

## Bembridge rMCZ no 22

### Marine Conservation Zone : Selection Assessment Document

<b>Version and Issue date</b>	<b>Amendments made</b>
V1.0 07.09.11	Draft final recommendations refined by the RSG in July 2011 and finalised at their meeting 2/3 August 2011.

<b>1. Site name</b> Bembridge r MCZ no 22 Contains: Tyne Ledges rRA no 15 and Culver Spit rRA no 21	<b>3. Site surface area</b> 8459 ha      84.59 km <sup>2</sup>
<b>2. Site centre location</b> ETRS89 N50 40' 9.445" W1 4' 24.767"    N50 40.157' W1 4.413' (N.B. WGS 84 UTM 31N coordinates are provided in the map vertices)	<b>4. Biogeographic region</b> Eastern English Channel

#### 5. Features proposed for designation within Bembridge <sup>1</sup>

Feature type	Feature name (EUNIS L3 translation from REC)	REC	Area / No. of records <sup>2</sup>
Broad-scale habitat	A5.2 subtidal sand	A3.92 ME infralittoral rock and thin sands	12.35 km <sup>2</sup>
		A3.A2 LE infralittoral rock and thin sandy sediment	
		A4.A2 LE circalittoral rock and thin sandy sediment	
		A5.23 infralittoral fine sand	
		A5.24 infralittoral muddy sand	
Habitat FOCI	A5.3 subtidal mud	A5.33 infralittoral sandy mud	1.36 km <sup>2</sup>
		A5.35 circalittoral sandy mud	
Habitat FOCI	A5.4 subtidal mixed sediments	A3.94 ME infralittoral rock and thin mixed sediments	61.31 km <sup>2</sup>
		A3.A4 LE infralittoral rock and thin mixed sediments	
		A5.43 infralittoral mixed sediments	
Habitat FOCI	Maerl ( <i>Phymatolithon calcareum</i> ) bed		1 record
	Mud habitats in deep water		1 record
	Native oyster beds		
	Rossworm ( <i>Sabellaria spinulosa</i> ) reef		625.33 m <sup>2</sup>
	Seagrass beds		0.24 km <sup>2</sup>
	Seapens & burrowing megafauna		1 record
Species FOCI Low mobility	Tentacled Lagoon Worm ( <i>Alkmaria romijni</i> )		4 records
	Lagoon Sand Shrimp ( <i>Gammarus insensibilis</i> )†		
	Kaleidoscope Stalked Jellyfish ( <i>Haliclystus auricula</i> )		1 record
	Long-snouted seahorse ( <i>Hippocampus guttulatus</i> )		1 record
	Short-snouted seahorse ( <i>Hippocampus hippocampus</i> )		4 records
	Starlet Sea Anemone ( <i>Nematostella vectensis</i> )†		
	Native Oyster ( <i>Ostrea edulis</i> )		11 records
	Peacock's Tail ( <i>Padina pavonica</i> )		78 records
	Sea Snail ( <i>Paludinella littorina</i> )†		

† these features are found above the MHW mark delimiting the site

<sup>1</sup> Sources of information relating to these features are listed in Section 13.

<sup>2</sup> 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.

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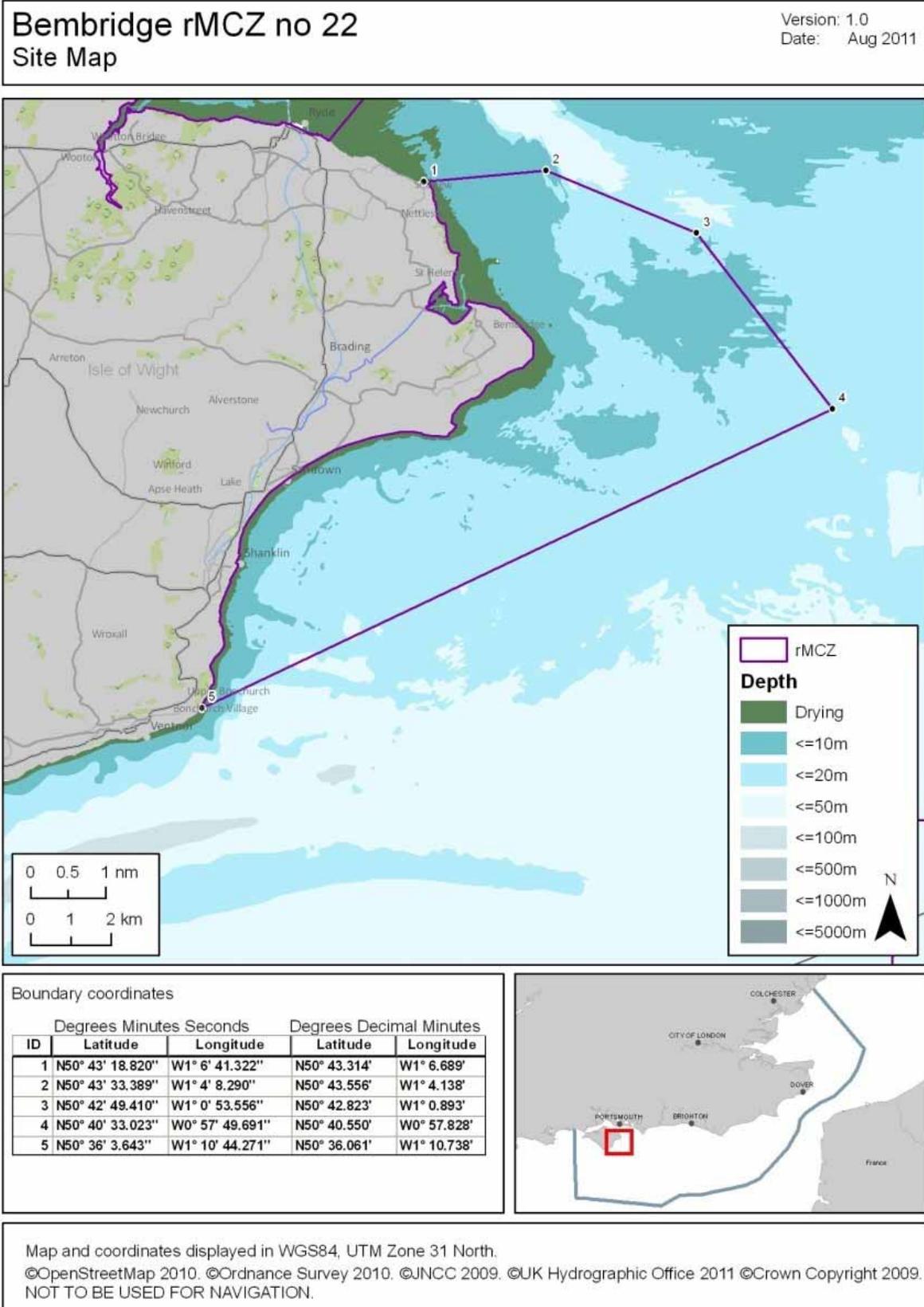
### 6. Features within Bembridge not proposed for designation<sup>3</sup>

