

Beachy Head East rMCZ no 13.1

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 Beachy Head East rMCZ no 13.1	3. Site surface area 19327 ha 193.27 km ²
2. Site centre location ETRS89 N50 46' 31.129" E0 25' 15.217" N50 46.519' E0 25.254' (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 Beachy Head East ¹

Feature type	Feature name	REC Broad-scale Habitats (L4)	Area / No. of records ²
Broad-scale habitats	A1.1 High energy intertidal rock		0.02 km ²
	A1.2 Moderate energy intertidal rock*		307.14 m ²
	A2.1 intertidal coarse sediment		0.18 km ²
	A2.4 intertidal mixed sediments		0.28 km ²
	A5.2 subtidal sand†	A3.92 ME infralittoral rock and thin sands	134.28 km ²
		A3.A2 LE infralittoral rock and thin sandy sediment	
		A4.92 ME infralittoral rock and thin sandy sediment	
	A5.4 subtidal mixed sediments†	A3.94 ME infralittoral rock and thin mixed sediments	18.23 km ²
A3.A4 LE infralittoral rock and thin mixed sediments			
A4.94 ME circalittoral rock and thin mixed sediments			
A4.A4 LE circalittoral rock and thin mixed sediments			
Habitat FOCI	Blue mussel beds		0.02 km ²
	Littoral chalk communities*		0.04 km ²
	Peat and clay exposures		312.57 m ²
	Rossworm (<i>Sabellaria spinulosa</i>) reef		312.57 m ²
	Subtidal chalk		7,814 m ²
Species FOCI Low mobility	Short-snouted seahorse (<i>H. hippocampus</i>)		1 record
	Native Oyster (<i>Ostrea edulis</i>)		1 record
Species FOCI High mobility	European Eel (<i>A. anguilla</i>)		n/a

*these features were identified by the RSG prior to a gap analysis check revealing they are protected (Section 6).

† only the extent of this habitat that corresponds to the listed REC habitats has been selected for protection.

6. Features within Beachy Head East not proposed for designation ³

Feature type	Feature name	Comments
Broad-scale habitats	A5.2 subtidal sand	A5.23 infralittoral fine sand REC data not proposed as it does not correspond to the reef feature of interest
	A5.4 subtidal mixed sediments	A5.43 infralittoral mixed sediments REC data not proposed as it does not correspond to the reef feature of interest
	A1.2 Moderate energy intertidal rock	Proposed for designation in MCZ but is fully protected within Seaford to Beach Head SSSI
Habitat FOCI	Littoral chalk communities	Proposed for designation in MCZ but is protected within Seaford to Beach Head SSSI (not known to RSG at time of recommendations)
	Subtidal sands and gravels	This feature is present within the site.
Species FOCI High mobility	Smelt (<i>Osmerus eperlanus</i>)	Not a good place for protection
	Undulate Ray (<i>Raja undulata</i>)	Not a good place for protection

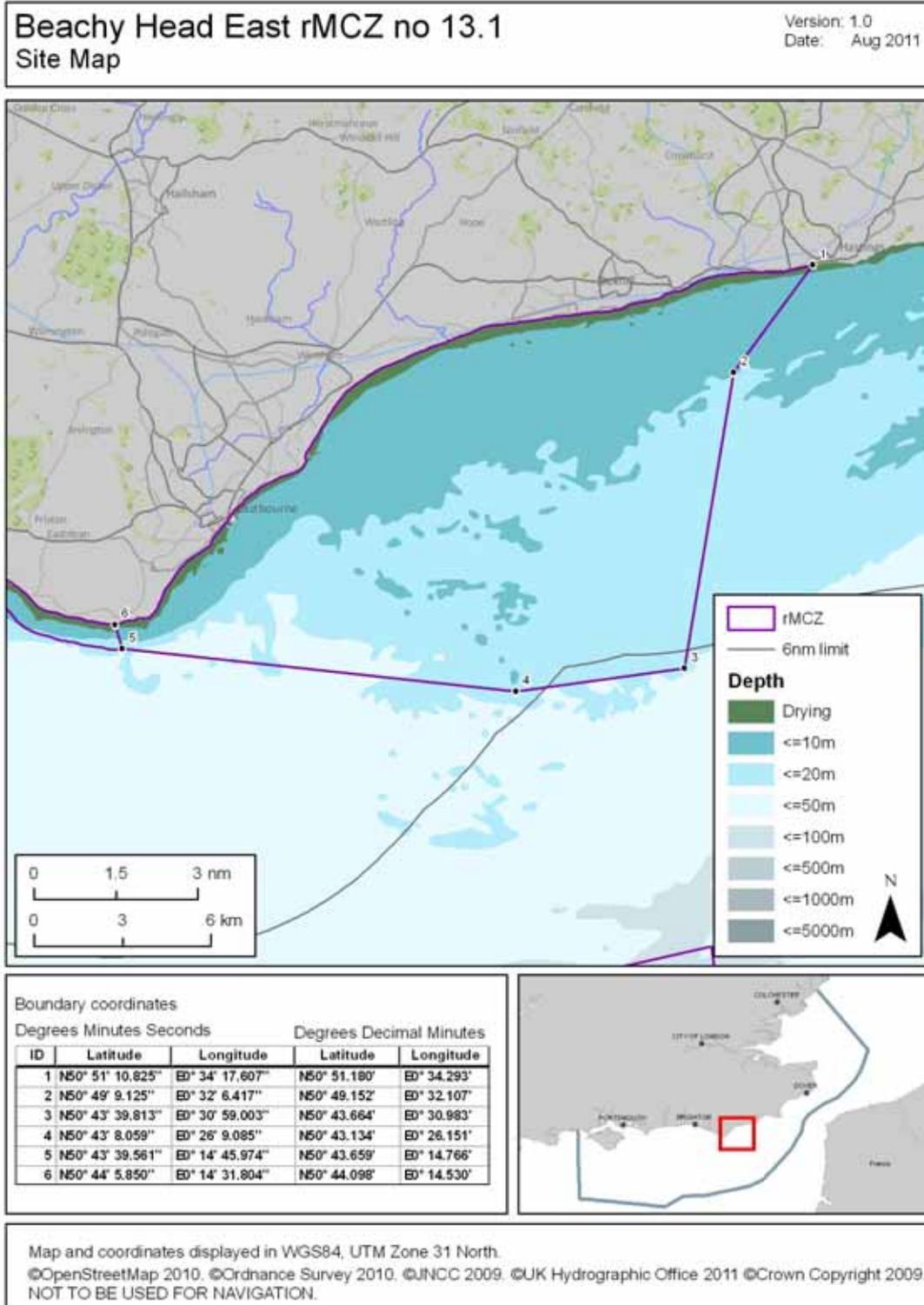
¹ Sources of information relating to these features are listed in Section 13.

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.

