

Dover to Folkestone rMCZ no 11.2

Marine Conservation Zone : Selection Assessment Document

Version and Issue date	Amendments made
V1.0 07.09.11	Draft final recommendations refined by the RSG and Local Groups in July 2011 and finalised by the RSG 2/3 August 2011.

1. Site name Dover to Folkestone rMCZ no 11.2	3. Site surface area 2013 ha 20.13 km ²
2. Site centre location ETRS89 N51 5' 39.718" E1 16' 40.110" N51 5.662' E1 16.669' (N.B. WGS 84 UTM 31N coordinates are provided in the map vertices)	4. Biogeographic region Eastern English Channel

5. Features proposed for designation within Dover to Folkestone ¹

Feature type	Feature name	Area / No. of records ²
Broad-scale habitats	A1.2 Moderate energy intertidal rock	0.29 km ²
	A2.1 intertidal coarse sediment	416.12 m ²
	A3.1 high energy infralittoral rock	1.47 km ²
	A3.2 mod energy infralittoral rock	0.18 km ²
	A5.1 subtidal coarse sediment	17.50 km ²
Habitat FOCI	Blue mussel beds	3,516 m ²
	Intertidal underboulder communities	3 records
	Littoral chalk communities	0.74 km ²
	Peat and clay exposures	660.92 m ²
	Rossworm (<i>Sabellaria spinulosa</i>) reef	625.13 m ²
	Subtidal chalk	0.13 km ²
	Subtidal sands and gravels (modelled)	1.25 km ²
Species FOCI Low mobility	Short-snouted seahorse (<i>Hippocampus hippocampus</i>)	1 record
	Native Oyster (<i>Ostrea edulis</i>)	4 records
Geology	Folkestone Warren	n/a

6. Features within Dover to Folkestone not proposed for designation ³

Feature type	Feature name	Comments
Broad-scale habitats	A2.2 Intertidal sand and muddy sand	Targets met by existing MPAs elsewhere
	A2.3 intertidal mud	Targets met by existing MPAs elsewhere
	A2.4 intertidal mixed sediments	Very small area
Species FOCI High mobility	European Eel (<i>Anguilla anguilla</i>)	Occurs here but not identified as a conservation priority
	Smelt (<i>Osmerus eperlanus</i>)	Occurs here but not identified as a conservation priority
	Undulate Ray (<i>Raja undulata</i>)	Occurs here but not identified as a conservation priority
Geology	Folkestone Warren	Proposed for designation in MCZ (see table above) but active processes on the cliffs and foreshore are protected through the SSSI

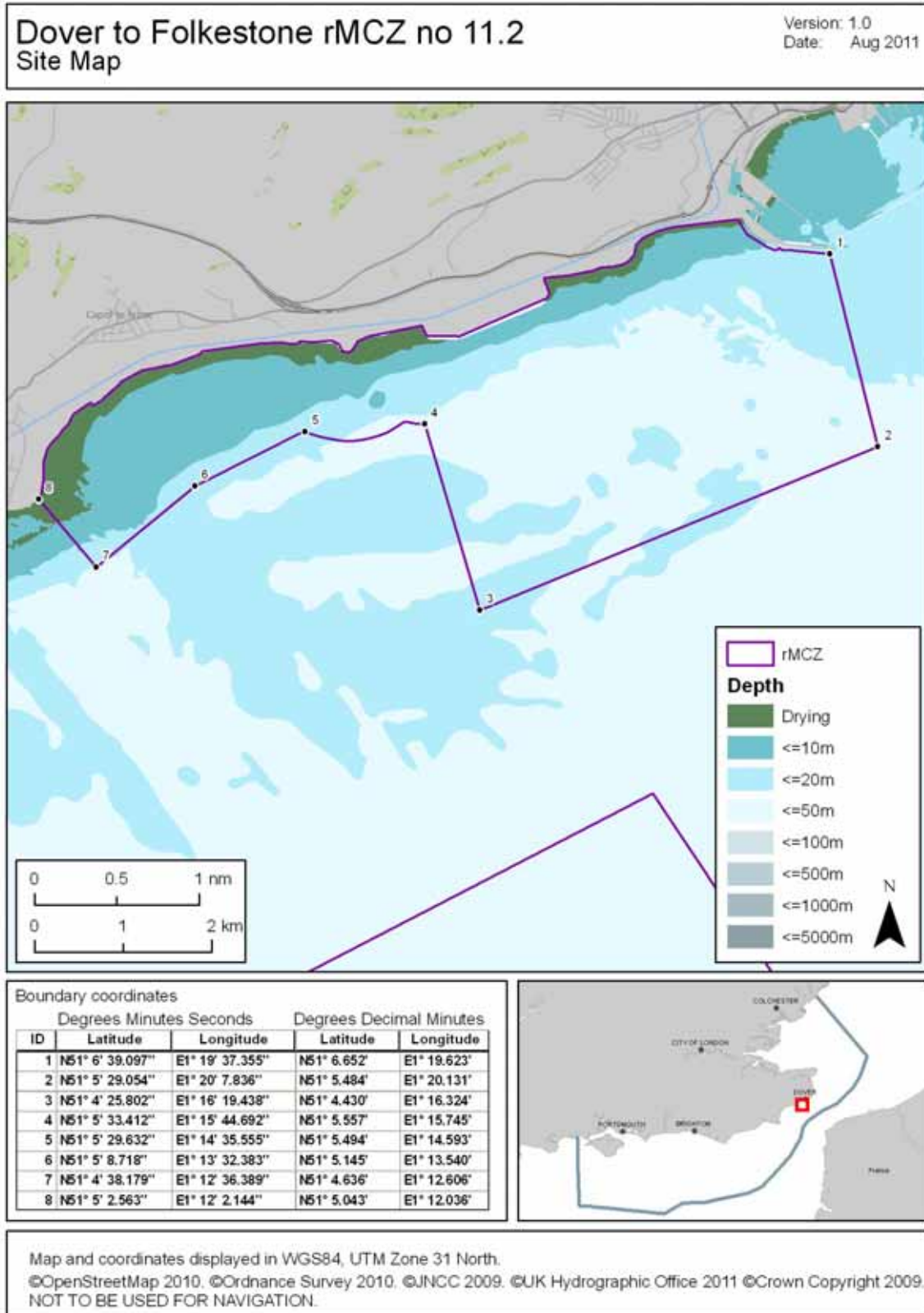
¹ Sources of information relating to these features are listed in Section 13.

² Areas have been calculated according to spatial GIS data and are indicative only. . A "record" is a survey point where a single individual, population or habitat has been found.

³ Features may occur in both tables (sections 5 & 6) if the rMCZ overlaps with an existing MPA where the features are protected.