Feature type	Feature name	Comments
Broad-scale habitats	A1.1 High energy intertidal rock	Protected in the South Wight Maritime SAC and Bonchurch Landslips SSSI, small areas of habitat occur outside of SAC boundary within MCZ
	A1.2 Moderate energy intertidal rock	Protected in South Wight Maritime SAC, small areas occur outside SAC
	A2.1 intertidal coarse sediment	Targets met by existing MPAs elsewhere
	A2.2 Intertidal sand and muddy sand	Partially protected (majority) in Solent and Southampton Water SPA, Whitecliff Bay & Bembridge Ledges SSSI, Brading Marshes SSSI
	A2.3 intertidal mud	Partially protected (majority) in Solent and Southampton Water SPA, Brading Marshes to St. Helen's Ledges SSSI, small areas of habitat outside of these sites but within MCZ
	A2.4 intertidal mixed sediments	Targets met by existing MPAs elsewhere
	A2.5 coastal saltmarshes/saline reedbeds	Fully protected within Solent and Southampton Water SPA and Brading Marshes SSSI
	A3.1 high energy infralittoral rock	Majority of habitat protected through South Wight SAC
	A3.2 mod energy infralittoral rock	Fully protected through South Wight SAC
	A3.3 low energy infralittoral rock	Fully protected through South Wight SAC and Brading Marshes SSSI
	Mosaic of A2.3, A2.5	Fully protected through South Wight SAC
	Habitat FOCI	Estuarine rocky habitats
Littoral chalk communities		Fully protected through South Wight SAC
Seagrass beds		Proposed for designation in MCZ (see table above) outside of South Wight Maritime SAC and Brading Marshes to St. Helen's Ledges SSSI
Subtidal chalk		Fully protected through South Wight SAC
Subtidal sands and gravels		In an area of very high activity, therefore not thought suitable
Species FOCI High mobility	European Eel ( <i>Anguilla anguilla</i> )	occurs throughout but not priority
	Smelt ( <i>Osmerus eperlanus</i> )	occurs throughout but not priority
	Undulate Ray ( <i>Raja undulata</i> )	occurs throughout but not priority

<sup>3</sup> Features may occur in both tables (5&6) if the MCZ overlaps with an existing MPA where the feature is protected

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## 7. Map of site



### 8. Site summary

The site lies adjacent to the east coast of the Isle of Wight and builds on the protection afforded by the South Wight Maritime SAC, with which it overlaps fully with three quarters of the site. The rMCZ is exceptionally rich in ENG habitats that are currently protected such as Rossworm (*Sabellaria spinulosa*) reef, mud habitats in deep water, sea pens and burrowing megafauna, seagrass beds and wild native oyster beds, as well as important regional non-ENG features like Spoon Worm and Ross Coral beds. The Ledges to the south of Bembridge Harbour are home to large areas of the brown alga, Peacock's Tail (*Padina pavonica*), which acts as the seeding population for other populations around the Isle of Wight and so the northern part, Tyne Ledges, has been selected as a Reference Area (rRA 15).

The Lagoon Sand Shrimp (*Gammarus insensibilis*) and Starlet Sea Anemone (*Nematostella vectensis*) have been recorded in Bembridge Harbour and in adjacent areas above the MHW mark. There are records of both species of seahorse (*Hippocampus hippocampus* and *H. guttulatus*) and the site is considered to provide suitable habitat for breeding populations of these species. Recent Natural England survey work has identified the only location of maerl (*Phymatolithon calcareum*) beds in the Balanced Seas project area in the slightly deeper waters around Culver Spit. As a result, this has been recommended as a Reference Area (rRA 21). Other, earlier surveys recorded one of only two occurrences of the Kaleidoscope Jellyfish (*Haliclystus auricula*) in the project area, in waters further from the shore, where the seabed becomes predominantly subtidal mixed sediments, sands and gravels. The northern part of the site, where there is no overlap with the South Wight Maritime SAC, has been identified as having particularly high biodiversity, in the form of benthic biotope richness and benthic species taxonomic distinctness.

The draft conservation objectives have implications for benthic trawling, anchoring, potting and shellfish harvesting, but further confirmation of the distribution of the features involved and of the level of intensity and distribution of activities is needed before finalising management measures. In particular, further discussions are necessary to determine how the two large commercial anchorages in the site (particularly the one in the north) that are both socially (refuge anchorages) and economically critical, and that area in close proximity to features that might be damaged by this activity can be rationalised with an MCZ. Further discussions are also needed with the static gear fishery. The RSG has recommended more detailed assessment of this area.

### 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 lies adjacent to the east coast of the Isle of Wight, encompassing the intertidal area (including Sandown Bay and Bembridge Harbour) and the subtidal area, extending right out to the landward edge of the deep water channel approach into the Eastern Solent.

According to the UKSeaMap/MESH data (JNCC 2011 v.7), the site contains subtidal sand (A5.2), mud (A5.3) and mixed sediments (A5.4) (see Broad-scale habitats map). These habitats are derived or 'back translated' from finer-scale EUNIS Level 4 habitats produced by two recent MALSF-funded seabed surveys (James *et al.* 2010, 2011) which reclassified seabed habitats into new EUNIS Level 4 habitats that were not previously part of the existing hierarchical EUNIS habitat classification system. These finer-scale REC habitats better represent the complexity of habitat in the area (see REC EUNIS Level 4 map) but were not used by the RSG to identify the conservation objectives for the site as all subtidal habitats considered as features for protection.

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Geological survey work has identified extensive areas of limestone and chalk bedrock that provide a complex system of crevices, tunnels and pools supporting a very diverse algae and invertebrate fauna (South Wight Maritime SAC Conservation Objectives, 2001; Tittley, 1988; George *et al.*, 1995). Most notably the site contains littoral chalk, exposed at low tide, and subtidal chalk in the north of the site along the area known as Tyne and Bembridge Ledges; these features are currently protected within the Solent Wight Maritime SAC. Bembridge Ledges to Culver Cliff, which is the most easterly example of extensive hard shores in the English Channel, has been described in detail by Collins *et al.*, (1990).

This rMCZ supports a very large number of species and habitat FOCI (see FOCI map). This is partly because several species reach their eastern limit of distribution along the English Channel at the Isle of Wight, which represents a transition zone between warmer south-western and colder North Sea waters, particularly at St Catherine's Point and on the extensive limestone reefs at Bembridge Ledges.

One example of such a species is the brown alga Peacock's Tail (*Padina pavonica*) which is thought to be at the eastern limit of its range here. The wave cut platforms forming Bembridge ledges consist of large and slowly draining pools between the gently shelving ledges that provide habitat for the most important and extensive population of Peacock's Tail in the project region. National contract data (DEFRA MB102 2A) contained some extremely old records, dating back to 1900, for this species from the Phycological Society. These data points clearly indicated simply the south westernmost point of a survey atlas grid square and so were discarded in favour of more recent survey data from the Isle of Wight Natural History Society (Herbert, 2010). The population is thought to seed the other populations found around the Isle of Wight (Hampshire Wildlife Trust, IOW Site Meeting Report, 2011) including a second smaller patch in the extreme south of the site (South Wight Maritime SAC, Conservation Objectives 2001). The wildlife sector considers that the two occurrences of Peacock's Tail in the Bembridge site constitute two separate populations, and thus provide two separate replicates of this species (RSG 9B, May 2011). The importance of the Peacock's Tail on the ledges led the RSG to recommend a Reference Area be placed here to protect the population (see rRA 15 Tyne Ledges).