Beachy Head East rMCZ no 13.1

7. Map of site



8. Site summary

The area to the east of Beachy Head is characterised by a highly biodiverse sandstone/chalk reef system with important subtidal chalk ledges and peat and clay exposures, supporting littoral chalk communities, Rossworm (*Sabellaria spinulosa*) reef, sea squirt (*Molgula*) beds and encrustations of Ross coral (*Pentapora foliacea*). Broad-scale habitats for protection have been selected from the finer-scale EUNIS Level 4 MALSF Synthesis REC data as the best available evidence and therefore only part of the EUNIS Level 3 habitat extents are selected for protection. Since the vulnerability assessment was undertaken with the EUNIS Level 3 data, it will now need to be reviewed with the new REC data.

The area contains Mussel Beds suggested by stakeholders to be one of the best examples of this habitat in the region, though they are much more extensive than the spatial data show. The European Eel (*Anguilla anguilla*) is considered to be of high importance and worthy of protection along with the Short-snouted seahorse (*Hippocampus hippocampus*), and the Native Oyster (*Ostrea edulis*), which stakeholders have noted are not fished in this area (Beachy Head Site meeting, January 2011). The site contains the Royal Sovereign Shoals and the Horse of Willingdon Reef, two marine Sites of Nature Conservation Importance (mSNCIs).

The RSG have recommended that the vulnerability assessment be undertaken on the REC data habitats in this site, to ensure the appropriate conservation objectives. To achieve the draft conservation objectives as proposed at present, benthic trawling, shellfish harvesting, set netting and potting might need to be managed in some way. If the site were to go ahead, the trawling sector would agree to an IFCA voluntary code of conduct to avoid the reef feature. Other activities are thought to be acceptable, according to available information, though monitoring of access and anchoring of recreational vessels may be a particular requirement to protect the intertidal coarse sediment. It is important however to note that the Sussex IFCA is preparing a proposal for a stakeholder led project to map the sea floor with side scan sonar, the results of which would be used to inform the management of the MCZ. The IFCA is hoping this project will start in 2012; funding is currently being sought.

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 boundaries ensure the inclusion of key features of the Beachy Head inshore waters such as its extensive chalk reef/ sandstone reef and upper greensand systems which contain high biodiversity and diverse alga flora within shallow lagoons (Brodie et al, 2007; Seven Sisters VMCA, 1998). The chalk coastline along Beachy Head is one of the few remaining lengths of undeveloped coast in South East England.

The area to the east of Beachy Head is characterised by a highly biodiverse sandstone/chalk reef system with important chalk ledges and peat and clay exposures, supporting sea squirt (*Molgula*) beds and encrustations of Ross coral (*Pentapora foliacea*). The site contains two marine Sites of Nature Conservation Importance (mSNCIs)⁴, Royal Sovereign Shoals and Horse of Willingdon Reef. As described by Irving (1996), the Royal Sovereign Shoals lie between 10-13km ENE of Beachy Head and 8-10km off Lagney Point, NE of Eastbourne. The reef covers an area of about 1 km² and is

⁴ mSNCIs are non-statutory sites designated on account of their special interest with regard to habitat, wildlife, geology or geomorphology by East and West Sussex County Council

Beachy Head East rMCZ no 13.1

marked by a buoy (the Royal Sovereign) at its southern end. Though most of the Shoals are of sandstone (probably Upper Greensand), outcrops of chalk occur in the north-west part. The reef rises from a surrounding seabed of gravel, muddy sand and sand, and the area is subject to strong tidal currents which reach 2.6 knots at spring tides. The Shoals display a wide range of habitat types within a relatively small area and provide a good example of an offshore sandstone reef. The Horse of Willington reef lies approximately 6km east of Eastborne and is about 1km in length (running NW/SE) and rises from a surrounding seabed of 14m to 5m depth BCD. The reef consists of sandstone bedrock and boulders, with patches of cobbles, pebbles and mixed sediment in between. The bedrock is clearly liable to fracturing, and has been described as “irregular vertical fissuring giving an effect like crazy paving”. Elsewhere the bedrock may form horizontal ledges with overhangs, or have irregular gullies up to 1m deep in between large angular blocks (Irving, 1996).

Using the UKSeaMap/MESH data (JNCC 2011 v.7), the BSH's to be designated for protection in Beachy Head East are four intertidal broad-scale habitats: high and moderate energy intertidal rock and intertidal coarse and mixed sediments (very thin strips along the coastline); and two subtidal habitats: subtidal sands and subtidal mixed sediments (see Broad-scale habitats map). It is extremely important to note that within the subtidal EUNIS Level 3 habitats, the finer-scale EUNIS Level 4 habitats mapped through two recent MALSF-funded REC seabed surveys (James *et al.* 2010, 2011) provide a better representation of the features in the site and the RSG has used this classification to identify features for protection. The REC habitat of “rock with a thin veneer of sediments” corresponds approximately to the feature that the RSG wish to see protected in the site i.e. the sandstone/greensand rocky reef (see REC EUNIS Level 4 map). REC habitats consisting entirely of deeper sediment have not been suggested as features for protection. However, the RSG have strongly recommended that further survey work is required to determine more precisely the distribution of the features to be protected and have noted that the Sussex IFCA is planning to undertake such work in the near future.

A collaborative survey between Seafish, Sussex Sea Fisheries Committee (now IFCA) and the local fishing industry has investigated the sensitivity and vulnerability of the seabed through a series of underwater video samples (SeaFish 2008). The results of this could be used to further refine the broad scale habitats in this site but it was not possible to translate these data into a usable format in the time available during the Balanced Seas project. However, general information on the distribution of reef, sand and mixed habitat can be seen in Figure 1.

