

Hythe Bay rMCZ no 26

Marine Conservation Zone: Selection Assessment Document

Version and Issue date V1.0 07.09.11	Amendments made Draft final recommendations refined by the RSG and Local Groups in July 2011 and finalised by the RSG 2/3 August 2011.
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1. Site name Hythe Bay rMCZ no 26 Contains:- Hythe Flats draft Reference Area no. 8	3. Site surface area 4155 ha 41.55 km ²
2. Site centre location ETRS89 N51 2' 28.204" E1 5' 4.698"N51 2.470' E1 5.078' (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 Hythe Bay ¹

Feature type	Feature name	Area / No. of records ²
Broad-scale habitats	A5.3 subtidal mud	37.02 km ²
Habitat FOCI	Mud habitats in deep water	79 records
	Seapens & burrowing megafauna	28 records

6. Features within Hythe Bay not proposed for designation ³

Feature type	Feature name	Reason features are not proposed for designation
Broad-scale habitats	A2.2 Intertidal sand and muddy sand	Targets met by existing MPAs
	A2.3 intertidal mud	Targets met by existing MPAs
	A2.4 intertidal mixed sediments	Targets met by existing MPAs
	A5.1 subtidal coarse sediment	
Habitat FOCI	Rossworm (<i>Sabellaria spinulosa</i>) reef	Key feature in Kent Wildlife Trust proposal but not one of the best examples in the region
Species FOCI Low mobility	Native Oyster (<i>Ostrea edulis</i>)	
Species FOCI High mobility	European Eel (<i>Anguilla anguilla</i>)	
	Smelt (<i>Osmerus eperlanus</i>)	
	Undulate Ray (<i>Raja undulata</i>)	

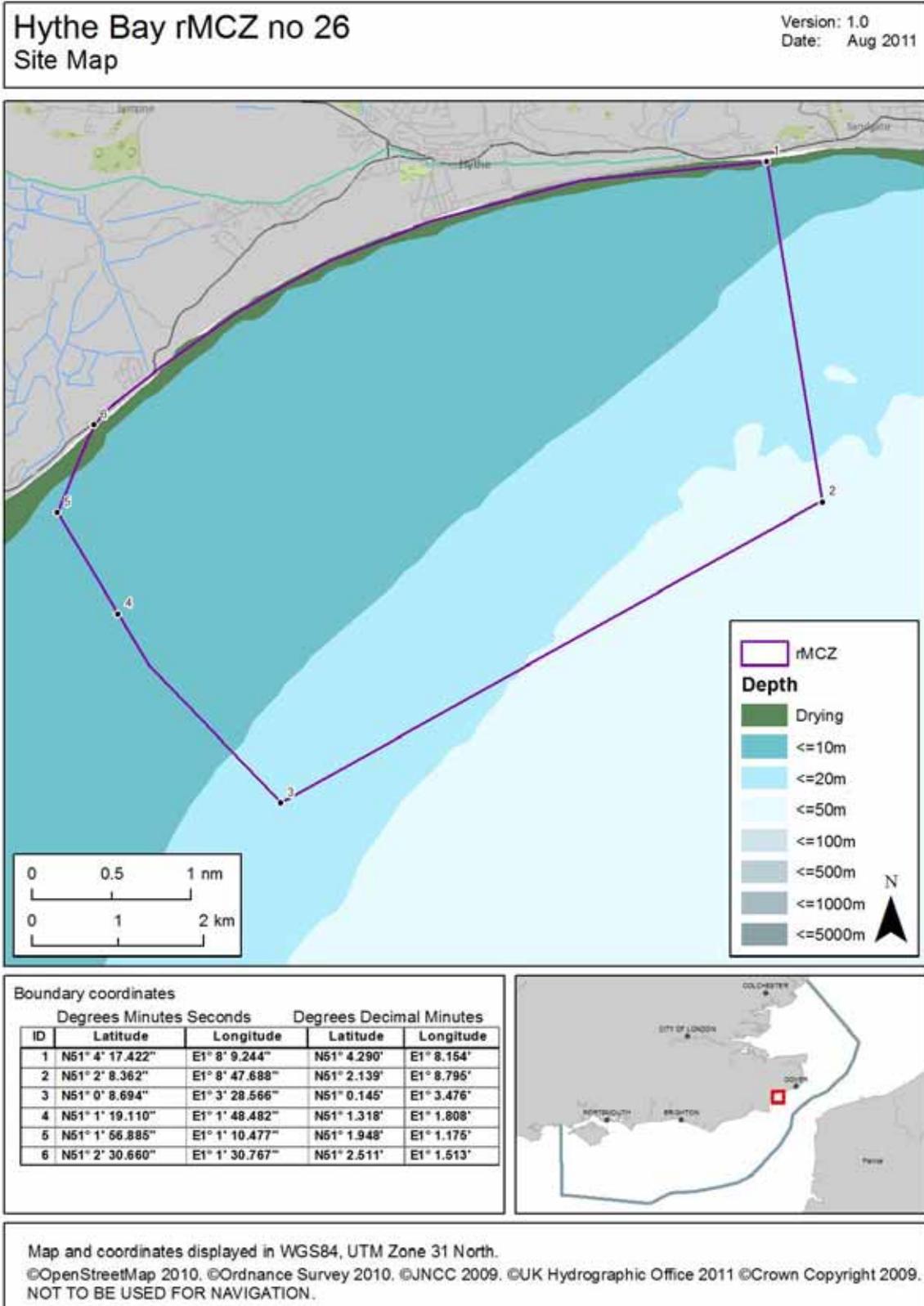
¹ Sources of information relating to these features are listed in Section 13.