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7. Map of site




8. Site summary

This is a highly diverse area with a number of habitat FOCI and additional features of interest (e.g. chalk ledges and gullies). The site is regionally important for its excellent examples of littoral chalk communities on intertidal and subtidal chalk reefs (shown by UKSeaMap v7 as moderate energy intertidal rock) grading seawards into subtidal coarse sediment. Further out (in the seaward extension) unusual hard rock types (e.g. subtidal greensand) form complex reef structures and support rich biota (mixed sediment rich in mobile invertebrates and anemones). The site contains intertidal and subtidal Blue Mussel beds, very good regional examples of intertidal underboulder communities, peat and clay exposures where the subtidal chalk grades into chalk marl clay, and impressive Rossworm (*Sabellaria spinulosa*) reefs.

The site overlaps an area of high benthic biotope richness, Chao 2 richness and benthic species richness. The area along the coastline from Folkestone to Deal was identified early on in the MCZ recommendation process, to protect the extensive chalk reefs. Subsequently, it was divided into two (11.1 and 11.2) at its midway point in order to exclude Dover Harbour. The rectangular protrusion of this site (11.2) was previously a Broad Area of Interest (BAI 11.3 Dover Harbour South Extension in 3rd Progress Report), which has now been consolidated with site 11.2.

To achieve the draft conservation objectives of the site, the trawling sector have agreed, that if an MCZ were to be designated, they would stop fishing (currently seasonal) on a permanent basis. Commercial potting should be kept at its current low level. Other activities are considered to be acceptable according to existing information. Measures necessary to protect the Short-snouted Seahorse are yet to be determined. To help inform management, the RSG have recommended that forthcoming Channel Coastal Observatory data be used to inform the distribution of the habitats for protection, including the apparent presence of circalittoral rock that is currently not recorded in existing datasets.

9. Detailed site description



The following is a description of the site based on extracts from literature held by the Balanced Seas Project and stakeholder correspondence. It does not constitute a complete literature review or ecological description of the site.

The site is located in the Dover Straits, capturing a narrow band of intertidal and subtidal coastline habitat running between Dover Harbour in the north and Folkestone in the south of the site. The main features of interest within the site are the intertidal and subtidal chalk that forms the reefs, ledges and gullies which support a highly diverse range of marine flora and fauna including superb examples of littoral chalk communities. There is extensive data and evidence for the area which is listed in KWT (2010), including intertidal and subtidal surveys in the 1980s conducted before and after the Channel Tunnel construction and the deposition of excavated chalk material now forming the Samphire Hoe platform; KWT surveys of the intertidal chalk platform between Folkestone Warren and Kingsdown Deal in 2009 and 2010 undertaken by algae and invertebrate experts from the Natural History Museum; surveys of the chalk-marl-clay at East Wear Bay and the lower greensand at Folkestone by the Natural History Museum for the Nature Conservancy Council in the 1980s; intertidal surveys by Kent Wildlife Trust's Shoresearch project at Copt Point, Abbot's Cliff, Samphire Hoe and Shakespeare Cliff;; a Conchological Society intertidal survey at Copt Point; subtidal sediment habitat samples taken by the Environment Agency; and diving surveys by Kent Wildlife Trust's Seasearch project since 2003.

According to the UKSeaMap/MESH data (JNCC 2011 v.7), the site contains moderate energy intertidal rock, intertidal coarse sediment, mud, high energy infralittoral rock, moderate energy infralittoral rock and subtidal coarse sediment (see Broad-scale habitats map). However, the broad-scale habitat map does not highlight the hard rock outcrops that are the features of interest.

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Channel Coastal Observatory has high-quality multibeam data derived to EUNIS Level 3 that should inform site verification, but this is not yet available. The Wildlife Trusts say this CCO data will also reveal the presence of circalittoral rock in the area, which should be noted as a feature of interest (RSG meeting 11, August 2011). Local stakeholders agreed it would therefore be preferable to consider the main FOCI habitat features of the site (i.e. the intertidal and subtidal chalk with associated communities) in order to consider any necessary protection (Sussex & South Kent Local Group 9.11.2010) (see Habitat and Species FOCI map).

The wave-cut chalk platforms form an almost continuous reef between Kingsdown, Deal in the north east to Folkestone Warren in the south west (excluding Dover Harbour), lying below stretches of defended and undefended chalk cliffs. The intertidal chalk platform is typically gently sloping, with a narrow band of flint cobbles and pebbles at the foot of the cliffs. Below this, the platform is usually incised with gullies and rockpools, and supports zones of ephemeral green algae, animal grazed rock, then brown wracks, leading through to mixed red algae and into the kelp zone at low water (KWT, 2010).

The area is also important for its NE to SW gradient from upper and lower chinks through grey marly chalk to gault clay (KWT, 2010). The bands of lower chalk present alternating layers of limestone, marl and clay which vary in colour, texture and hardness, and provide a variety of noticeably different substrata on the shore and in the shallow sublittoral. Most of the Dover to Folkestone stretch is of lower chalk (also referred to as chalk marl) which is greyer in appearance, containing a greater amount of clay than middle chalk which appears occasionally on the shore and in the sublittoral, especially in cliff falls (Wood and Wood, 1986; cited in KWT, 2010).

The chalk platform extends across the intertidal and out into the subtidal to varying distances along this stretch from Kingsdown to Folkestone. The vertical structure of the subtidal chalk reefs varies from relatively flat exposures partially overlain and scoured with sediment, through areas of large boulders, to outcropping chalk reefs with gullies up to around 2m high, supporting a rich cover of animal life (KWT, 2010). Associated with intertidal and subtidal chalk reefs (described by UKSeaMap v7 as high and moderate energy infralittoral rock) is a continuous band of littoral chalk communities.

The very soft clay in Folkestone Warren supports different communities of algae (Tittley, 1986; cited in KWT 2010)), and the larger fucoids and laminarian kelps are replaced with faster growing, less heavy *Palmaria palmata*, and the less robust, lighter kelp, *Saccharina latissima*. It is also the only known foreshore occurrence in Kent of the brown alga *Desmarestia ligulata* (KWT, 2010). At Copt Point, harder lower greensand rock emerges from below the gault clay. This represents one of very few occurrences of harder rock in the intertidal in the Balanced Seas region, and as a result it is important in supporting algal assemblages unusual for the south east, being more typical of northern and western Britain, with species including *Pelvetia caniculata*, *Ascophyllum nodosum*, and *Corda filum* (see Features map).

A range of animals, including some rarely seen east of the loW, are found here (Tittley 1986; cited in KWT, 2010). The intertidal greensand forms ridges with rock pools and boulders over a broad zone, and supports different algal species from those found on chalk. Tittley et al (1989) recorded 171 algae species, and 160 invertebrate species, concluding that this is one of the most important marine biological sites in south-eastern England. As a result, the coastline from Abbot's Cliff to Folkestone Harbour was proposed as a Voluntary Marine Conservation Area in the 1990s, encompassing in a small area an unusually large range of geological types from chalk, through chalk-marl, and gault clay to lower greensand (KWT, 2010). However this proposal was not followed through.