Beachy Head East rMCZ no 13.1

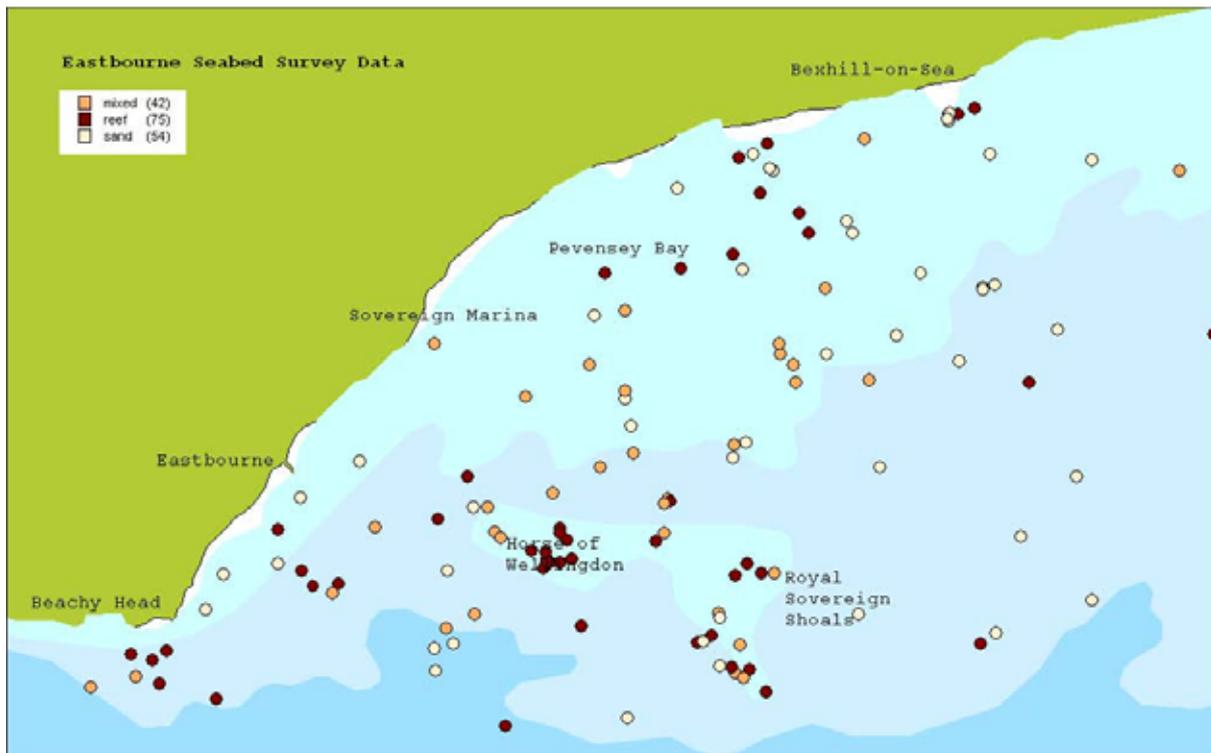


Figure 1. Eastbourne seabed survey data showing reef, sand and mixed sediments (Seafish, 2008)

This site supports an excellent example of littoral chalk communities which form a continuous extension of the same habitat found on the west side of Beachy Head. Rocky ridges run approximately in line with the cliffs near at The Pound, near Eastbourne, creating pools and lagoons at low tide. These sheltered habitats are full of seaweeds and other marine life (Seven Sisters VMCA 1998). Rossworm (*Sabellaria spinulosa*) reefs have also been identified for protection, as well as Mussel Beds, which stakeholders consider to be large beds that are much more extensive than the spatial data show and one of the best examples of this habitat in the region (Beachy Head Sites Meeting, January 2011) (see FOCI map.)

The European Eel (*Anguilla anguilla*) is considered to be of high importance and worthy of protection. As the only dataset held by the project to verify this species is the very coarse-scale CEFAS data layer (Ellis *et al.* 2010 DEFRA MB102 2B), stakeholder knowledge has been used to identify its presence, but there is no fine-scale data to support this. The Short-snouted seahorse (*Hippocampus hippocampus*) is thought to require protection in the site, as well as the Native Oyster (*Ostrea edulis*) which, according to stakeholders, is not fished in this area (Beachy Head Sites Meeting, January 2011).

The Wildlife Trusts have identified various rare and important features for the southeast region and provided the project with spatial data for these features (see Southeast Features map). Particularly noteworthy features are black bream, hard rock reefs, Ross coral (*Pentapora foliacea*) and sea squirt (*Molgula*) beds (see Southeast Features map.) The Royal Sovereign Shoals area is 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). Royal Sovereign Shoals was also 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 (170), 94% were in favour (MCS, 2011).

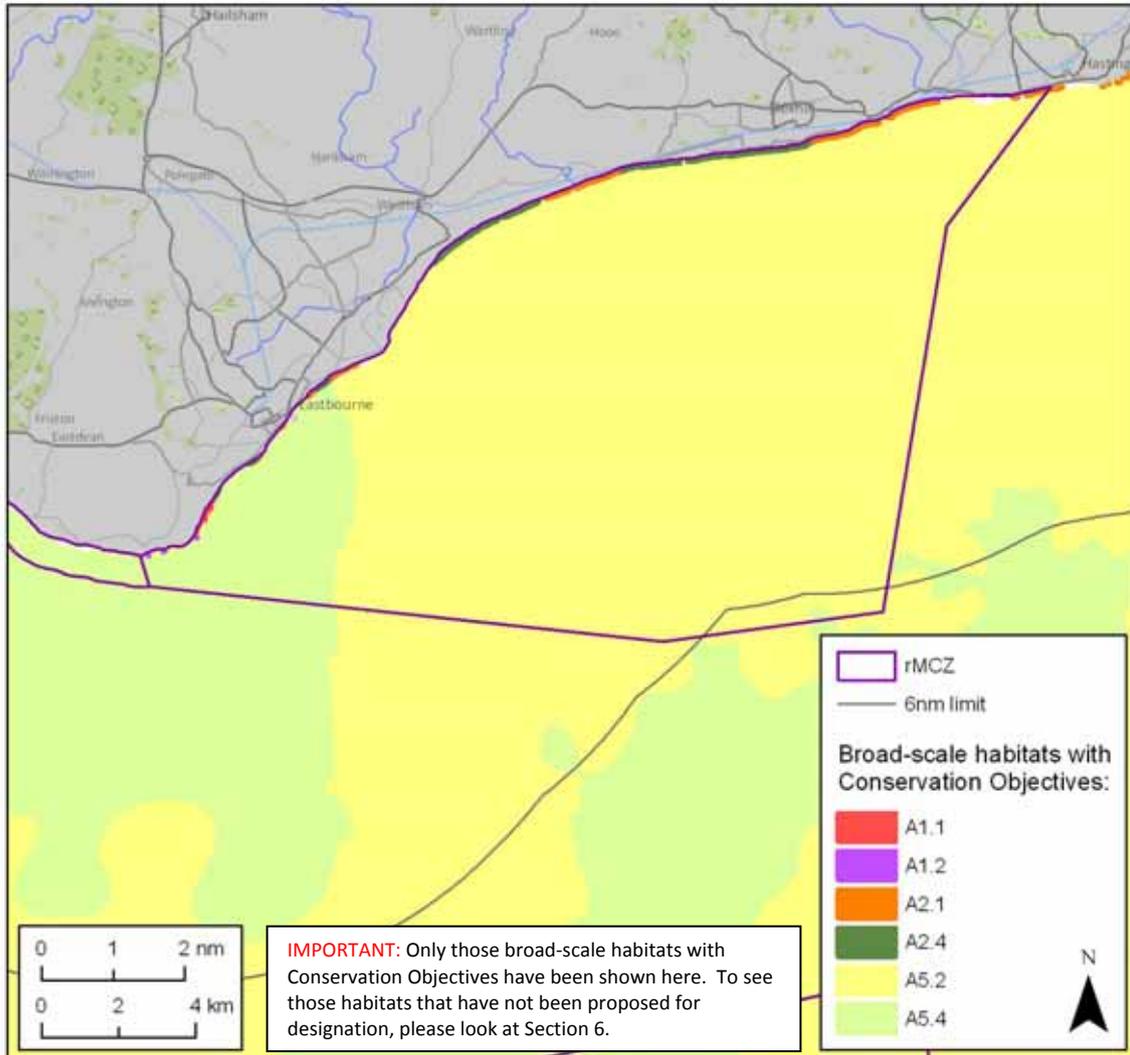
Beachy Head East rMCZ no 13.1

An important feature that does not have supporting spatial data but that has been mentioned by stakeholders are the herring spawning grounds on hard boulder and gravel ground and the protected Norman's Bay and Amsterdam wrecks (Beachy Head Sites Meeting, Jan 2011). There are also suggestions by stakeholders that nursery grounds for Plaice and Dover sole occur on a reef just north of the Royal Sovereign Shoals. CEFAS has conducted a small fish survey which indicated that this is one of the most important places for nursery grounds within 0.25nm of shore (CEFAS report not held by the project). This site is also a bird foraging ground for the Black headed Gull, Black-legged Kittiwake and the Common Tern.