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

The site lies in the western part of Hythe Bay, abutting the shoreline, and overlapping the Hythe Bay Danger Area. Within the site, a rich seapen and burrowing megafauna community is present in the soft sediment, which is presumed to be continuous across Hythe Bay, extrapolating from the data from 20 point samples taken annually over 10 years around the Hythe long sea outfall. Importantly, this biotope is somewhat richer here than the national biotope description, as the samples contain the Spoonworm (*Maxmuelleria lankesteri*), a dominance of *Ampelisca (tenuicornis/brevicornis)* in places, the burrowing anemone (*Cerianthus lloydii*) and large burrowing shrimps *Callianassa* species and *Upogebia* species which have extensive and deep burrow networks. The Hythe version of this biotope also stands out from any other in the country in the high abundance of the burrowing mollusc *Saxicavella jeffreysi*, found in densities of almost 1000 individuals per m². Many other species of mollusc are present within these samples and high densities of some usual groups were also recorded, including *Phoronis muelleri* and *P. pallida*. Overall the site is considered a biodiversity hotspot within the Balanced Seas area. Inshore of the main spoonworm muddy areas are extensive areas of *Ampelisca* mats, exceeding densities of over 5,000 individuals per m², again with large numbers of other species present including burrowing shrimps, and dense mollusc communities.

This site is thought to be entirely subtidal mud A5.3 (as verified by grab sample data from Hythe Bay Sea Outfall Survey 1982-1993), rather than what is shown on the broad-scale habitat map (A5.1 subtidal coarse sediments). To meet targets appropriately, the area of the site has been calculated as subtidal mud. Channel Coastal Observatory has high-quality multibeam data/EUNIS L3 that should inform site verification

Zoned management has been suggested for this site, as a result of a joint proposal by the Wildlife Trust and fisheries sector, and six discrete 'management units' have been proposed, four of which would have no trawling but continued static gear fishing, and two of which would have no fishing at all. The vulnerability assessment concluded that these areas were too small to achieve the conservation objectives of the site, considering that benthic trawling should be prohibited throughout the site. However, the fisheries sector made it clear that if this was to be recommended for this site, they would withdraw their support not only for this site, but also 11.1, 11.2 and 11.4 (three sites in which they have agreed to cease trawling if rMCZs were to be designated). The Local Group therefore recommended that the management units should be recommended, and this was supported by the RSG. The RSG recommended that trawling activity should not exceed its current level, and that increased effort from new vessels or displacement of vessels into this site from elsewhere should be prevented through a licensing system.

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.

Hythe Bay is the stretch of coast from Folkestone to Dungeness, and this site is located in the most sheltered part of the Bay, opposite Hythe itself. This site has been selected for its very high biodiversity and its unusual and high density communities of invertebrates, and particularly the habitat FOCI seapens and burrowing megafauna.