Figure 1. Unusual algal communities on greensand at Copt Point, Folkestone

The greensand outcropping on the shore at Copt Point is also in evidence subtidally, on the West Bank providing an unusually hard subtidal substrate in the region, and forming reefs with greater structural complexity. Wood and Wood (1986) report that in the vicinity of Shakespeare Cliff, near-shore sublittoral exposures of greensand and chalk bedrock and boulders support rich biota including stunted *Laminaria*, red algae and silty mats of *Polydora* worm tubes. The harder rock habitat is unusual in the largely soft rock and sediment-dominated southeast region, and the rocky outcrops, ledges and boulders support a rich range of animal species, including attached sponges, seasquirts, bryozoans, anemones and hydroids, as well as mobile species of crustacean, sea slugs and other molluscs, echinoderms and fish. The fan worm *Bispira volutacornis* is found in abundance on some of these rock structures, along with the finger bryozoan (*Alcyonidium diaphanum*), dead man's fingers (*Alcyonium digitatum*), helter-skelter hydroid (*Hydrallmania*), hornwrack (*Flustra foliacea*), whelks (*Buccinum undatum*), the painted topshell (*Calliostoma ziziphinum*), the edible crab (*Cancer pagurus*), squat lobsters (*Galathea*), small spider crabs (*Inachus*), goose bump sponge (*Dysidea*), the circular crab (*Atelecyclus*), queen scallops (*Chlamys*) and *Corophium* crustaceans (KWT, 2010). Mixed sediment covering the underlying geology here is rich in mainly mobile animal species, including brittlestars, squat lobsters, crabs, fish and molluscs, but also sessile species like the burrowing anemone, *Cerianthus lloydii* (KWT, 2010).



Figure 2. Chalk gullies and boulders on Samphire Hoe foreshore

Rossworm (*Sabellaria spinulosa*) reef occurs intertidally⁴ in East Wear Bay. *Sabellaria* formations stabilize the mixed sediment seabeds and provide shelter, attachment points and habitat for a range of other species, supporting the lower levels of the food chain. Several of these formations have been surveyed by Kent Seasearch survey divers (KWT, 2010). When the offshore reef was surveyed in 2005, it was the most extensive and intact *Sabellaria* reef in the region and thought to be one of the best examples. Recent surveys have shown some damage from unknown causes (Dover Sites Meeting Report, February, 2011). Mixed together with the intertidal *Sabellaria* reefs are some very dense aggregations of intertidal blue mussel beds on intertidal rock, particularly at Copt Point in the southern extreme of the site. Blue mussel beds extend out into the subtidal extents of the site.



Figure 3. Intertidal Blue Mussel beds at Copt Point, Folkestone

Intertidal underboulder communities are present at all levels of the shore from near High Water Mark where large boulders provide shaded, cave-like conditions for unusual algae; through the mid shore furoid (wrack) zones where mobile animals such as porcelain crabs and brittlestars shelter among sponge and bryozoan crusts; to the very low shore kelp zones where crusts of sponges, bryozoans and ascidians grow (KWT, 2010). The best regional examples of intertidal underboulder communities occur in Shakespeare Point (Sussex and South Kent Local Group Meeting Report, April, 2011).



Figure 4. Intertidal underboulder communities on Abbot's Cliff and Shakespeare Bay undercliff

⁴ These intertidal *Sabellaria spinulosa* reefs on the intertidal/infralittoral fringe (recorded within the biotope **MIR.SabKR Sabellaria spinulosa with kelp and red seaweeds on sand-influenced infralittoral rock** from the 1997 biotope classification) do not have an equivalent in the 04.05 version of the biotope classification, where *Sabellaria spinulosa* biotopes are limited to cirralittoral rock or subtidal sediment. Being on intertidal rock, these reefs do not fit within the BAP description, but NE have given confirmation that they do fit within the OSPAR definition (NE email, 21.03.2010) and have therefore been included within the FOCI data for Rossworm reef.

Wild and unharvested native oysters are found scattered throughout the site. There are several records (evidenced and anecdotal) of short-snouted seahorses (*Hippocampus hippocampus*) in the area outside the western (Admiralty) arm of Dover harbour (KWT, 2010 and National Contract Data).



Figure 5. Short-snouted seahorse (*Hippocampus hippocampus*) found at Shakespeare Bay

The Wildlife Trusts have identified various habitats and species considered to be important in the Southeast and provided spatial data to show where these occur (see Southeast Features map). The combination of the chalk, gullies and *Sabellaria* reef is very rare and has not been recorded elsewhere in the UK (Dover Site Meeting Report, February 2011). The Wildlife Trust survey data specifically shows that sea anemone (*Diadumene cincta*) occurs throughout the north east section of the site in both the intertidal and subtidal, with sea anemone (*Cerianthus lloydii*) and

Peacock worm (*Sabella pavonica*) closer inshore along the mid section of the coastline rounding into Wear Bay. Ross coral (*Pentapora foliacea*) occurs in the southern subtidal section of the site and sea squirt beds in northern Wear Bay and near Dover Harbour in the east of the site (see Southeast Features map)

Seasearch surveys have shown particularly well developed subtidal chalk gullies within Wear Bay and Shakespeare Cliff. The lower profile boulders and bedrock outcrops beyond the kelp zone support some red algae, but are increasingly dominated by sessile animal species characteristic of silty situations exposed to moderately strong tidal flows. This includes a diverse sponge fauna, anemones, bryozoans, sea squirts, hydroids forming a generally low turf, with mobile molluscs, crustaceans, echinoderms and fish. Silted mats of the seasquirt (*Molgula manhattensis*) cover many horizontal surfaces at many locations (KWT, 2010). Shakespeare Bay reefs was one of the recommendations put forward by the Marine Conservation Society as part of their 'Your Seas Your Voice' Campaign, where the general public could vote for the site they would most like to see gain more protection; of those who voted (131), 92% were in favour (MCS, 2011).

Folkestone/East Wear Bay/Dover (TR244368, 51.0865326N, 1.20285928E) has been nominated as a potential Important Plant Area for marine algae in the UK (Plantlife 2007; cited in KWT, 2010). It is described in the IPA document as "a site of diverse geology, including hard rocky substrata, including lower greensand, gault and chalk with very diverse microhabitats and exposures. This is reflected in the algae. There are good communities of species which are uncommon in south-east England, including a natural zonation of brown algae (*Pelvetia canaliculata* – the only place in south east England, *Ascophyllum nodosum*, fucoids and kelps) and a good diversity of species (*Choriocolax polysiphoniae* (very rare at the site), *Chorda filum*, *Sciniaia forcillata*, *Mastocarpus stellatus*)" (KWT, 2010).

The geological feature of interest in the site is Folkestone Warren described in the ENG as a Mass Movement Coastal Geological Conservation Review (GCR) site.