Beachy Head East rMCZ no 13.1

Version: 1.0
Date: Aug 2011

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



Broad-scale habitats with Conservation Objectives:

- A1.1 high energy intertidal rock
- A1.2 mod energy intertidal rock
- A2.1 intertidal coarse sediment
- A2.4 intertidal mixed sediments
- A5.2 subtidal sands*
- A5.4 subtidal mixed sediments*

* Only certain areas of this habitat were selected by the RSG for protection. Please see the accompanying map of REC survey habitats for more detail.



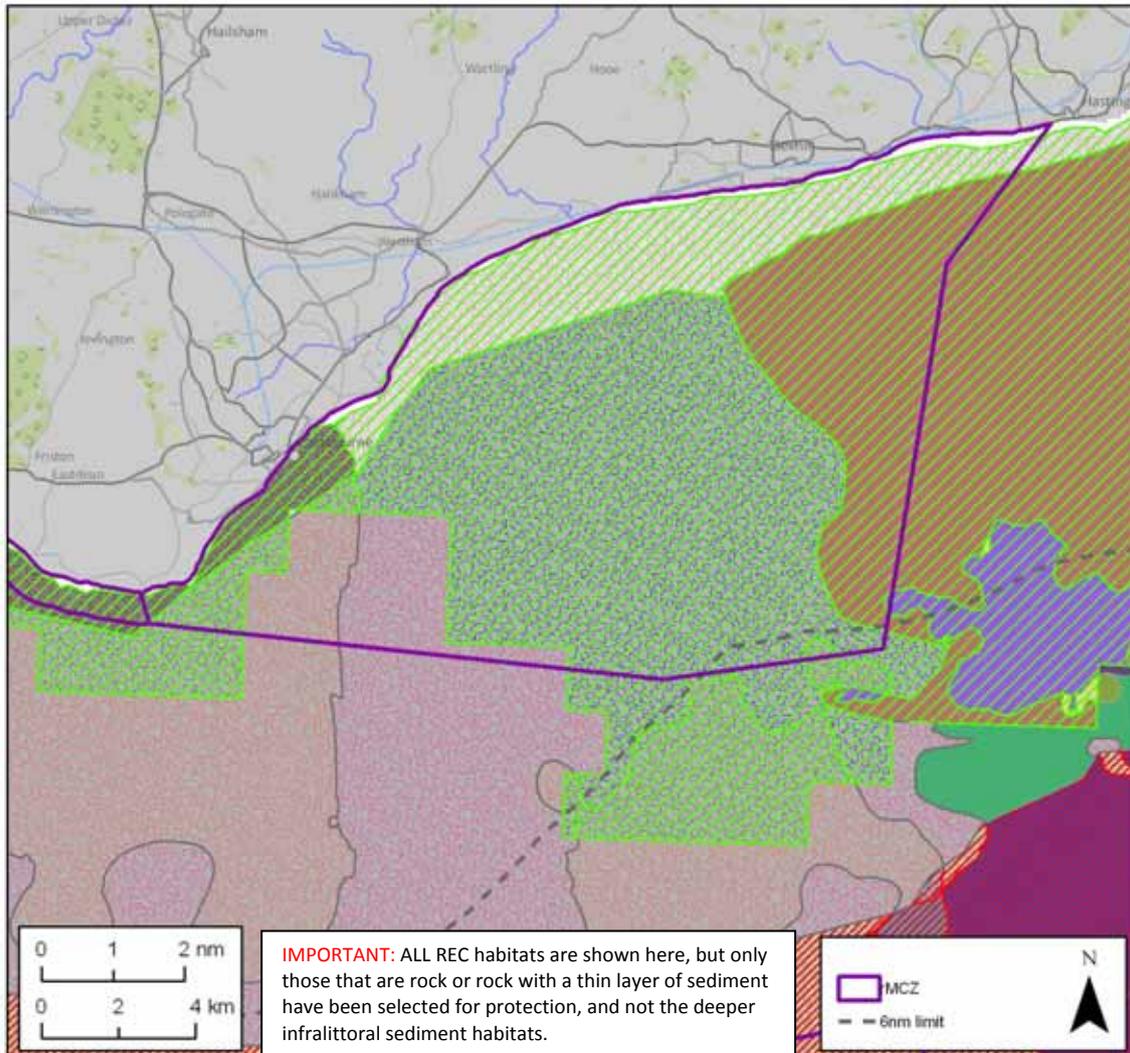
Map and coordinates displayed in WGS84, UTM Zone 31 North.
©OpenStreetMap 2010. ©Ordnance Survey 2010. ©JNCC 2009. ©Crown Copyright 2009.
NOT TO BE USED FOR NAVIGATION.

Beachy Head East rMCZ no 13.1

Beachy Head East rMCZ no 13.1

Broad-scale habitat (reclassified EUNIS Level 4 from REC data)