According to the UKSeaMap/MESH (v7 JNCC) data, the EUNIS Level 3 habitat in the site appears to be subtidal coarse sediment throughout, but those in the RSG with knowledge of the seabed in this area agreed that this is not correct and that the habitat is soft sediment, rich in burrowing megafauna community (KWT, 2010). For the purposes of meeting ENG targets, the surface area of

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the Hythe Bay site has therefore been described as A5.3 subtidal mud (see Broad-scale habitats map.)

Supporting evidence for this habitat comes from benthic sample data collated by the Environment Agency, which consists of 20 point samples taken annually over 10 years around the Hythe long sea outfall and analysed by Heriot Watt University Institute for Offshore Engineering. According to these EA-collated data, Hythe Bay contains a specific biotope community (SS.SMU.CFiMu.MegMax - Burrowing megafauna and *Maxmuelleria lankesteri* in circalittoral mud), characterised by the presence of the spoonworm *Maxmuelleria lankesteri* and one of the qualifying biotopes for the Habitat FOCI: Seapens and Burrowing Megafauna (see FOCI map.) This biotope stands out from any other in the country due to its high abundance of the burrowing mollusc *Saxicavella jeffreysi*, in densities of almost 1000 individuals per m² (KWT, 2010). This bivalve lives in sand and sandy mud offshore, scattered around the British Isles but is never common (Tebble, 1966), yet within the Hythe habitat it is certainly common and worthy of note in its own right. Inshore of the main spoonworm muddy areas are extensive areas of *Ampelisca* mats, exceeding densities of over 5,000 individuals per m², again with large numbers of other species present including burrowing shrimps *Callianassa* and *Upogebia*, the burrowing anemone (*Cerianthus lloydii*) and dense mollusc communities (see Features map.)

Survey samples show that the spoonworm and burrowing megafauna biotope occurs across the whole of the block of regular sampling stations in the northern part of Hythe Bay, and across the central part of the bay to the south (marked with red boxes on the chart in Fig 1. below). Another biotope, with abundant *Ampelisca*, (SS.SMU.lSaMu.AmpPlon) has also been recorded at several of these survey points (marked with green circles).

