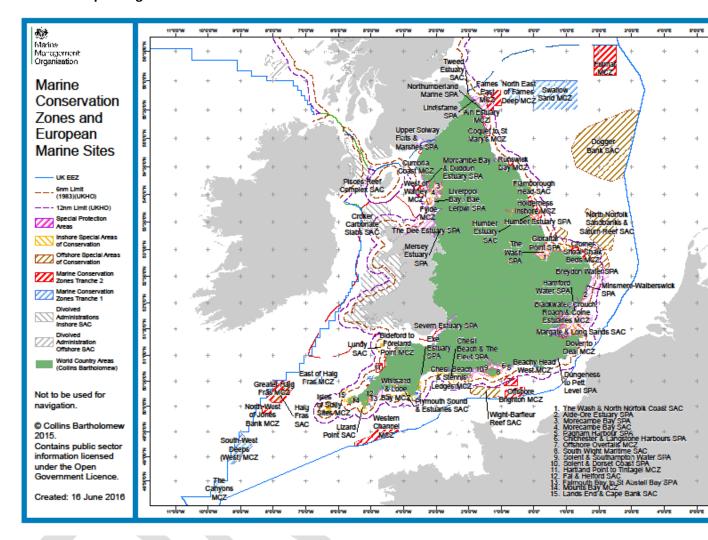
Displacement is difficult to quantify, and it is impossible to predict where exactly activities will be displaced to. As a result of stakeholder input in the management process, some of the areas currently fished within the site will remain open to fishing thus reducing the potential for displacement.

Displacement is dependent on the intensity and distribution of fishing activities within the site before the closure and on external factors (such as fish distribution, TAC/quota, fuel prices, other spatial claims).

As part of the MMOs risk-based enforcement, regular monitoring of fishing activity is collated on a Monitoring Control and Surveillance System (MCSS). MCSS does not analyse fishing trends and activity, but stores information, which can be accessed at any time. The MMOs monitoring of activity in each site could assist in any future considerations relating to displacement and could be used to indicate any changes in fishing trends and activity.

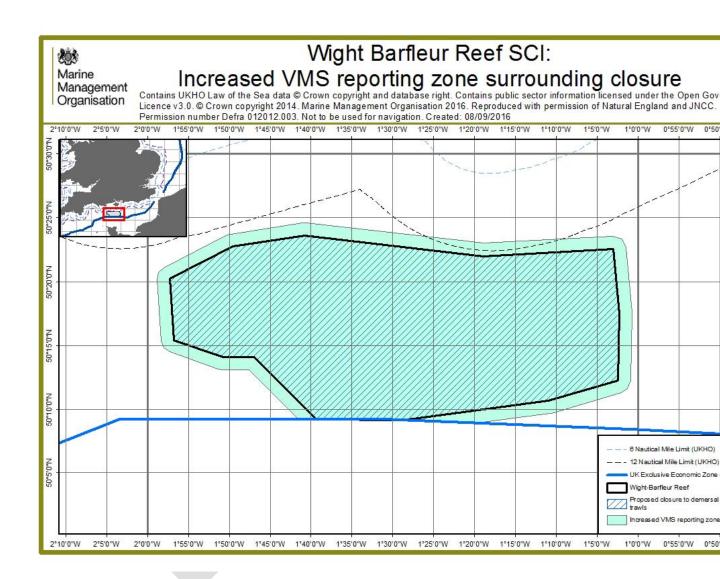


Annex C – Map of English MPA network



Annex D – Map and coordinates for Wight-Barfleur Reef SCI reporting zone with increased reporting

The increased 1nm reporting zone proposed to be established around this site will cease at the meridian line between UK and French waters.



Coordinates for increased reporting zone

	Degre	es Minutes	Degrees Minutes Seconds		
Point	Lat (North)	Lon (West)	Lat (North)	Lon (West)	
1	50°09.20760'	-001°41.50140'	50°09'12.4560"	-001°41'30.0840"	
2	50°13.08360'	-001°47.58120'	50°13'05.0160"	-001°47'34.8720"	
3	50°13.08600'	-001°50.84100'	50°13'05.1600"	-001°50'50.4600"	
4	50°13.14480'	-001°51.36540'	50°13'08.6880"	-001°51'21.9240"	
5	50°14.50680'	-001°57.32880'	50°14'30.4080"	-001°57'19.7280"	
6	50°14.86140'	-001°58.06800'	50°14'51.6840"	-001°58'04.0800"	
7	50°15.37920'	-001°58.36020'	50°15'22.7520"	-001°58'21.6120"	
8	50°20.17260'	-001°58.85220'	50°20'10.3560"	-001°58'51.1320"	
9	50°20.17260'	-001°58.85220'	50°20'10.3560"	-001°58'51.1320"	
10	50°21.12660'	-001°58.00440'	50°21'07.5960"	-001°58'00.2640"	
11	50°23.65020'	-001°50.29680'	50°23'39.0120"	-001°50'17.8080"	
12	50°23.74920'	-001°49.81680'	50°23'44.9520"	-001°49'49.0080"	
13	50°24.59580'	-001°41.01660'	50°24'35.7480"	-001°41'00.9960"	
14	50°24.60060'	-001°40.61040'	50°24'36.0360"	-001°40'36.6240"	
15	50°23.02200'	-001°18.88740'	50°23'01.3200"	-001°18'53.2440"	
16	50°23.56380'	-001°03.10860'	50°23'33.8280"	-001°03'06.5160"	
17	50°23.33700'	-001°01.97460'	50°23'20.2200"	-001°01'58.4760"	
18	50°22.65540'	-001°01.41720'	50°22'39.3240"	-001°01'25.0320"	
19	50°17.63760'	-001°00.74760'	50°17'38.2560"	-001°00'44.8560"	
20	50°17.53440'	-001°00.74220'	50°17'32.0640"	-001°00'44.5320"	
21	50°12.25500'	-001°00.90360'	50°12'15.3000"	-001°00'54.2160"	
22	50°11.64360'	-001°01.25460'	50°11'38.6160"	-001°01'15.2760"	
23	50°11.31540'	-001°02.02560'	50°11'18.9240"	-001°02'01.5360"	
24	50°09.69900'	-001°10.56180'	50°09'41.9400"	-001°10'33.7080"	
25	50°09.69780'	-001°10.56900'	50°09'41.8680"	-001°10'34.1400"	
26	50°09.66600'	-001°10.80540'	50°09'39.9600"	-001°10'48.3240"	
27	50°08.93100'	-001°19.60740'	50°08'55.8600"	-001°19'36.4440"	

Then from Point 27 follow the UK EEZ re-joining to Point 1.

Annex E - References

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