Version: 1.0
Date: Aug 2011



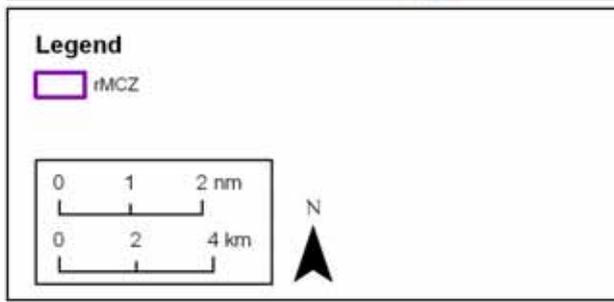
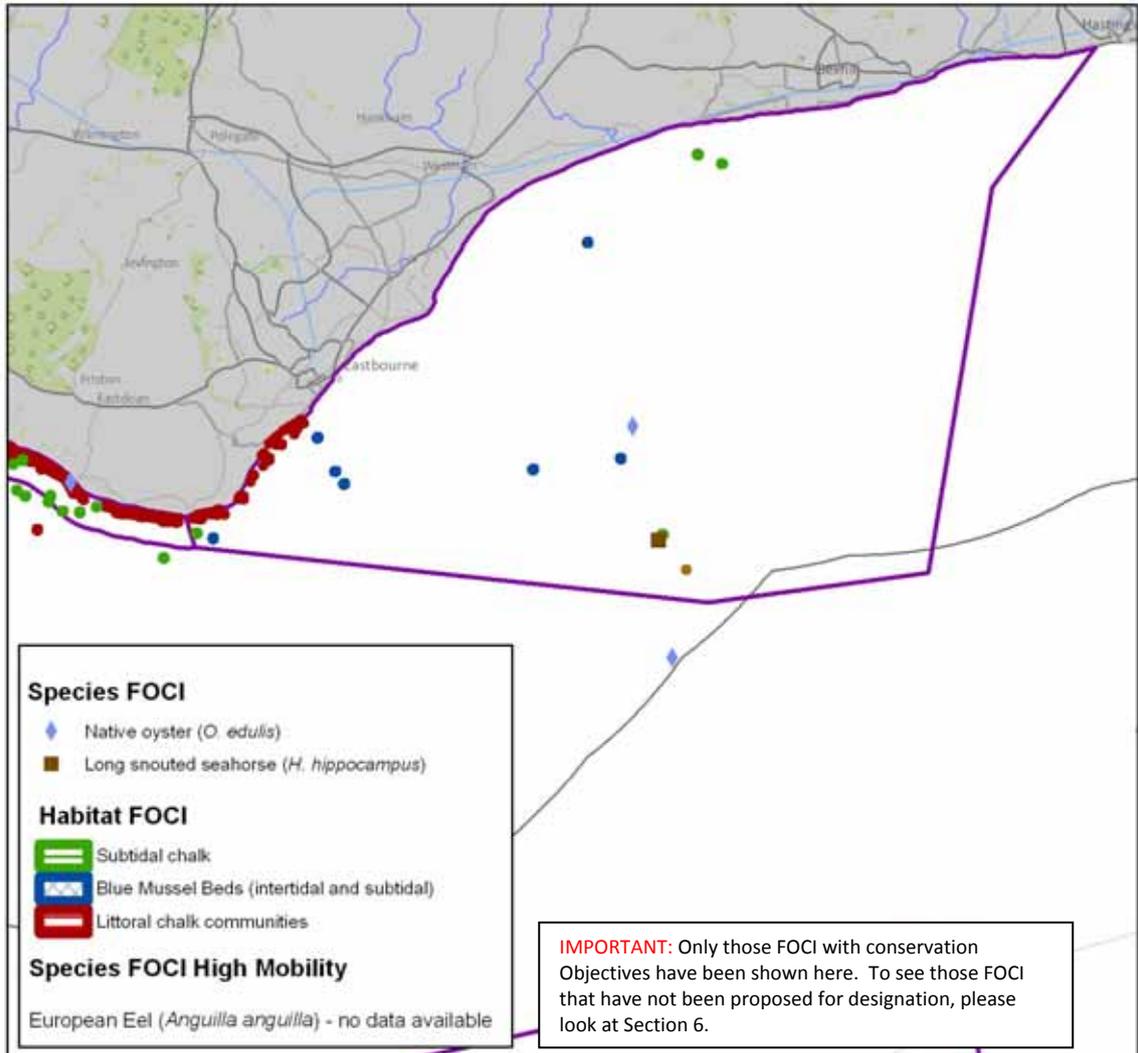
- Broad-scale habitat (reclassified EUNIS Level 4 from REC data)
- A3.92 : Moderate energy infralittoral rock and thin sands
 - A3.94 : Moderate energy infralittoral rock and thin mixed sediments
 - A3.A2 : Low energy infralittoral rock and thin sandy sediment
 - A4.92 : Moderate energy rock and thin sandy sediment
 - A4.94 : Moderate energy circalittoral rock and thin mixed sediments
 - A4.A2 : Low energy circalittoral rock and thin sandy sediment
 - A5.23 : Infralittoral fine sand
 - A5.43 : Infralittoral mixed sediments



Map and coordinates displayed in WGS84, UTM Zone 31 North.
 ©OpenStreetMap 2010. ©Ordnance Survey 2010. ©JNCC 2009. ©Crown Copyright 2009.
 NOT TO BE USED FOR NAVIGATION.

Beachy Head East rMCZ no 13.1
 Habitat and Species FOCI Conservation Objectives

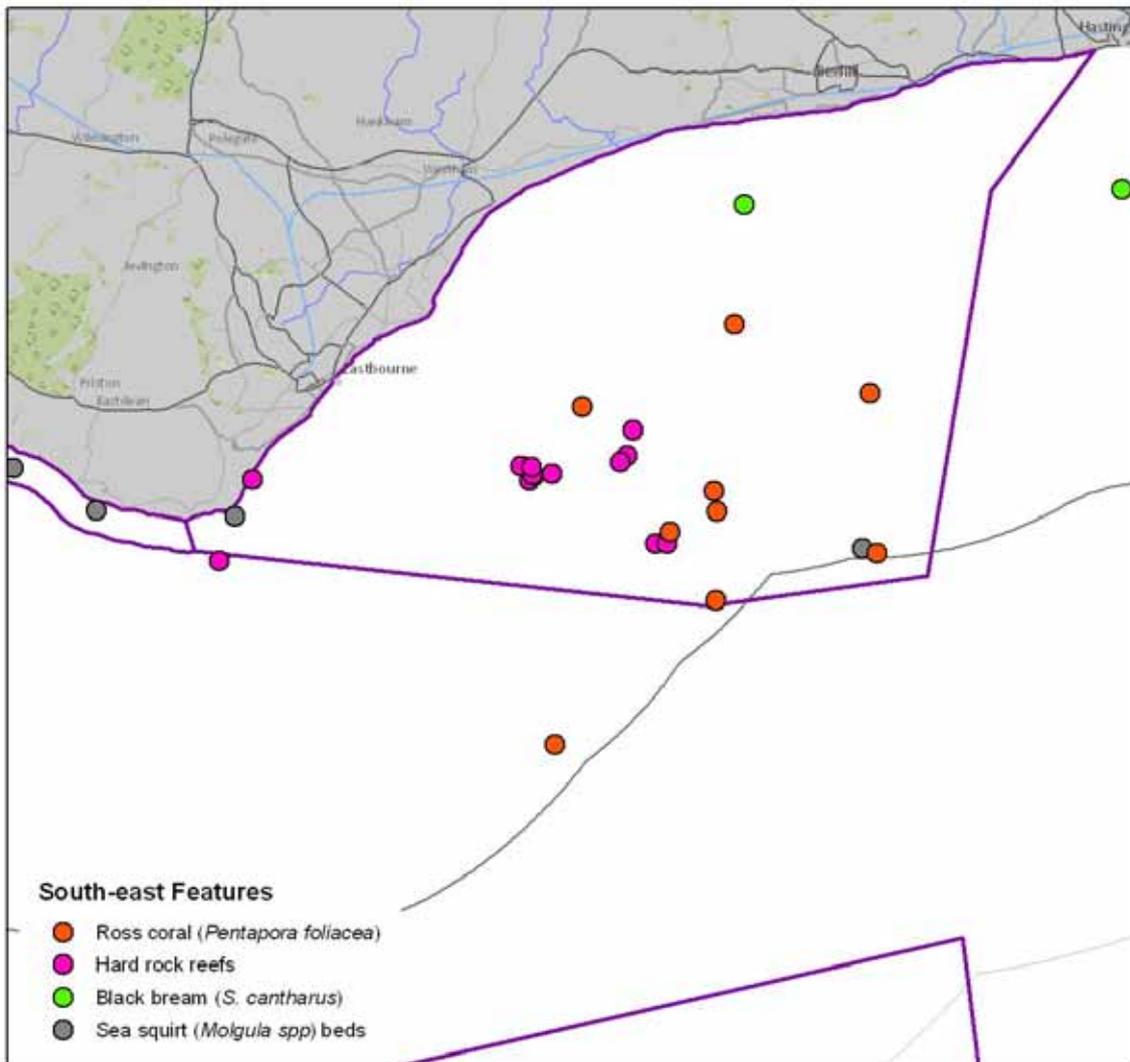
Version: 1.0
 Date: Aug 2011



Map and coordinates displayed in WGS84, UTM Zone 31 North.
 ©OpenStreetMap 2010. ©Ordnance Survey 2010. ©JNCC 2009. ©Crown Copyright 2009.
 NOT TO BE USED FOR NAVIGATION.