Many species are associated with the rich algal populations found on the ledges including one of only two occurrences of the Kaleidoscope Jellyfish (*Haliclystus auricula*) in the project area and anecdotal evidence of another record occurring further inshore and north associated with the seagrass beds. The Hampshire and Isle of Wight Wildlife Trust have recently surveyed the area and plan to resurvey it in May 2012 (Inshore Task Group Report, February 2011).

Data provided to the project by Natural England from a recent survey of the South Wight Maritime SAC confirm the presence of a suggested Maerl (*Phymatolithon calcareum*) bed (Fowler, 1995). Video transects carried out at 14.9 metres depth showed that the percentage cover of maerl varies, reaching a maximum of approximately 30-40% cover, with around 20% of that figure being live maerl (NE email, 1.04.11). National contract data (Seeley *et al.* 2010 DEFRA MB102 2B) showing that Common Maerl occurred elsewhere in the project area were considered by both stakeholders and the Science Advisory Panel to be erroneous, and were therefore discarded from the project dataset. The Culver Spit location is thus the only verified record of this habitat FOCI in the project region (O'Dell, J, *et al.* 2011). As a result, the RSG recommended a Reference Area at this location for this feature (see rRA 21 Culver Spit).

Rossworm (*Sabellaria spinulosa*) reef occurs in the subtidal areas east of Culver Spit and Sandown Bay (Seeley *et al.* 2010 DEFRA MB102 2C). A survey of a nearby aggregate renewal zone south of the rMCZ found the biotope to be sublittoral mixed sediment derivatives such as low lying *Sabellaria* crusts and sublittoral mixed sediment with patchy *Sabellaria spinulosa* tubes, particularly on pebbles and cobbles (Environmental Resources Management Ltd. 2011) underpinning the suitability of the area for this type of habitat.

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Seagrass beds occur along the intertidal stretch in the north of the site between Bembridge and the northern site boundary, associated with the ledges and occurring within the harbour. These beds are not thought to be the best example in the region but are none the less important and worthy of protection (Wildlife Trust, IOW Site Meeting Report, February 2011). Furthermore, seagrass is protected by the existing MPAs overlapping this site and therefore this rMCZ ensures that the extent of protection is continuous in this area.

National contract data (Seeley *et al.* 2010 DEFRA MB102 2B, NE surveys completed in 2010) show two regionally extremely scarce habitat FOCI - Mud habitats in deep water and Seapens and burrowing megafauna – at the same spot in the north of the rMCZ, suggesting that the environment here may be relatively stable (IOW Site Meeting Report, February 2011). Small and patchy commercially harvested wild native oyster beds occur in the northwest of the site (Seeley *et al.* 2010 DEFRA MB102 2C; RSG Meeting Report, April 2011). Records for individual Native Oysters (*Ostrea edulis*) are scattered throughout the site in the subtidal areas, and associated with the native oyster beds in the deeper water in the northwest of the site. Recent surveys by the Hampshire and Isle of Wight Wildlife Trusts have found evidence of intertidal underboulder communities in the Bembridge area with many boulders hosting a variety of sponges, seasquirts and crustaceans typical of these habitats, but these survey data are very recent and have not yet been passed to Balanced Seas.

The National Contract Data (shows the rare sea snail (*Paludinella littorina*) as occurring on the upper shores of the ledges, the only record of this species in the project region. Above the MHW mark in Bembridge Harbour and adjacent areas in the north of the site examples can be found of some regionally scarce species namely the Lagoon Sand Shrimp (*Gammarus insensibilis*), Tentacled Lagoon Worm (*Alkmaria romijni*) and Starlet Sea Anemone (*Nematostella vectensis*). The area has records of both species of seahorse native to the UK, Short-snouted (*Hippocampus hippocampus*) and Long-snouted (*Hippocampus guttulatus*) Seahorse and the area is thought to be suitable habitat for breeding populations, although no evidence currently exists to support this assumption.

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). In this site, hard rock reefs associated with Bembridge Ledges and other rocky areas off Culver, Princess Shoal and Horse Ledge bolster the biodiversity of the area (IOW Site Meeting Report, February, 2011). Spoonworm communities (*Maxmuelleria lankesteri*) have been found coinciding with the Seapen and Burrowing Megafauna population in the north of the site. Ross coral (*Pentapora foliacea*) and Mantis Shrimp have been identified in the area and local stakeholders considered these features important for inclusion in the site (IOW Site Meeting Report, February, 2011). Two of the Key Inshore Biodiversity Areas in the Balanced Seas Region recommended as MCZs by the South East England Biodiversity Forum lie within this rMCZ (SEEBF, 2010). The northern part of the site has been identified as having particularly high biodiversity, in the form of benthic biotope richness and benthic species taxonomic distinctness (Jackson *et al.* 2010 DEFRA MB102 2F).

The southeast region is considered important for Black Bream breeding populations. One such population has been identified within and around Sandown Bay nesting amongst the rocky ledges (Bembridge Angling Club email 9.02.2011). It is considered to be a minor breeding population in comparison to Kingmere, East Sussex but may be a different breeding stock and thus important for species integrity (IOW Site Meeting Report, February, 2011).

Surveys carried out as part of an aggregate licence renewal application just south of the southern boundary of the rMCZ (Environmental Resources Management Ltd, 2011), showed that this general area supports a diverse array of demersal, pelagic fish and shellfish with over 60 species recorded. Among the most characteristic are black sea bream, plaice, smoothhound shark, mackerel (spawning at low