The importance of the area of rMCZ11.2 is further underpinned by the fact that the site captures a small section of an area with high benthic biotope richness, benthic species Chao2 richness and

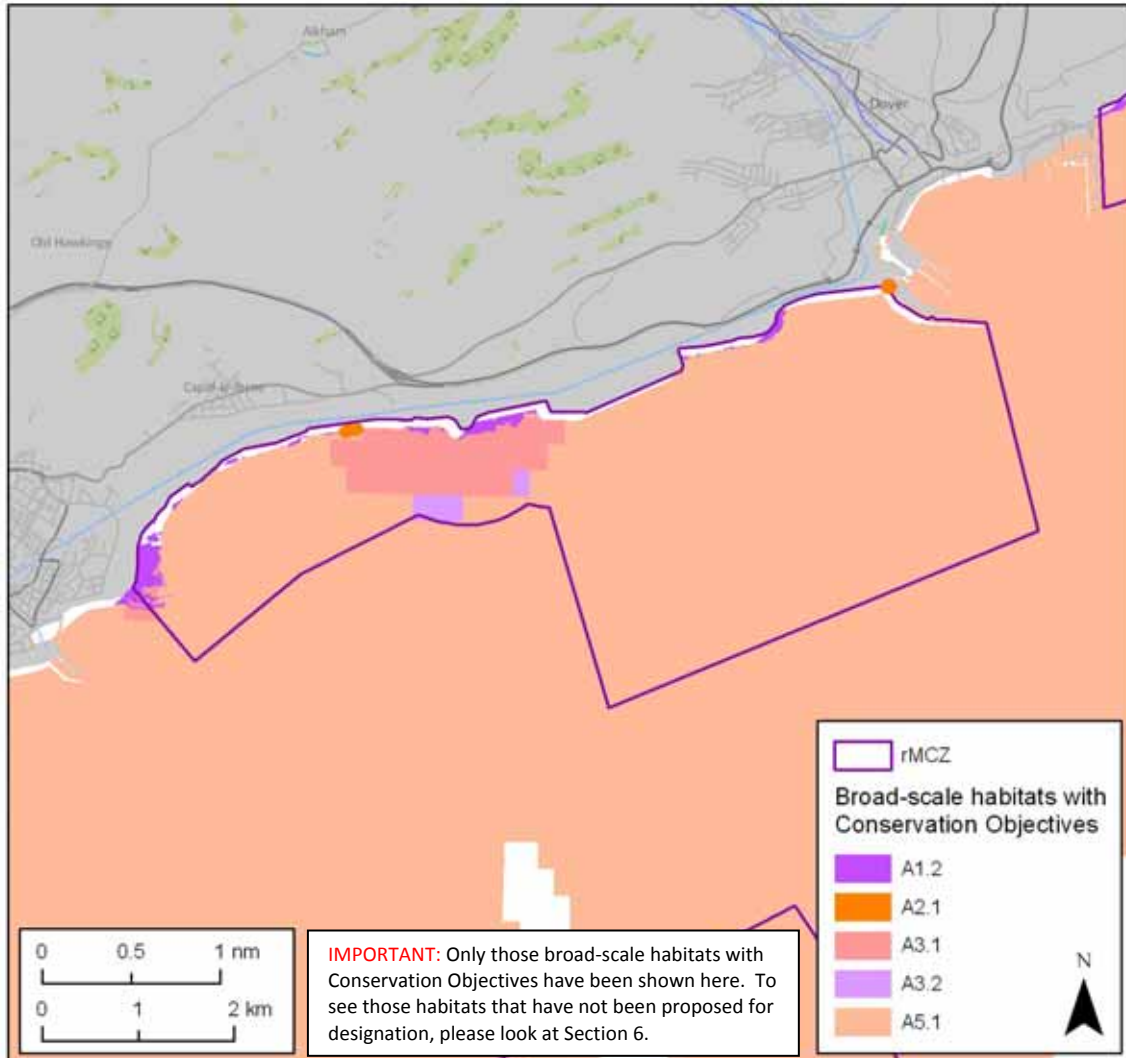
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benthic species richness (Jackson *et al.* 2010 DEFRA MB102 2F). The western part of the site has been shown to have high species richness and biodiversity from sediment sample data collated from various surveys by the Environment Agency. The area is also within one of the Key Inshore Biodiversity Areas in the Balanced Seas Region recommended as an MCZ by the South East England Biodiversity Forum (SEEBF, 2010).

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Version: 1.0
Date: Aug 2011

Broad-scale habitats (EUNIS Level 3) with Conservation Objectives



Broad-scale habitats with Conservation Objectives:

- A1.2 mod energy intertidal rock
- A2.1 intertidal coarse sediment
- A3.1 high energy infralittoral rock
- A3.2 mod energy infralittoral rock
- A5.1 subtidal coarse sediment