Beachy Head East rMCZ no 13.1
South-east Features

Version: 1.0
Date: Aug 2011



Map and coordinates displayed in WGS84, UTM Zone 31 North.
©OpenStreetMap 2010. ©Ordnance Survey 2010. ©JNCC 2009. ©Crown Copyright 2009.
NOT TO BE USED FOR NAVIGATION.

10. Site boundary

The landward boundary of the site is described entirely by the Mean High Water limit stretching from Hastings Pier in the east to Beachy Head Light in the west. From Hasting Pier in the east, the seaward boundary follows a straight line south west to Bulverhythe navigational buoy, from where it extends south to the midpoint along the western edge of the aggregate licence area that is parallel with the Beachy Head Light. The boundary then meets the Royal Sovereign Shoals light before meeting the Beachy Head light itself.

The site lies mainly within 6 nautical miles; however by setting the boundary around the navigation buoys (considered practical for sea users) this extends it over the 6 n mi line which has implications for management which will need consideration if this site goes forward.

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.

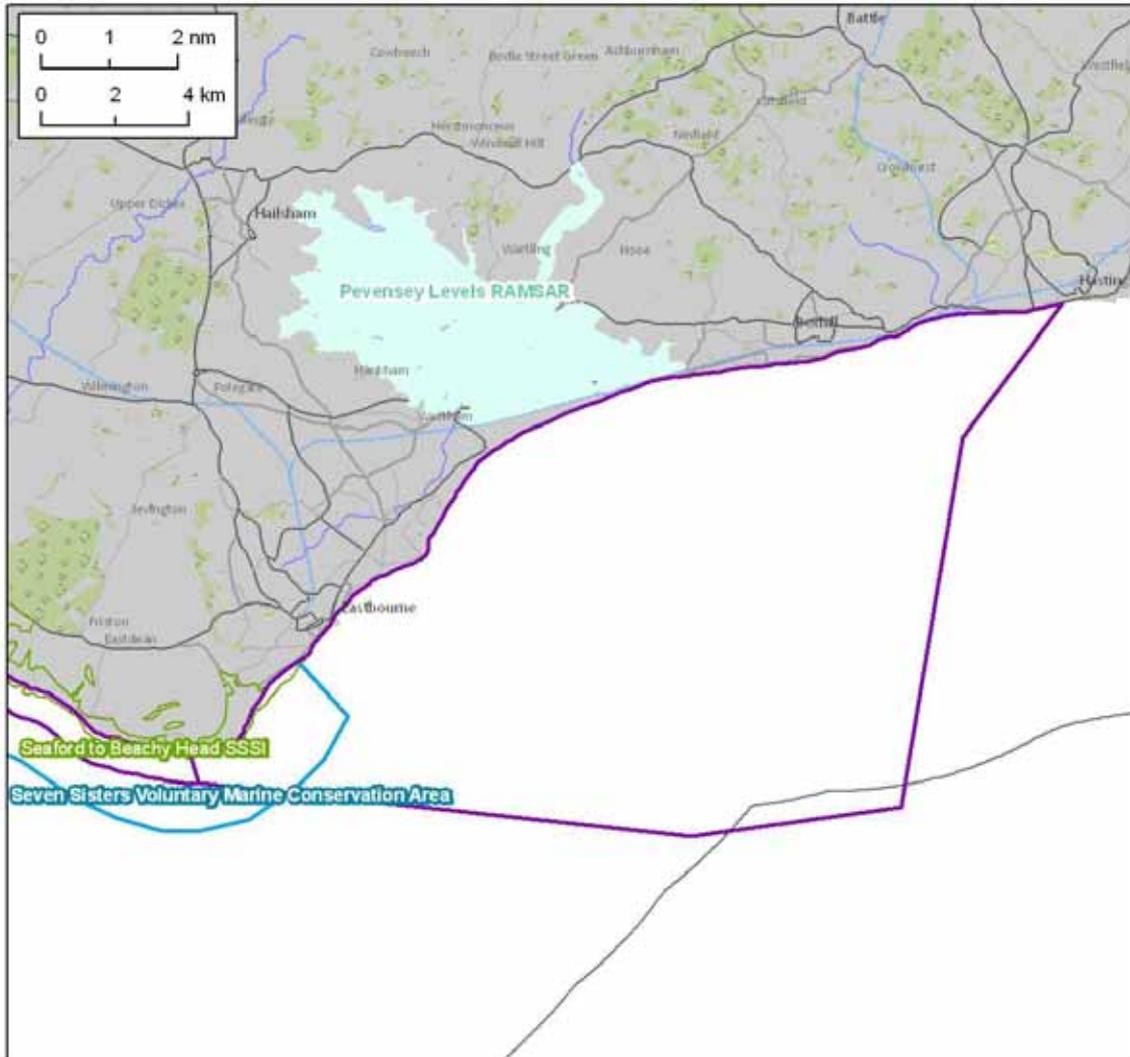
12. Sites to which this site is related

This site partially overlaps the Seaford to Beachy Head SSSI. It also includes two Marine Sites of Nature Conservation Interest, Horse of Willingdon Reef and Royal Sovereign Shoals. The westernmost part of the rMCZ, from the Wish Tower (the Martello Tower at Eastbourne) to the western boundary overlaps with the Seven Sisters Voluntary Marine Conservation Area (for information about this, see rMCZ 13.2).

Beachy Head East rMCZ no 13.1

Beachy Head East rMCZ no 13.1 Related Marine Protected Areas

Version: 1.0
Date: Aug 2011



Legend

- dMCZ
- 6nm limit
- Existing MPAs**
- SSSI
- RAMSAR
- Seven Sisters Voluntary Marine Conservation Area



Map and coordinates displayed in WGS84, UTM Zone 31 North.
©OpenStreetMap 2010, ©Ordnance Survey 2010, ©JNCC 2009, ©Crown Copyright 2009.
NOT TO BE USED FOR NAVIGATION.