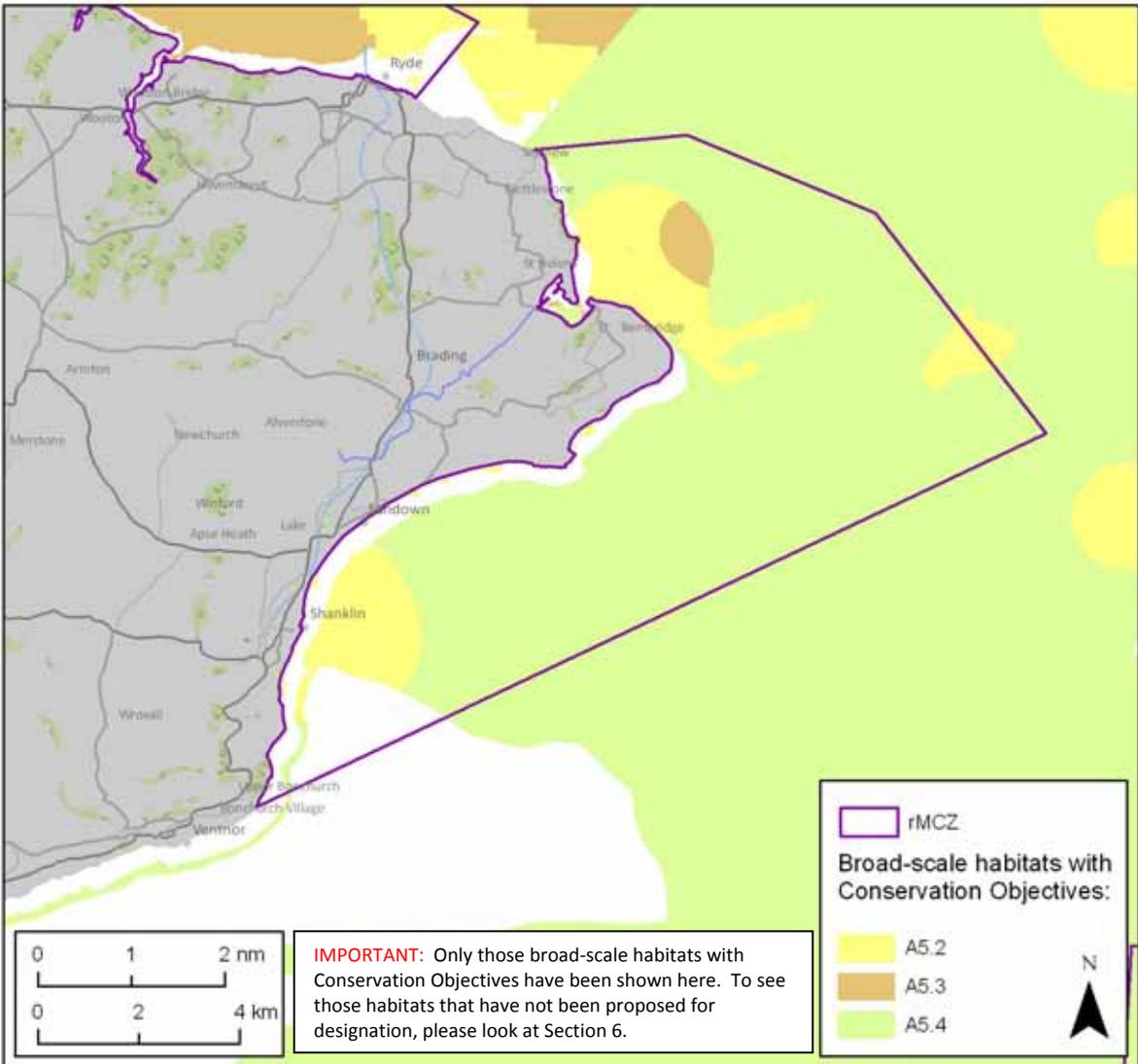
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levels all along), sprat, brown crab, lobster and squid. Cod are seasonally abundant, and may spawn in the area. Herring are also found throughout the area. Bass and Mullet are common and Plaice and Dab are the most abundant flat fish, with Sole also present and using the area to spawn. Migratory fish found in the area include Atlantic Salmon, Sea Trout and European Eel. Species of note recorded include the Twaite Shad, a European Protected Species under the Habitats Directive (1) (Environmental Resources Management Ltd, 2011).

Bird species with internationally important breeding populations in the vicinity include black-headed gull and little tern, while nationally- important species are sandwich tern, common tern and cormorant (Mitchell et al. 2004 cited in Environmental Resources Management Survey, 2011)). In addition, the offshore waterfowl species great crested grebe and red-breasted merganser may over-winter in the area and considerable numbers of divers may pass through the region on passage (Oakwood 1998 cited in Environmental Resources Management Survey, 2011). The RSPB have gathered additional information in regard to the foraging areas for birds and note that Bembridge to Ryde is the best foraging area for Sandwich Tern in the region.

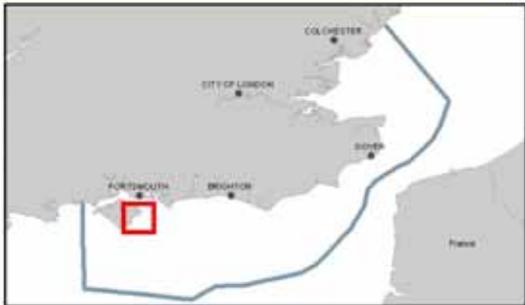
**Bembridge rMCZ no 22**  
 Broad-scale habitats (EUNIS Level 3) with Conservation Objectives

Version: 1.0  
 Date: Aug 2011



Broad-scale habitats with Conservation Objectives:

- A5.2 subtidal sand
- A5.3 subtidal mud
- A5.4 subtidal mixed sediments

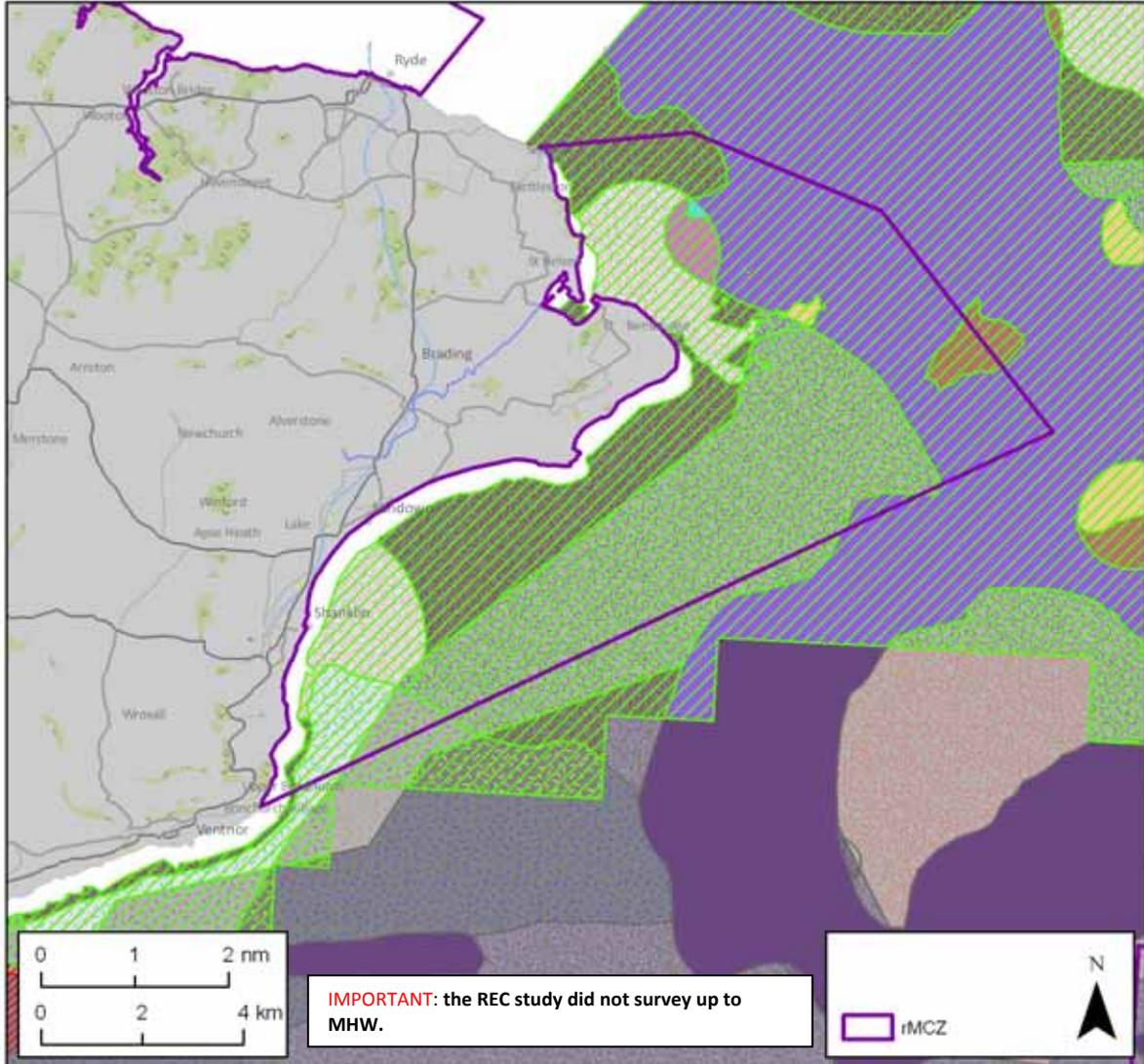


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Version: 1.0  
Date: Aug 2011