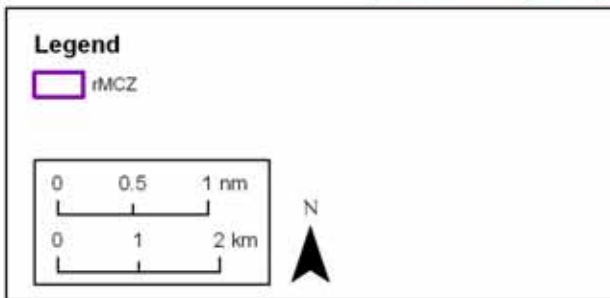
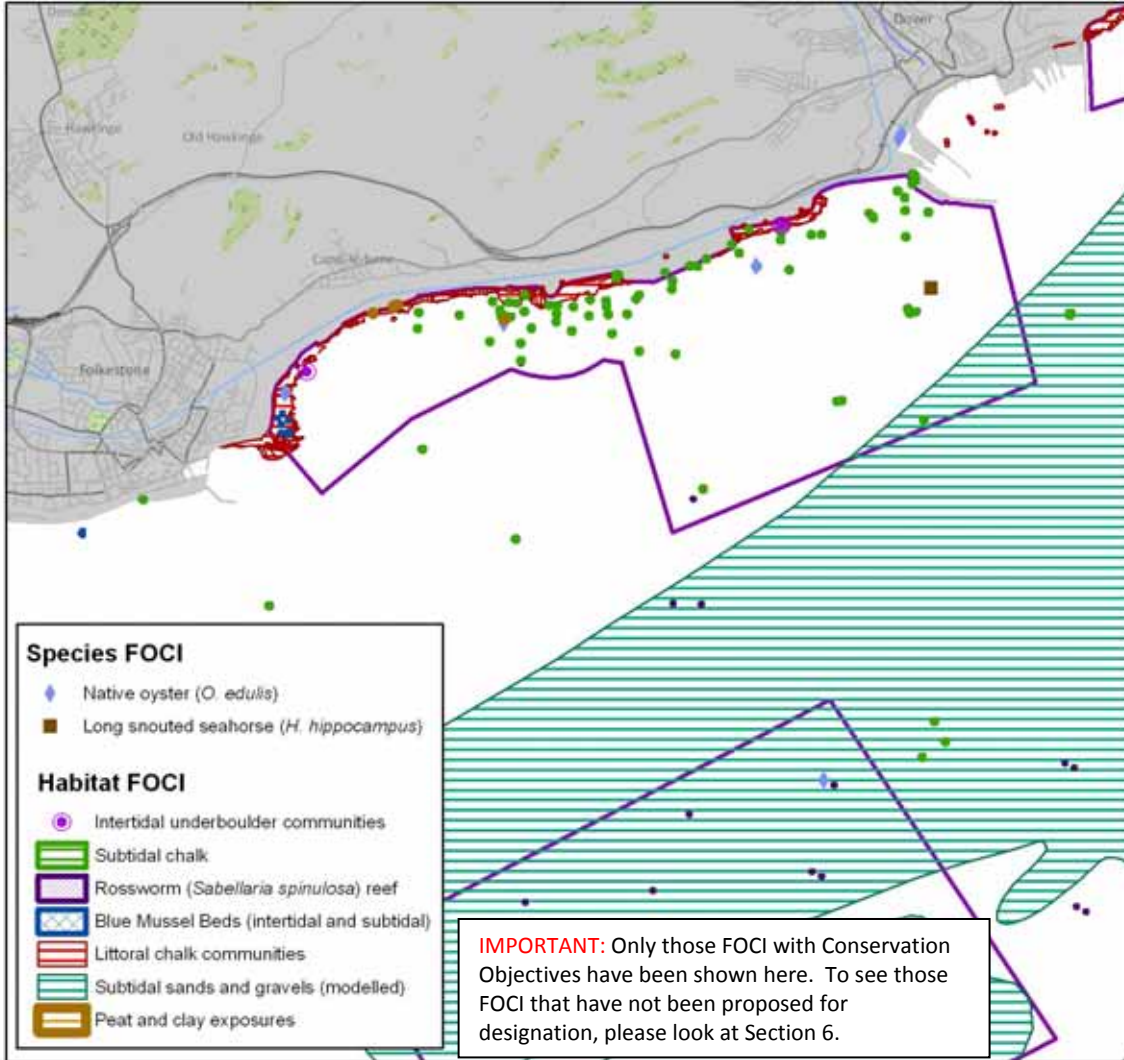


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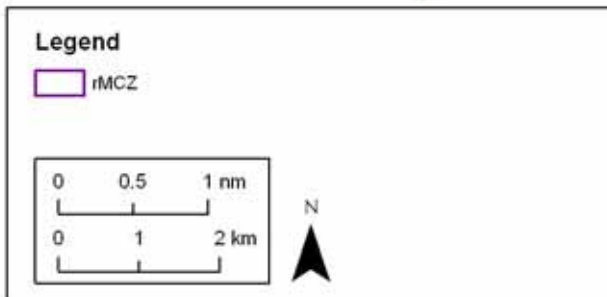
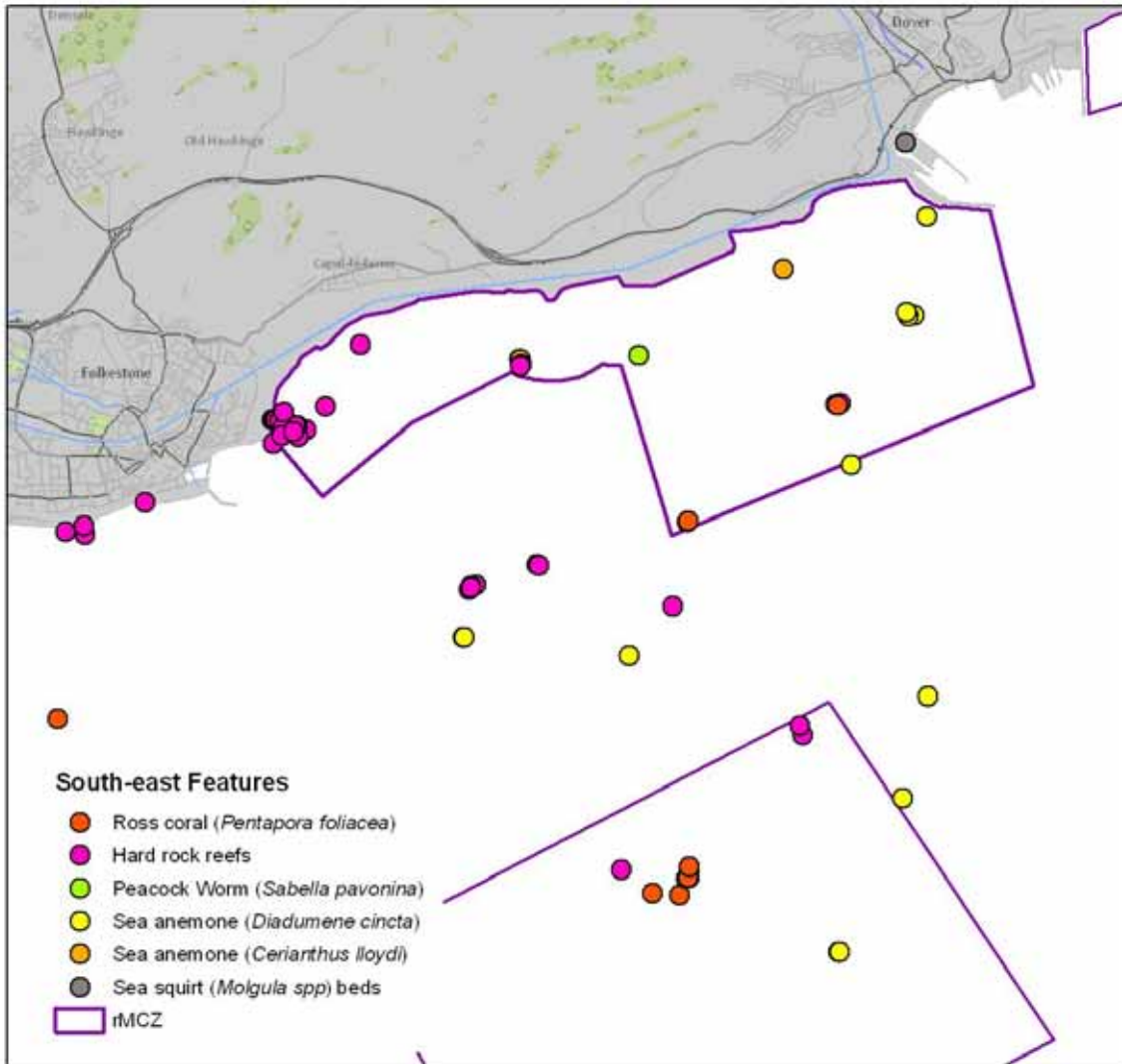
Habitat and Species FOCI Conservation Objectives