Beachy Head East rMCZ no 13.1

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
Broad Scale Habitats	Modelled data	MALSF REC	Synthesis study of Central and Eastern English Channel	2011
Rossworm (<i>Sabellaria spinulosa</i>) reef	Survey	National contract data DEFRA MB102 2C	JNCCMNCR60000715	07/09/1996
Rossworm (<i>Sabellaria spinulosa</i>) reef	Survey	Kent Wildlife Trust		06/08/2000
Littoral chalk communities	Survey	National contract data DEFRA MB102 2C		1986-2000
Peat and clay exposures	Survey	National contract data DEFRA MB102 2C		11/08/1996
Blue mussel beds	Survey	National contract data DEFRA MB102 2C	Multiple	1995-1998
Subtidal chalks	Survey	National contract data DEFRA MB102 2C	Multiple	1982-1996
Subtidal chalks	Survey	Marine recorder extract Sept 2010		1982-1997
Subtidal sands and gravels	Survey	National contract data DEFRA MB102 2C		2006
Subtidal sands and gravels	Survey	National contract data DEFRA MB102 2C	Multiple	1995-2008
Long-snouted seahorse (<i>H. guttulatus</i>)	Survey	National contract data DEFRA MB102 2B		23/09/2006
Short-snouted seahorse (<i>H. hippocampus</i>)	Survey	Seahorse Trust		24/07/2006
Short-snouted seahorse (<i>H. hippocampus</i>)	Survey	Seahorse Trust		13/02/2007
Short-snouted seahorse (<i>H. hippocampus</i>)	Survey	National contract data DEFRA MB102 2B		08/06/2006
Native oyster (<i>O. edulis</i>)	Survey	National contract data DEFRA MB102 2B		1995-2006
Native oyster (<i>O. edulis</i>)	Survey	Marine recorder extract Sept 2010		28/09/2008
European Eel (<i>Anguilla Anguilla</i>)	Survey	National contract data, DEFRA MB102 2B	CEFAS	
European Eel (<i>Anguilla anguilla</i>)	Anecdotal evidence	Beachy Head Sites Meeting		Jan 2011

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.
- BROWNING, L. 2002. *The Marine Biodiversity of South-East England*. The Wildlife Trust, Hampshire.
- ELLIS, J.R., READDY, L., SOUTH, A. 2010 *Assessing and developing the required biophysical datasets and data layers for Marine Protected Areas network planning and wider marine spatial planning purposes. Report No 15: Task 2B Distribution of highly mobile species.(Task 2B)* DEFRA. London
- IRVING, R. 1996. *Dossier of Marine Sites of Nature Conservation Importance*. Compiled on Behalf of the Sussex mSNCI Steering Group.
- JAMES, J. W. C. PEARCE, B. COGGAN, R. A. LEIVERS, M. CLARK, R. W. E. PLIM, J. F. HILL, J. M., ARNOTT, S. H. L. BATESON, L. DE-BURGH THOMAS, A. & BAGGALEY, P. A. 2011. *The MALSF Synthesis Study in the Central and Eastern English Channel*. British Geological Survey Open Report OR/11/01. MALSF, Suffolk.
- JAMES, J. W. C. PEARCE, B. COGGAN, R. A. ARNOTT, S. H. L. CLARK, R. W. E. PLIM, J. F. PINNION, J. BARRIO FRÓJAN, C. GARDINER, J. P. MORANDO, A. BAGGALEY, P. A. SCOTT, G. & BIGOURDAN, N. 2010. *The South Coast Regional Environmental Characterisation*. British Geological Survey Open Report OR/09/51. 249pp. MALSF, Suffolk.

Beachy Head East rMCZ no 13.1

- JONES, L.A. IRVING, R. COSGROVE, A.R.P. COYLE, M.D. GILLILAND, P.M. & MURRAY, A.R. *Eastern Channel Marine Natural Area Profile: A contribution to regional planning and management of the seas around England*. English Nature, Peterborough.
- MARINE CONSERVATION SOCIETY .2011. *Regional Report 2: Balanced Seas Region. (May 2009 – February 2011)*. Marine Conservation Society.
- SEAFISH. 2008. *Case Study: Eastbourne Fishermen’s Association Seabed Survey to Inform Sensitive Area Management Plan*. Seafish, Edinburgh.
- 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.
- 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.
- SEVEN SISTERS VOLUNTARY MARINE CONSERVATION AREA. 1998. *Seven Sisters: Voluntary Marine Conservation Area: Visitor Guide*. East Sussex City Council, East Sussex
- SOUTH DOWNS COASTAL GROUP. 2007. *Shoreline Management Plan (1st Review 2006/7) Beachy Head to Selsey Bill. (Consultation Draft)* Available at: < http://www.sdgc.org.uk/SMP2_Summ/SMP1-main.html > [Accessed 1st August 2011]
- 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.

14. Stakeholder support for the site

The RSG as a group reached consensus that this site should be put forward in their final recommendations. The Sussex IFCA is preparing a proposal for funding to this end.

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 Beachy Head East rMCZ 13.1
Yachting	RYA	Support - needs further IFCA survey to carry site management forward.
Kite Surfing	British Kite Surfing Association	More surveys needed - supported.
Sea Angling		Beachy Head East. RSA support (LG) maintain with voluntary agreements as required.
	Local Fisheries Representatives	Moderate support.
Fishing - under 10s (static gear)	NUTFA	Full agreement for trawl protection.
Fishing - FPO, beam trawling		Good support if area is accurately surveyed and activities are allowed to continue in historically fished areas that are away from reef structures.
Aggregates	BMAPA	Based on VA screening out indirect effects from licensed marine aggregate areas immediately south/east of site - support.
Birds	RSPB	Beachy Head East - Support site as it supports seabird foraging areas, particularly kittiwake. Support setting CO for rocky reef habitat based on REC data.
Wildlife Trusts	Hampshire Wildlife Trust	I support this site. Veneer sediments should have a recover objective.
Marine Ecology	Seasearch	Strongly support for reef habitat complexity. This site illustrates the importance of using the finer scale REC data as this shows rock with sediment veneer, back-translated/simplified to sediment at L3, which is inappropriate.
Marine Wildlife	Marine Conservation Society	<u>Support site</u> . Recover all broadscale habitats from bottom trawling.
IFCA	Kent & Essex IFCA	The comments made by NE and IFCA illustrate the need for

Beachy Head East rMCZ no 13.1

		better data for the sites as data can be used to deliver the variable management which is required to deliver the Conservation Objectives.
Heritage and Archaeology	English Heritage	Beachy Head East. Support but: potential for archaeology and investigation of peat, investigation will need to be allowed.

15. Summary of Conservation Objectives 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 information and data 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.

IMPORTANT: The conservation objectives for this site were set using the coarser EUNIS Level 3 data and the RSG has requested that the vulnerability assessment be undertaken on the finer-scale EUNIS Level 4 REC data habitat and the COs revised as appropriate.

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.