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



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

- A3.1: High energy infralittoral rock
- 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
- A3.A4: Low energy infralittoral rock and thin mixed sediments
- A5.23: Infralittoral fine sand
- A5.24: Infralittoral muddy sand
- A5.33: Infralittoral sandy mud
- A5.35: Circalittoral sandy mud
- A5.43: Infralittoral mixed sediments

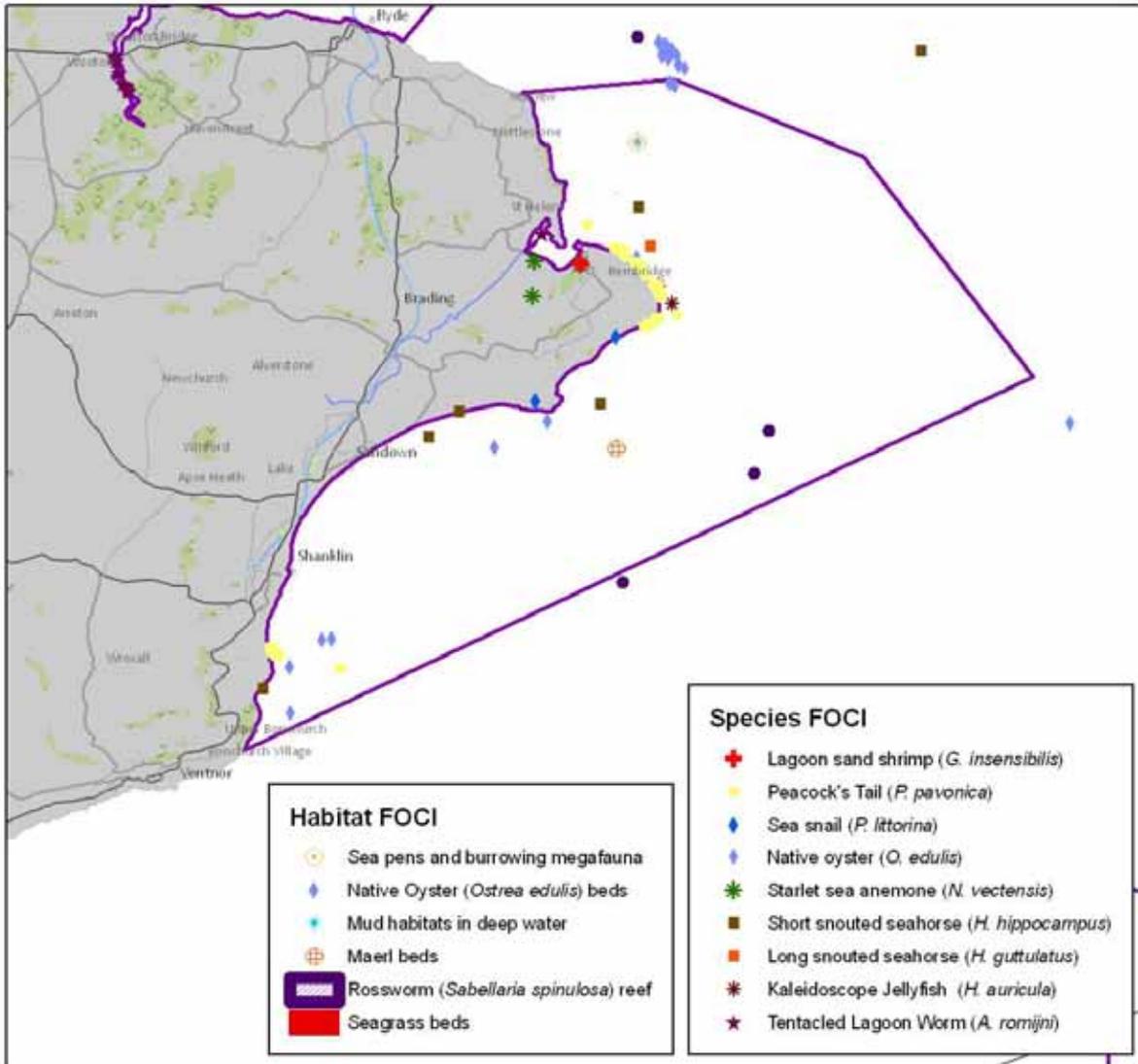


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Bembridge rMCZ no 22  
Habitat and Species FOCI Conservation Objectives

Version: 1.0  
Date: Aug 2011



**Legend**

rMCZ

0 0.5 1 nm  
0 1 2 km

**IMPORTANT:** Only those FOCI with conservation Objectives have been shown here. To see those FOCI that have not been proposed for designation, please look at Section 6.