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South-east Features

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10. Site boundary

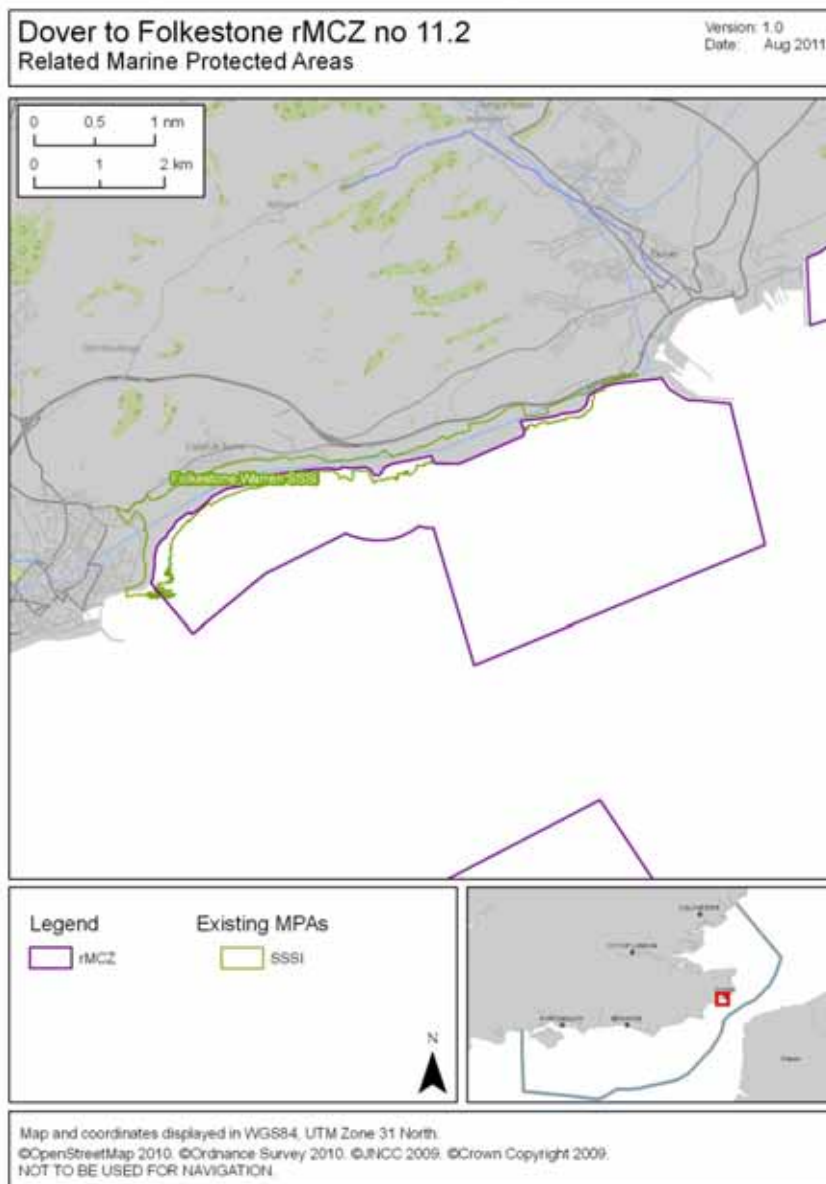
The landward boundary is described entirely by the Mean High Water mark from 50 m south of the southern harbour wall of Dover Port to Copt Point and the northern wall of Folkestone Harbour. The seaward boundary from Copt Point to the north end of East Wear Bay has been drawn to adequately protect the main features of the site (intertidal and subtidal chalk and communities). From this mid-point, the boundary extends out perpendicular to the shore line approximately 2.15km and forms a simple rectangle, meeting up with the parallel boundary extending approximately 2.3km from 50 m from the southern wall of Dover Harbour.

11. Conservation objectives

Individual conservation objective forms for each feature can be found in Appendix 1. For a site-based summary of the conservation objectives and proposed management measures, please see Section 15.

12. Sites to which this site is related

This site is adjacent to Folkestone Warren SSSI.



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13. Supporting documentation (information relating to ENG features only)

Information	Type of information	Source	Name of survey	Date
Broad-scale habitats	Modelled and survey data	JNCC V.7 Combined UKSeaMap and MESH	Combined	June 2011
Rossworm (<i>Sabellaria spinulosa</i>) reef	Survey	Kent Wildlife Trust		04/09/2005 And 13/05/2008
Intertidal under boulder communities	Survey	Kent Wildlife Trust		2006-2010
Intertidal under boulder communities	Survey	National contract data, DEFRA MB102 2C	JNCCMNCR10000219	1905-1993
Intertidal under boulder communities	Survey	Marine recorder extract Sept 2010		08/06/1905
Peat and clay exposures	Survey	Kent Wildlife Trust		05/03/2006 And 31/05/2009
Blue mussel beds	Survey	National contract data, DEFRA MB102 2C	JNCCMNCR10000219	10/06/1986
Blue mussel beds	Survey	Kent Wildlife Trust		2004-2009
Subtidal chalk	Survey	National contract data, DEFRA MB102 2C	Multiple	23/06/1986 And 10/02/93
Subtidal chalk	Survey	Seasearch data (Kent and Sussex)		1986-2010
Subtidal chalks	Survey	Kent Wildlife Trust		1986-2010
Native oyster (<i>O.edulis</i>)	Survey	National contract data, DEFRA MB102 2B		19/04/1996
Littoral chalk communities	Survey	National contract data, DEFRA MB102 2C	JNCCMNCR10316899	
Littoral chalk communities	Survey	Marine Recorder extract Sept 2010 (via KWT)	BMNH Shakespeare & Abbott's cliff Littoral faunal survey	1986
Littoral chalk communities	Survey	Kent Wildlife Trust	Kent Shoresearch; Countdown 2010 Dover Intertidal surveys	2006/8 2009
Short-snouted seahorse (<i>Hippocampus hippocampus</i>)	Survey	Seahorse Trust		2008
Subtidal sands and gravels	Modelled data	National contract data, DEFRA MB102 2C	BGS survey	24/01/2003

References (additional information can be found in the Bibliography)