Beachy Head East rMCZ no 13.1

Feature	REC ⁷ habitat	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
A1.1 High energy intertidal rock	N/A	MAINTAIN			LG (July 2011) noted some concern about sewage discharge along the coast
A1.2 Mod energy intertidal rock	N/A	MAINTAIN			
A2.1 Intertidal coarse sediment	N/A	MAINTAIN		SNCBs stated that monitoring of access and anchoring of recreational vessels might be a particular requirement for A2.1	
A2.4 Intertidal mixed sediments	N/A	RECOVER MAINTAIN (See IFCA comment)	Crab Tiling/Bait digging	<p>IFCA recommend changing this CO to MAINTAIN with monitoring over time – bait digging only occurs in the sandy deposits within the coarser mixed sediments. The sand fills in and recovers therefore in reality there is no activity/feature overlap. Changing the CO to MAINTAIN would reduce concern and bring stronger local support for the dMCZ.</p> <p>IFCA code of conduct if management needed</p> <p>NE suggested that the code of conduct should require that bait is collected only from the sandy deposits within the mixed sediments.</p>	<p>At the LG meeting (July 2011) the following was noted:</p> <ul style="list-style-type: none"> • RSA prefer CO of MAINTAIN and believe that bait pumping does not impact the habitat; the different methods used must be taken into account. • Some stakeholders feel that a MAINTAIN CO provides the necessary precautionary approach and restrictions should be put in place only after the impact is proved; under certain circumstances bait digging could have a positive impact. • Wildlife sector believe CO should stay as RECOVER until there is more evidence that bait collection does not damage this habitat, Mixed sediments are more vulnerable to bait collection than other habitats: removing the worm disturbs the habitat and may have affect the rest of the community dependant on that habitat. • Lack of data on impacts of types and intensity of bait collection on different habitat types is a major obstacle to finding agreement on this issue
A5.2 Subtidal Sand (only part of this feature has been selected for protection, please see REC habitats for the finer detail)	A3.92 LE infra-littoral rock & thin sands	To be reassessed according to the REC data habitats	IMPORTANT: Vulnerability Assessment will need to be undertaken on the REC data (which will require additional work to be done to assess the sensitivity of these finer scale habitats) in order to produce the appropriate CO as currently the vulnerability of subtidal sand or subtidal mixed sediment is not thought to accurately reflect that of the 'rock and thin sediment' habitats which roughly correspond to the extent of the sandstone/greensand reef requiring protection. COs were therefore not finalised and not discussed at either the LG meeting of July 2011 or the final RSG meeting (2/3 Aug 2011)		
	A3.A2 LE infra-littoral rock & thin sandy sediment				
	A4.92 ME rock & thin sandy sediment				
			The RSG have selected these REC habitats ('rock and thin sediment' rather than deep sediment) for protection, based on their aim to protect the sandstone/greensand reef. Further refinement of these habitats is necessary to properly define the		

⁷ Regional Environmental Characterisation Study habitats were produced the most recent seabed survey: MALSf synthesis of central and eastern English Channel

Beachy Head East rMCZ no 13.1

Feature	REC ⁷ habitat	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
A5.4 Subtidal mixed sediments (only part of this feature has been selected for protection, please see REC habitats for the finer detail)	A5.23 infralittoral fine sand	No CO			limits of the reef, using forthcoming Channel Coastal Observatory data. The RSG also request that support is given to an IFCA seabed survey, which will provide greater detail and extend out beyond the limit of the CCO data (1km).
	A3.94 ME infra-littoral rock & thin mixed sediments	To be reassessed according to the REC data habitats			
	A3.A4 LE infra-littoral rock & thin mixed sediments				
	A4.94 ME circa-littoral rock & thin mixed sediments				
	A4.A4 LE circa-littoral rock & thin mixed sediments	No CO			
A5.43 infralittoral mixed sediments					
Blue Mussel beds	N/A	RECOVER	Fishing - shellfish harvesting (towed dredging)	<p>IFCA code of conduct</p> <p>NE recommended adaptive management of the area with ongoing monitoring and review as this feature moves around – annual spat falls settle on hard ground in different locations every year. Trawling should not occur over hard ground because of importance of this to spat.</p> <p>SNCBs stated that current levels of commercial potting and set netting are acceptable, monitoring if levels increase</p>	<p>LG meeting (July 2011): Fishing industry agreed RECOVER provided trawling is restricted only directly over the feature.</p> <p>LG meeting (July 2011): Fishing industry recommended that shellfish harvesting should be allowed to continue near to the site/feature as they believe this activity keeps down levels of infestation from predators such as starfish which can decimate a mussel bed overnight</p> <p>Fisheries representative at RSG meeting (2/3 August) said that the mussel beds are more extensive than project data shows.</p>
Littoral chalk communities	N/A	MAINTAIN			
Subtidal chalk	N/A	MAINTAIN			
Peat and clay exposures	N/A	MAINTAIN			
Rossworm (<i>Sabellaria spinulosa</i>) reef	N/A	RECOVER	Fishing - benthic trawling (bottom gear)	<p>IFCA Voluntary Code of Conduct to regulate trawling over hard grounds</p> <p>NE stated that adaptive management would be required since the <i>Sabellaria</i> moves.</p>	<p>LG members (July 2011) agreed RECOVER provided the site is surveyed to identify the exact location of the Rossworm reefs, since there is only a single record at present in the rMCZ. LG also noted the following:</p> <ul style="list-style-type: none"> Benthic trawling: according to the sector, this does not occur directly over reefs as this damages the gear; agreed that restrictions over extensive reefs would be fine but light trawling gear should be allowed in areas with only isolated spots of
	N/A		Fishing - potting/creeling		
	N/A		Fishing - set netting		
	N/A		Fishing - shellfish harvesting (towed dredging)		

Beachy Head East rMCZ no 13.1

Feature	REC ⁷ habitat	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
					<p><i>Sabellaria</i>. The trawling fleet agreed that they would abide by a code of conduct not to trawl over the hard rock and reef features</p> <ul style="list-style-type: none"> Fishing industry wanted to note that support will be good if management is applied variably and allows for activities that are historically important to continue. Potting does not occur on top of reefs – whelk potting and set netting may occur in the general area but not directly on top of the feature
Short-snouted seahorse (<i>Hippocampus hippocampus</i>)	N/A	MAINTAIN			
Native Oyster (<i>Ostrea edulis</i>)	N/A	RECOVER	Fishing - benthic trawling (bottom gear)	IFCA Code of conduct	LG noted (July 2011) that the population is more extensive than shown in the project data, but agreed that this CO is appropriate and trawling would be addressed as above
European Eel (<i>Anguilla anguilla</i>)	N/A	MAINTAIN		EA regulations in place	

16. Evolution of the Site

Beachy Head East (Royal Sovereign Shoals) was one of the first broad areas of interest to be identified by the RSG. Although all stakeholders are keen to see protection of the sandstone reef, refinement of the boundaries to reflect this has been difficult, as the major data layers were not sufficiently detailed to accurately delineate the reef extent and stakeholders have identified a number of maritime pointers that should delineate the site instead (see Section 10), which will also assist in demarcating the site during navigation. During the Beachy Head Sites Meeting (January 2011), the eastern boundary was moved westwards to meet Bulverhythe Buoy to avoid a heavily trawled area and the boundary continuing on southwards was moved to meet the midpoint of the (expired) aggregate area western limit to include additional areas of Ross coral.

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 issues associated with this area are:

- This area very heavily fished with static gear, and this sector is agreeing to the recommendation upon the assumption (in the Conservation Objectives) that their activities will not be significantly impacted by an MCZ
- Site boundaries were negotiated to avoid areas heavily trawled by certain mobile gears; trawling restrictions in the reef areas and where large amounts of potting activity take place are acceptable to the trawling sector.
- The Crown Estate accepts the site, but has noted that the site is within a future interest area for nearshore wave projects, contains an active telecoms cable, the Eastbourne disposal site and outfalls. They have suggested that the site is shown to overlap an aggregates licence area but this has been relinquished and the BMAPA representative has not flagged up any issues with these boundaries.

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.