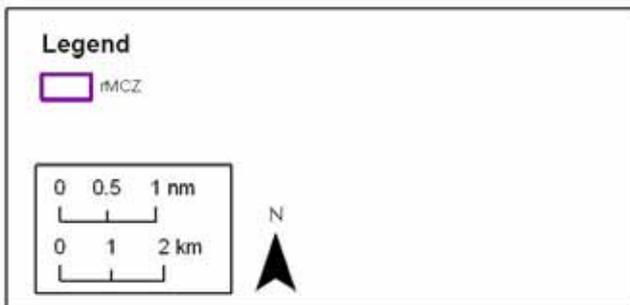
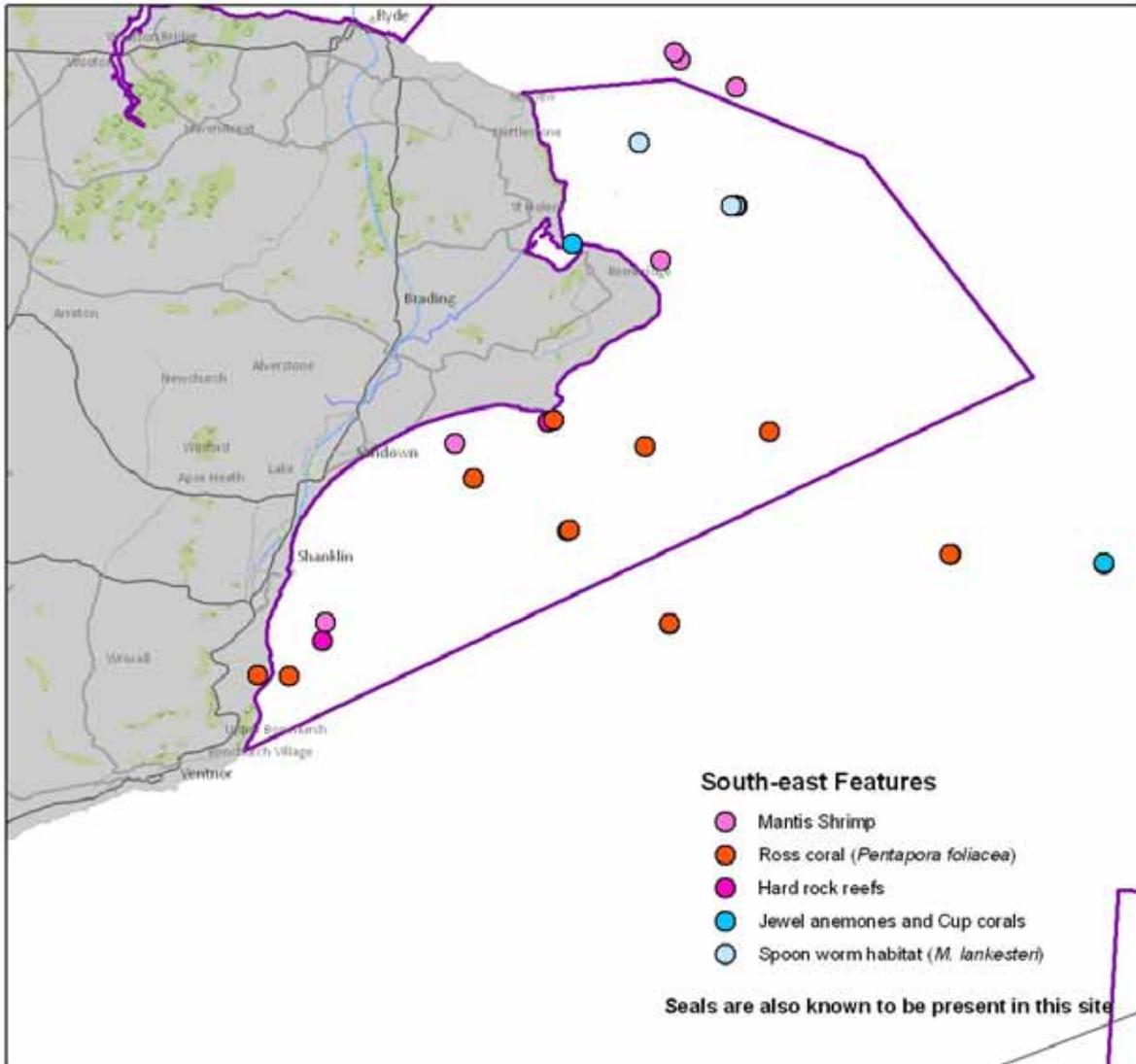
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Bembridge rMCZ no 22  
South-east Features

Version: 1.0  
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### 10. Site boundary

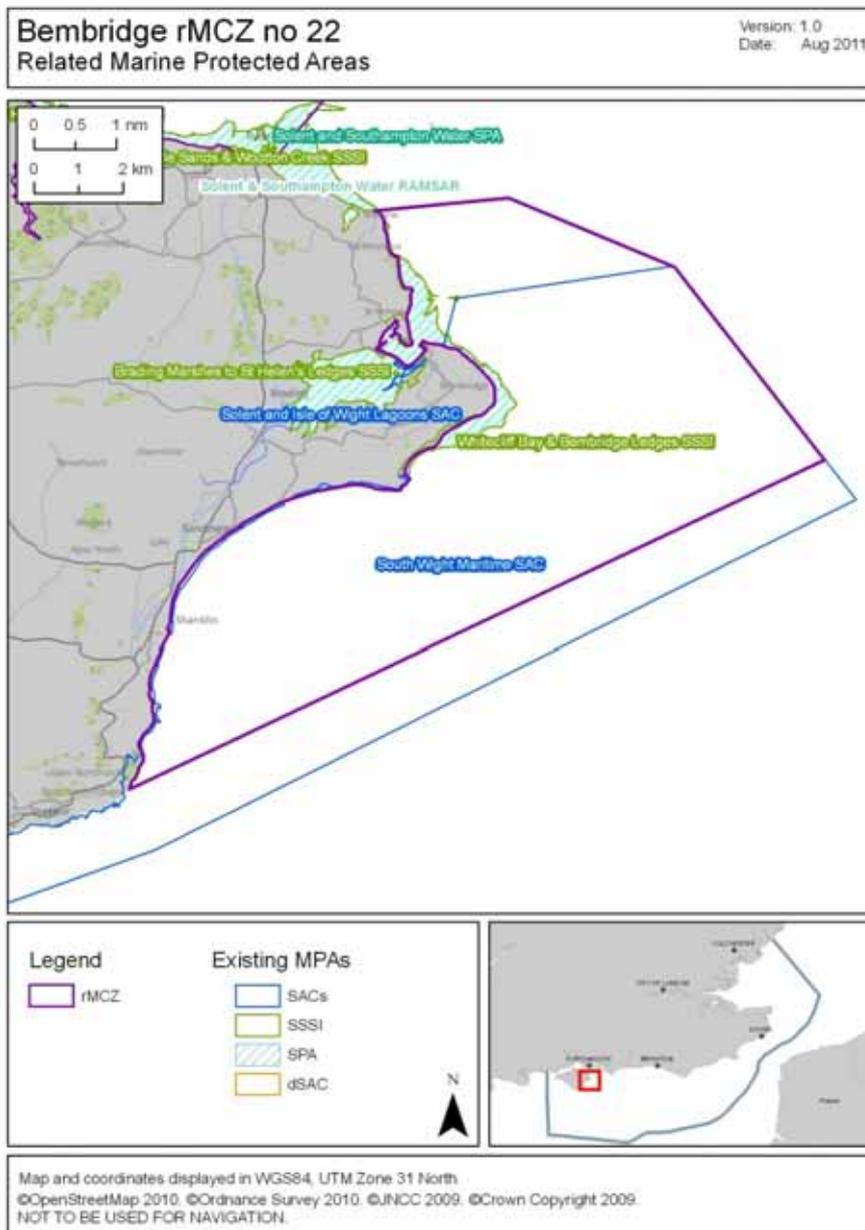
The landward boundary of this site is described entirely by the Mean High Water mark from the Seaview Esplanade in the north, south to Bonchurch which lies to the north-east of Ventnor. From the north, the seaward boundary extends out to a navigational buoy before following the same line as the boundary of the SAC. The easternmost point lies just west of the Nab Tower and the boundary follows a straight line from here to Bonchurch in order to avoid the Nab anchorage to the east.

### 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 South Wight Maritime SAC, Whitecliff Bay and Bembridge Ledges SSSI, Brading Marshes to St Helen's Ledges SSSI and Solent and Isle of Wight Lagoons SAC.