- BRODIE, J., JOHN, D. M., TITTLE, I., HOLMES, M.J., WILLIAMS, D. B. 2007. *Important Plant Areas for Algae: A Provisional Review of Sites and Areas of Importance for Algae in the United Kingdom*. Plantlife International, Salisbury.
- COVEY, R., 1991. *Benthic Marine Ecosystems in Great Britain: a Review of Current Knowledge. Eastern England and English Channel (MNCR Coastal Sectors 6 and 7)*. Nature Conservancy Council CSD Report No. 1172 (MNCR Report No. MNCR/OR/08).
- JACKSON, E.L., LANGMEAD, O. HISCOCK, K. TYLER-WALTERS, H. MILLER, P. McQUATTERS-GOLLOP, A. SAUNDERS, J. & C. FOX. 2009. *Assessing and Developing the Required Biophysical Dataset and Data Layers for Marine Protected Areas Network Planning and Wider Marine Spatial Planning Purposes. Task 2F: Development of Marine Diversity Data Layer: Review of Approaches and Proposed Method*. DEFRA, London.
- KENT WILDLIFE TRUST. 2010. Information for the Balanced Seas Regional Stakeholder Group to Inform Discussions on the Dover, West Bank and Folkestone Holes Area.
- MARINE CONSERVATION SOCIETY .2011. *Regional Report 2: Balanced Seas Region. (May 2009 – February 2011)*. Marine Conservation Society.
- SEELEY, B., LEAR, D. HIGGS, S. NEILLY, M. BILEWITCH, J. EVANS, J. WILKES, P. & ADAMS, L. 2010. *Assessing and Developing the Required Biophysical Dataset and Data Layers for Marine Protected Areas Network Planning and Wider Marine Spatial Planning Purposes: Mapping of species with limited mobility (Benthic species). (Task 2B)*. DEFRA, London.
- SEELEY, B., HIGGS, S., LEAR, D., EVANS, J., NEILLY, M., CAMPBELL, M., WILKES, P., ADAMS, L., 2010. *Assessing and Developing the Required Biophysical Dataset and Data Layers for Marine Protected Areas Network Planning and Wider Marine Spatial Planning Purposes. Report No 16: Mapping of Protected Habitats (Task 2C)*. DEFRA, London.
- SOUTH EAST ENGLAND BIODIVERSITY FORUM (SEEBF) 2010. *Key Inshore Biodiversity Areas in the Balanced Seas Region for Recommendation as Marine Conservation Zones*. Letter and list to RSG and Balanced Seas Project Team, 22 Nov 2010.
- TITTLE, I. 1986. *A Preliminary Survey of the Intertidal Benthic Marine Algal Communities between Shakespeare Cliff and Abbot's Cliff, Dover, Kent*. Nature Conservancy Council, Peterborough.

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TITTLE, I., 1989. *Macrobenthos of Non-Chalk Rocky Shores in Southeastern England*. Nature Conservancy Council, Peterborough.
 TITTLE, I., and SPURRIER, C.J.H. (in prep.) Biological Survey of the Intertidal Chalk Reefs between Kingsdown, Deal and Folkestone Warren, Kent.
 WOOD E., and WOOD, C. 1986. *Channel Tunnel Sublittoral Surveys*. Nature Conservancy Council, Peterborough.

14. Stakeholder support for the site

The RSG as a group reached consensus that this site should be put forward in their final recommendations. There was broad support from the sectors within the group for this site.

Individual sectors wishing to note their support or concerns about the site recorded the following at the final RSG meeting in August 2011; their comments have been transcribed verbatim from the form that they completed:

SECTOR	ORGANISATION	COMMENT for Dover to Deal rMCZ 11.1
Yachting	RYA	Support provided Dover HB agree, and anchoring on approaches remains (with voluntary agreement if needed).
Sea Angling		Broad agreement on maintain but would prefer a mile around the harbour exclusion.
Ports		Provided 50m gap between Dover Harbour wall and rMCZ is maintained, the ports could compromise on this. 1nm (as per Dover's area of jurisdiction) would however still be preferable.
Fishing - FPO, beam trawling		Local support for this site.
Fishing - Over 10s, FPO, trawling sector (under and over 10m)	Gilson Co.	No problem.
Shipping	Chamber of Shipping	Seriously concerned re proximity to Dover and impact on safety of navigation e.g. via affecting space for anchoring in case of machinery failure, as well as restriction of port operation.
Birds	RSPB	Support site. Boundary should go to harbour wall to capture extent of ecological feature. Consider 'recover' for littoral chalk communities if trawling overlaps, even if just seasonally.
Wildlife Trusts	Hampshire Wildlife Trust	I support this site but the COs are based on inconsistent, insubstantial activity data. E.g. for chalk says no overlap with trawling, but it does occur.
Marine Wildlife	Marine Conservation Society	<u>Support site</u> . But subtidal habitats must be protected to recover.
IFCA	Kent & Essex IFCA	General support.
Heritage and Archaeology	English Heritage	Support if Langdon Wreck can continue to be investigated.

15. Site summary of conservation objectives (COs) and proposed management measures

A conservation objective (CO) is a statement describing the desired quality of the feature. Existing MPAs in the UK use the term *Favourable Condition* to represent the desired state of their features. Some pressures caused by human activities may stop the feature attaining favourable condition if present at sufficient intensity.

MAINTAIN means that, the *stated levels of activity* currently occurring on the feature are considered acceptable, but features will be monitored and restrictions may have to be introduced if the condition declines.

RECOVER means that restrictions may be necessary on the activity causing the pressure, in order to allow the feature to recover to favourable condition. It does not necessarily mean that the activity

will be prohibited, as other mitigation measures might be appropriate (e.g. change in gear type, reduction of intensity, seasonal restrictions, etc)

The table below documents the draft COs for ALL the features listed for protection within the site, as established by JNCC and NE through the Vulnerability Assessment (VA) process⁵ and then sense-checked at the national level⁶. Where a RECOVER objective is noted, the associated activity causing the pressure is indicated. In some cases, where data and information warrant it, the RSG chose to adopt the changes to COs recommended by the public authorities: Inshore Fisheries and Conservation Authorities (IFCAs), Marine Management Organisation (MMO), Environment Agency (EA) or Natural England. Changes were only accepted when recommended by these authorities and have been clearly noted. Where the VA has not yet been undertaken, or there is considerable uncertainty surrounding the accuracy of the information being used to recommend a change to the conservation objective, it has been noted as 'TO BE ASSESSED'. Local and regional stakeholders were given the opportunity to comment on the COs and potential management measures and to provide additional information that might not have been taken into account in the VA work.

For greater detail on discussions relating to the site and the network, please refer to both RSG and Local Group stakeholder meeting reports at www.balancedseas.org.

⁵ The process of establishing conservation objectives is outlined in the [Conservation Objectives Guidance](#) (JNCC/NE 2011)

⁶ VA results were standardised across all four regional projects but the fisheries activity data is still undergoing assessment.