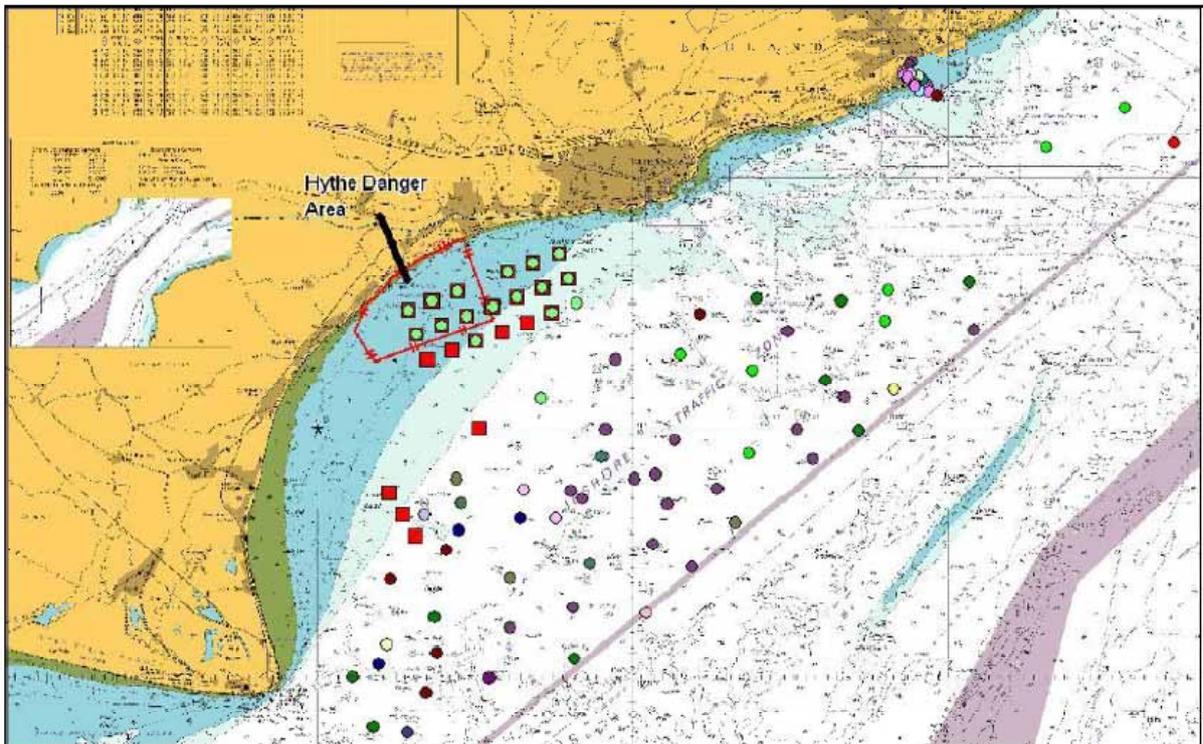


Figure 1. Spoonworm and burrowing megafauna biotope (red squares) and *Ampelisca* mat biotope (green circles) occurring in Hythe Bay

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Targeted Seasearch surveys undertaken in 2010 confirmed that spoonworms are still present and that there is a muddy seabed unusually densely populated with burrowing crustaceans, molluscs and polychaetes (see Figure 2). Hythe Bay is 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).



Figure 2. Burrows, molluscs and anemones in soft sediment in Hythe Bay

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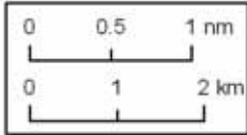
Broad-scale habitats (EUNIS Level 3) with Conservation Objectives



IMPORTANT: This EUNIS L3 habitat has been classified according to biotope records from the Long Sea Outfall survey, collated by EA (see Section 13). Only those broad-scale habitats with Conservation Objectives have been shown here. To see those habitats that have not been proposed for designation, please look at Section 6.

Broad-scale habitats with Conservation Objectives:

- Subtidal mud biotope



Broad-scale habitats with Conservation Objectives:
- A5.3 Subtidal mud*

*Stakeholders wish to note that the entire site is considered to be A5.3 Subtidal mud, as indicated by these data survey points of the subtidal mud biotope.