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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
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	JNCCMNCR10000686	28/08/1997
Mud habitats in deep water	Survey	National contract data, DEFRA MB102 2C	JNCCMNCR10000686	29/08/1997
Native oyster beds	Survey	National contract data, DEFRA MB102 2C		01/01/2009
Subtidal sands and gravels	Survey	National contract data, DEFRA MB102 2C		08/09/2006 And 27/04/1987
Seagrass beds	Survey	Hampshire and IoW Wildlife Trust		21/09/2009
Seagrass beds	Survey	National contract data, DEFRA MB102 2C		2006
Seagrass beds	Survey	marine recorder extract Sept 2010		15/06/2008 And 02/07/2006
Seapens and burrowing megafauna	Survey	National contract data, DEFRA MB102 2C	JNCCMNCR10000686	
Tentacled Lagoon Worm ( <i>A. Romijni</i> )	Survey	Natural History Museum (Sourced from: Environment Agency database)	Quantitative benthic survey of the Bembridge Harbour Lagoon	01/01/2003
Stalked Jellyfish ( <i>Haliclystus auricula</i> )	Survey	National Contract data, DEFRA MB102 2B		05/08/2007
Short-snouted seahorse ( <i>H. hippocampus</i> )	Survey	Seahorse Trust		2008
Short-snouted seahorse ( <i>H. hippocampus</i> )	Survey	National contract data, DEFRA MB102 2B		31/10/2004 And 01/11/2006
Long-snouted seahorse ( <i>H. guttulatus</i> )	Survey	National contract data, DEFRA MB102 2B		05/10/2003
Native oyster ( <i>O.edulis</i> )	Survey	National contract data, DEFRA MB102 2B		1971-2009
Native oyster ( <i>O.edulis</i> )	Survey	Marine Recorder update Aug 2010		27/04/2008
Peacock's Tail ( <i>Padina pavonica</i> )	Survey	National contract data, DEFRA MB102 2B	JNCCMNCR10000265	1973-1079
Peacock's Tail ( <i>Padina pavonica</i> )	Survey	IoW Natural History Society		2009
Lagoon Sand Shrimp ( <i>Gammarus insensibilis</i> )	Survey	Hampshire and IoW Wildlife Trust		
Sea snail ( <i>Paludinella littorina</i> )	Survey	National contract data, DEFRA MB102 2B	MPALAYERS000004	
Starlet Sea anemone ( <i>Nematostella vectensis</i> )	Survey	Hampshire and IoW Wildlife Trust		
Common Maerl	Survey	Natural England	South Wight Maritime survey	2010

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### 14. Stakeholder support for the site

The RSG as a group reached consensus that this site should be put forward in their final recommendations.

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 Bembridge rMCZ 22
Yachting	RYA	Support on basis that there is no overlap between recreational boating and seagrass beds.
Kite Surfing	British Kite Surfing Association	Very contentious area, but packed with FOCI. Supported but with doubts about effectiveness if MCZ goes ahead due to activity levels.
Sea Angling		Recover is not acceptable to RSA. Maintain is preferred with codes of conduct.
Fishing	Local Fisheries Representatives	Variable support subject to further work.

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Fishing - FPO, beam trawling		Very little support, mainly due to potting being so badly affected, and shipping anchorage.
Birds	RSPB	Bembridge - support as this will benefit seabird foraging, particularly sandwich tern.
Wildlife Trusts	Hampshire Wildlife Trust	I support this site but believe that the CO for burrowing megafauna should be the same for deep water mud and subtidal mud and it should be recover, including for towed fishing gear.
Marine Ecology	Seasearch	Strongly support this rich area, supporting rare examples of FOCI for the region. Suggest anchoring can be managed to avoid/minimise damage to mud and burrowing megafauna.
Marine Wildlife	Marine Conservation Society	<u>Support site</u> . Recover all broadscale habitats to protect from bottom towed fishing gear.
Heritage and Archaeology	English Heritage	Support with usual provisos for management measures for archaeological investigation on littoral or at bottom of cliff.

### 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) process<sup>4</sup> and then sense-checked at the national level<sup>5</sup>. 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](http://www.balancedseas.org).

<sup>4</sup> The process of establishing conservation objectives is outlined in the [Conservation Objectives Guidance](#) (JNCC /NE 2011)

<sup>5</sup> 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
A5.2 Subtidal Sand	MAINTAIN			
A5.3 Subtidal Mud	MAINTAIN but see notes in final column	Commercial shipping (anchoring)		<p>New data from the Ports sector presented at the final RSG (August 2011) showed the anchorage at St Helen's Rd to be much larger than previously thought and that it overlaps with subtidal mud, seapens and burrowing megafauna and is very close to mud habitats in deep water. In addition, it was agreed that anchoring occurs in a wider area than the anchorage itself.</p> <p>The new data means that the CO will need to be re-assessed and will most probably change to RECOVER which would greatly concern the Ports and Shipping sector although NE said that potential mitigation measures would be explored. Recreational sailing sector noted that recreational anchorages must be taken into account as well especially with regards to displacement.</p>
A5.4 Subtidal mixed sediments	MAINTAIN			
Maerl beds	RECOVER	Fishing - benthic trawling (bottom gear)	IFCA suggested no overlap of trawling with this feature, but if the CO stays as Recover re is an IFCA code of conduct would be appropriate	A reference area has been proposed for this feature, and if it goes, ahead the CO would also be RECOVER
	RECOVER	Tourism & recreation (anchoring by recreational vessels)	MMO code of conduct	
Mud habitats in deep water	MAINTAIN			CO was previously RECOVER but was changed in the SNCB sense check. This feature overlaps with sea pen and burrowing megafauna so see below for discussion; CO and management measures would need to be the same for both features
Rossworm ( <i>Sabellaria spinulosa</i> ) reef	RECOVER	Shipping (anchoring)		See comments on Subtidal mud with regards to St Helens Rd commercial anchorage
	RECOVER	Tourism & recreation (anchoring by recreational vessels)	MMO code of conduct	Both the LG (July 2011) and RSG (Aug 2011) noted the major concern from RSA sector about restrictions on anchoring in this area, particularly mainland anglers who use the area frequently
Seagrass beds	RECOVER	Fishing - potting/creeling	IFCA code of conduct if CO stays as recover	IFCA and LG agree that there is no overlap of these fishing activities. CO to be reassessed and MAINTAIN may be suitable
	RECOVER	Fishing - shellfish harvesting (towed)		