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Feature	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
A1.2 Moderate energy intertidal rock	MAINTAIN			
A2.1 Intertidal coarse sediment	MAINTAIN			
A3.1 High energy infralittoral rock	RECOVER	Fishing - benthic trawling (bottom gear)	<p>IFCA code of conduct</p> <p>VA was undertaken on Fishermap information indicating that 8 vessels using chain mats operate in this area but the IFCA says that there are fewer vessels.</p> <p>VA suggests that commercial potting/set netting should be kept to current low levels</p>	<p>Wildlife Sector (at LG meeting July 2011) stated that survey video footage is available to show damage to substrate and feel that the RECOVER CO is appropriate.</p> <p>The trawling sector would agree to abide by a code of conduct preventing trawling all year round as described in the main text.</p>
A3.2 Moderate energy infralittoral rock	RECOVER	Fishing - benthic trawling (bottom gear)	<p>IFCA code of conduct</p> <p>VA was undertaken on Fishermap information indicating that 8 vessels using chain mats operate in this area but the IFCA says that there are fewer vessels.</p>	<p>Wildlife Sector (at LG meeting July 2011) stated that survey video footage is available to show damage to substrate and feel that the RECOVER CO is appropriate</p> <p>The trawling sector would agree to abide by a code of conduct preventing trawling all year round as described in the main text</p>
A5.1 Subtidal coarse sediment	MAINTAIN			
Peat and Clay exposures	MAINTAIN			
Blue Mussel beds	MAINTAIN RECOVER			<p>Trawling currently occurs on a seasonal basis (which was not known at the time of the vulnerability assessment) but the trawling sector has agreed to avoid this site on a permanent basis as described in the main text</p> <p>N.B. forthcoming Channel Coastal Observatory data should be used to refine the distribution of this feature, which may influence the CO.</p>

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Intertidal underboulder communities	MAINTAIN			
Littoral chalk communities	MAINTAIN RECOVER			Trawling currently occurs on a seasonal basis (which was not known at the time of the vulnerability assessment) but the trawling sector has agreed to avoid this site on a permanent basis as described in the main text. N.B. forthcoming Channel Coastal Observatory data should be used to refine the distribution of this feature, which may influence the COs.
Rossworm (<i>Sabellaria spinulosa</i>) reef	RECOVER	Fishing - benthic trawling (bottom gear)	IFCA code of conduct VA was undertaken on Fishermap information indicating that 8 vessels using chain mats operate in this area but the IFCA says that there are fewer vessels.	Wildlife Sector stated (LG meeting, July 2011) that survey video footage is available to show damage to substrate and feel that the RECOVER CO is appropriate. The trawling sector would agree to abide by a code of conduct preventing trawling all year round as described in the main text.
Subtidal chalk	RECOVER	Fishing - benthic trawling (bottom gear)	IFCA code of conduct VA was undertaken on Fishermap information indicating that 8 vessels using chain mats operate in this area but the IFCA says that there are fewer vessels.	Wildlife Sector stated (LG meeting July 2011) that survey video footage is available to show damage to substrate and feel that the RECOVER CO is appropriate The trawling sector would agree to abide by a code of conduct preventing trawling all year round as described in the main text
Subtidal sands and gravels	MAINTAIN			
Native Oyster (<i>Ostrea edulis</i>)	MAINTAIN			
Short-snouted seahorse (<i>Hippocampus hippocampus</i>)	TO BE ASSESSED			The vulnerability assessment and resulting CO were not available for the Local Group meeting of July 2011 or final RSG meeting in August and they were therefore not discussed by stakeholders.
Folkestone Warren	MAINTAIN			The vulnerability assessment and resulting CO were finalised for the final RSG meeting in August but were not ready for the Local Group meeting in July and so were not discussed there.

16. Evolution of the site recommendations

For the first iteration, a Broad Area of Interest was identified around the Dover Harbour area because of its diversity of important species and habitats. During RSG 4 (9.9.10), the seaward boundaries of 11 were moved landwards so that the site reflected more closely the extent of the littoral and subtidal chalk records, which were considered to be the most important feature of the site.

At RSG 5 (5.10.2010), Dover Harbour Board raised concerns about the inclusion of the Harbour within an MCZ and the RSG agreed to exclude it, thus creating two sites: 11.1 (Dover Harbour North, subsequently renamed as Dover to Deal) and 11.2 (Dover Harbour South, subsequently renamed Dover to Folkestone), separated by the full Harbour exclusion zone. The Sussex and South Kent Local Group at its meeting of 9.11.10 pointed out that the exclusion zone (1 naut mi from the Harbour walls on either side) only excludes fishing, should not prevent the establishment of an MCZ and might even be beneficial by helping to protect important features since fishing is not permitted. At the Inshore Task Group (07.12.10), the boundaries were therefore extended up to the harbour walls. Despite requests from the Dover Harbour Board and the ports sector at subsequent meetings to move the boundaries back to the edge of the exclusion zone, the RSG did not agree to this. At the Local Group meeting of 26.07.2011, Dover Harbour raised particular concerns about the work required to maintain the harbour walls and it was agreed that the boundaries for both rMCZ 11.1 and rMCZ 11.2 would start 50m away from the harbour walls. This was accepted by the RSG in its final meeting (2/3 Aug 2011).

Additional area suggestions to the southeast of Dover were put forward at the Sussex & South Kent Local Group meeting in July 2010, one of which (labelled L on early maps) became West Bank (11.3). At the Dover Sites meeting in January 2011, the implications of site 11.3 on the fishing sector were discussed and this led to an independent meeting between the local trawling and wildlife sectors. The two sectors agreed to propose that 11.3 be moved closer to 11.2 to reduce socio-economic impact but still retain habitat complexity. The two sites (11.2 and 11.3 Dover to Folkestone Extension) remained contiguous but separate until RSG 8 in April 2011, when they were merged to become dMCZ 11.2 Dover to Folkestone.

For greater detail on discussions relating to the site and the network, please refer to both RSG and Local Group stakeholder meeting reports at www.balancedseas.org.

17. Implications for Stakeholders

The following issues are associated with this site:

- Dover Port has planned expansion within the harbour which it is feared may not be compatible with the aims of an MCZ, and considers that the boundaries currently proposed conflict with the area of jurisdiction of the Dover Harbour Board (two letters of concern have been sent to the project by Dover Harbour Board). The Harbour Board is supported in its view by the ports and shipping sectors. The environment sector feel the features lying within the area of port jurisdiction require protection through the MCZ mechanism.
- There is a gentleman's agreement between the trawling and potting/netting sectors that potting and netting does not take place when fish valuable to the trawlers move into the area, which tends to be seasonally; currently therefore trawling occurs on a seasonal basis. Discussions during the development of the recommendation for this site led to agreement that the trawling sector will avoid the MCZ, if designated, on a permanent basis provided that no restrictions are placed on trawling in rMCZ 26 Hythe Bay, other than in the smaller 'management units' proposed by the sector themselves.

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- The north-east part of the site is used as an occasional, bad weather anchorage, and cross channel ferries anchor here for maintenance work. The Port closes when wind speeds are over 40 knots and vessels need to anchor while waiting to get into port. Numbers of vessels involved are not currently available, but Dover Coastguard may have this information; this will need further discussion if this site goes ahead, although at present there are no implications for commercial anchoring.
- The Crown Estate supports the site, but has noted that the site contains 6 active power cables and 3 inactive telecoms cables. Licences are granted for coastal protection, Folkestone disposal site and outfalls.

This list represents only the major issues associated with the site. To see all stakeholder discussions, please refer to the Balanced Seas RSG and Local Group meeting reports at www.balancedseas.org.