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Feature	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
		dredging)		
	RECOVER	Tourism & recreation (anchoring by recreational vessels)	MMO code of conduct if CO stays as Recover	At the LG (July 2011), the RYA said think there is no major overlap of activity with feature. Racing markers are placed in the season but thought not to have an impact. Only potential impact is occasional dredging of channel into Bembridge Harbour and a popular anchoring spot in southern section of Priory Bay.
Native Oyster ( <i>Ostrea edulis</i> ) beds	RECOVER MAINTAIN (See IFCA comment)	Fishing - set netting	IFCA recommend CO changes to MAINTAIN  IFCA code of conduct if CO stays as Recover	LG (July 2011) agreed with IFCA suggestion to change the CO to MAINTAIN - only 2 set netting vessels operate in area so low intensity  RSG (Aug 2011) agreed change to CO to MAINTAIN
	RECOVER	Fishing - shellfish harvesting (towed dredging)	IFCA code of conduct if CO stays as Recover	LG (July 2011) said there is some activity in north of site, but not in Sandown Bay or Ventnor area; Lack of certainty about impact
Sea-pen and burrowing megafauna communities	RECOVER	Fishing - potting/creeling	IFCA code of conduct requiring fishermen to avoid the feature, but a survey is needed first to identify precise locations	At the LG (July 2011), WT said this feature refers to spoon worms which is the characteristic fauna of this community in the Balanced Seas area (sea pens are found further west – Finding Sanctuary).  LG fishing representatives said (July 2011) that this is a heavily potted area (whelk and lobster) although not as intense as indicated in previous LG reports and Fisherman.  RSG (Aug 2011) suggested the burrowing megafauna should be resurveyed as the project data points are from 1995 but the Wildlife sector said that the data is indicative of where these species can and have occurred in the past.
	RECOVER	Fishing - shellfish harvesting (towed dredging)	IFCA code of conduct	
	To be considered	Commercial anchoring	Commercial anchoring not assessed as part of VA.	At the LG (July 2011), WT said there are spoon worm records across St Helen's Roads. See comments as for subtidal mud
Tentacled Lagoon Worm ( <i>Alkmaria romijni</i> )	MAINTAIN			
Lagoon Sand Shrimp ( <i>Gammarus insensibilis</i> )	MAINTAIN			
Stalked Jellyfish ( <i>Haliclystus auricula</i> )	MAINTAIN			
Long-snouted seahorse ( <i>Hippocampus guttulatus</i> )	MAINTAIN			
Short-snouted seahorse ( <i>Hippocampus</i> )	MAINTAIN			

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Feature	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
<i>hippocampus</i> )				
Starlet sea anemone ( <i>Nematostella vectensis</i> )	MAINTAIN			
Native Oyster ( <i>Ostrea edulis</i> )	RECOVER	Fishing - shellfish harvesting (towed dredging)	IFCA code of conduct if CO remains as RECOVER	Comments as for native oyster beds above. LG (July 2011) said that there is no oyster dredging in the southern part of the site where the records occur.
Peacock's Tail ( <i>Padina pavonica</i> )	MAINTAIN			
Sea snail ( <i>Paludinella littorina</i> )	MAINTAIN			

### 16. Evolution of the site recommendations

A broad area of interest was identified in this area in September 2010 (RSG 4, Sept 2010) to capture the high numbers of ENG FOCI features present along the east coast of the Isle of Wight that are not protected by the South Wight Maritime SAC and other designations. In order to facilitate management, the eastern boundary was aligned with the SAC and extended out to the Nab Tower (RSG 6, January 2011). At the Isle of Wight site meeting in February 2011, local stakeholders questioned the condition of the subtidal broad-scale habitats, which were suggested as being impacted by an aggregate dredging licence area, fishing, anchoring and shipping, and so the seaward boundary was brought westwards to surround only the infralittoral rock habitats (particularly A3.3) and exclude the subtidal sediment habitats. At the same time, the northern and southern boundaries were extended outwards to capture additional FOCI features. These adjustments were supported by most sectors and this slimmer site, with a boundary closer to shore, was submitted to the SAP in the 3<sup>rd</sup> Progress Report.

Following a review of the contribution of existing protected areas to meeting the ENG criteria (the gap analysis), the infralittoral rock (A3.3) within this site were found to be protected by the South Wight Maritime SAC, which meant that the site was thus protecting very little sea bed. In Feb 2011, the RSG looked again at the quality of the subtidal sediment habitats as it had been determined that not all areas of the aggregate licence area were actually dredged, the aggregate license area would not be renewed when it expired (2012) and there was a commitment to leave the seabed in a similar condition to before it was dredged (RSG 7, Feb 2011). At the Solent Local Group in April 2011, it was therefore recommended that the seaward boundaries should be extended out to include the dredging area.

At the same Local Group meeting, the southern boundary was moved to avoid the Nab anchorage. A commercial anchorage (St Helen's Road Anchorage) was already included in the site, on the assumption that anchoring would be compatible with the features for protection (Solent Local Group, April 2011) though it was understood that the level of exposure would have to be taken into account in the vulnerability assessment (RSG 8 April 2011). A CO of MAINTAIN was determined for the features in the area of the anchorage during the vulnerability assessment, but it was subsequently recognised that anchoring occurs at a much higher intensity than the project's data showed. A number of options for addressing this were discussed, including moving the northern boundary southwards to exclude the anchorage. The RSG decided that the recommendation should go forward without making this revision, but that further information should be gathered on this issue before decisions are taken about the site. This issue is discussed further in the next section.

At the RSG's meeting in April 2011, the boundary was extended south to include a small patch of A4.2 habitat had been revealed and was needed to meet the targets, but it was subsequently found to be protected by the South Wight SAC, and this part of the boundary was moved back at RSG 9B in May 2011.

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](http://www.balancedseas.org).

### 17. Implications for Stakeholders

The following issues are associated with this site:

- The shipping and ports sectors are very concerned about the potential impact of an MCZ on the large commercial anchorages occurring within this site (St Helen's Road and Nab anchorage). The spatial data held by the project team is the best available data provided by the shipping / ports sectors, but stakeholders feel it does not fully represent the anchoring area used by commercial vessels and that the pressure on features is likely to be far greater than currently noted. Despite provision of an updated data layer for commercial anchorages, the level of commercial anchoring activity was underestimated and it is now recognised that a MAINTAIN CO for subtidal mud and other features in

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this area, as determined in the vulnerability assessment, is probably not appropriate given the actual extent and intensity of anchoring and that the CO might need to be RECOVER (RSG 11, Aug 2011). This would potentially lead to restrictions on anchoring which would not be feasible in the circumstances: the anchorage has been in existence for over 50 years, as a result of the sheltered nature of this location, and it is critical for Southampton and Portsmouth ports for both commercial and safety reasons. Moving such a large and busy anchorage was deemed by the relevant sectors to be unreasonable and impractical. Two other options were discussed:

- Making the site smaller and excluding the subtidal mud (A5.3) and seapens: however this would mean the replication principle would not be met for sea pen and burrowing megafauna and mud habitats in deep water FOCI.
- Excluding those parts of the anchorage where the features occur. This option was the most attractive to the Ports and Shipping sector.
- Investigating potential mitigation measures for anchoring further

It was concluded that the first step is to obtain more detailed information on the extent of the anchorage and to determine more accurately the vulnerability of the features to anchoring pressure.

- A large aggregate license area occurs within this site, but has recently been relinquished.
- The Bembridge area is extremely popular with the RSA sector; to date, anglers have been closely involved in all discussions and are broadly supportive of the site; however they are very concerned about any potential impacts the site might have on anchoring or angling itself
- The fisheries sector has been involved in discussions on this site, but further information needed and it is clear that there is likely to be limited or no support if there are restrictions on the potting sector or other local fisheries. There are a dozen static gear boats working from Bembridge, and local restaurants rely totally on local seafood to attract business. Most of the Ventnor fleet and beach based south coast boats rely on potting and netting in Sandown Bay during the winter and prevailing SW gales.
- The Crown Estate expressed concern that this site overlaps with an aggregates production licence but the RSG BMAPA aggregates representative has said this area has been relinquished.

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](http://www.balancedseas.org).