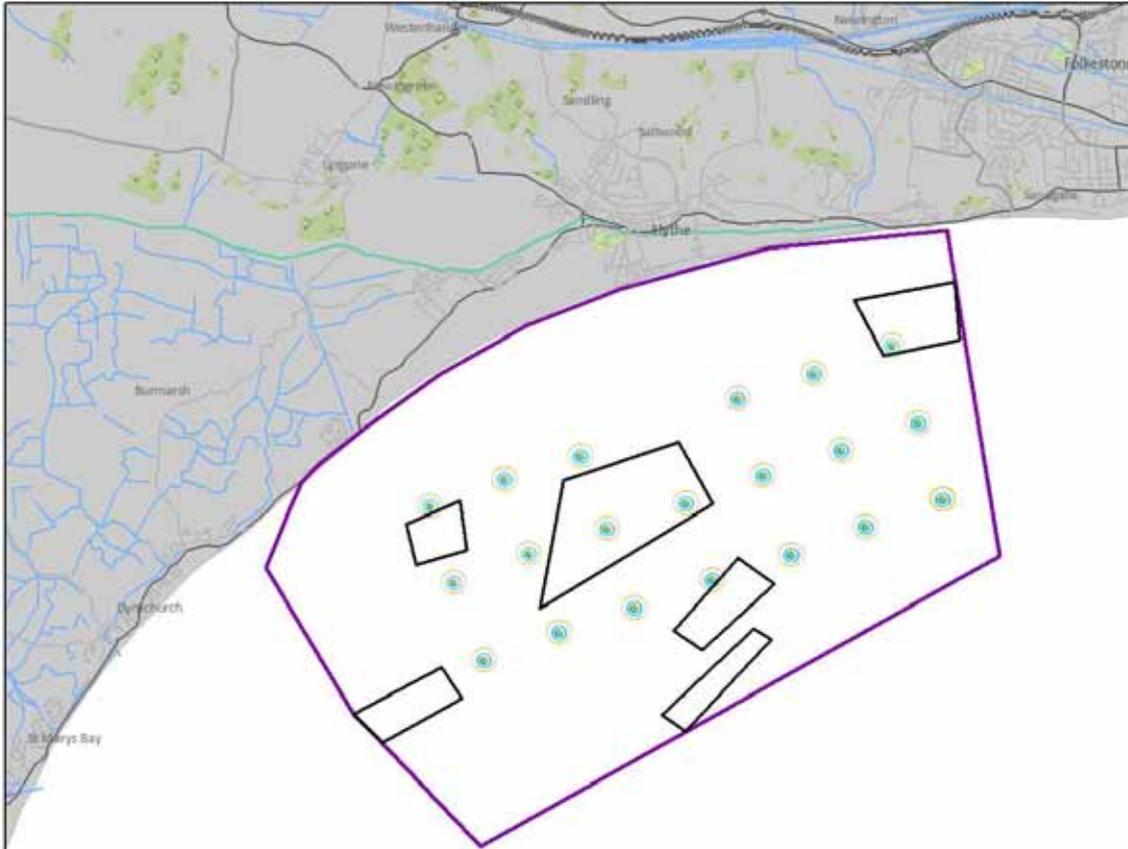


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Habitat and Species FOCI Conservation Objectives



Habitat FOCI

- Proposed Management Units
- Sea pens and burrowing megafauna
- Mud habitats in deep water

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.

IMPORTANT: please note that many of these features overlap one another.

Legend

- rMCZ

0 0.5 1 nm

0 1 2 km

N



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10. Site boundary

The original boundary of the site was suggested by Kent Wildlife Trust in their supporting site document (KWT, 2010), but was adjusted later to take into account the management units proposed jointly with the local fishing fleet (independent meeting, see Section 16). The landward boundary follows the Mean High Water mark from just west of Folkestone Harbour westwards to just before Dymchurch. From here, the seaward boundary follows that of the Danger Area out to its southern point, before extending further out to enclose the survey data points that indicate the location of seapens and burrowing megafauna habitat. This area is being proposed with very specific zoning for its management, developed jointly by local fishermen and Kent Wildlife Trust. The proposed boundaries of the management units are shown on the map for Habitats and Species FOCI (see above) and in Figure 3 with their associated activities and are described below in Section 16.

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 not associated with any existing designations

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

Information	Type of information	Source	Name of survey	Date
A5.3 biotope information	Survey	Hythe LSO survey 1983-1992 (via Environment Agency biotope database)	Hythe LSO survey 1983-1992	1983-1991
Mud habitats in deep water	Survey	Hythe LSO survey 1983-1992 (via Environment Agency biotope database)	Hythe LSO survey 1983-1992	1983-1991
Seapens and burrowing megafauna	Survey	Hythe LSO survey 1983-1992 (via Environment Agency biotope database)	Hythe LSO survey 1983-1992	1983-1991
Rossworm (<i>Sabellaria spinulosa</i>) reef	Survey	Data sourced from Environment Agency database		01/Aug/1983 And 01/Aug/1984
Native oyster (<i>O.edulis</i>)	Survey	National contract data, DEFRA MB102 2B		01/08/1999

References (additional information can be found in the Bibliography)

- KWT (Kent Wildlife Trust). December 2010. Information for the Balanced Seas Regional Stakeholder Group to Inform Discussions on Hythe Bay
- 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.
- 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.
- TEBBLE, N. 1966. *British Bivalve Seashells: A Handbook for Identification (British Museum)* London: British Museum (Natural History)

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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 recorded the following in a table at the final RSG meeting in August 2011; their comments have been transcribed verbatim:

SECTOR	ORGANISATION	COMMENT for Hythe Bay rMCZ 26
Yachting	RYA	Support. No impact on recreational boating.
Sea Angling		Change Boundary 200m from shore, keep the area as maintain to protect local fleet and [?] activity.
Fisheries	Local Fisheries Representatives	The strong opposition to modify the agreement that was reached earlier will lose support from fishing industry.
Fishing - FPO, beam trawling		No support as it stands - possible 6 finite areas could be "no trawl areas".
Birds	RSPB	Support site but disappointing that management areas showing where trawling will not happen are so tightly drawn - these areas will not achieve much recovery as required by CO.
Wildlife Trusts	Hampshire Wildlife Trust	I support this site and the COs and believe they should apply across the site.
Marine Wildlife	Marine Conservation Society	<u>Support site</u> . No trawling would be acceptable for MCS. Trawling in the site is not acceptable over broad habitats.
Statutory environmental	Environment Agency	Broadly support.
Heritage and Archaeology	English Heritage	Support as long as I+E (archaeological) investigations allowed along the littoral and investigation of wrecks.

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) process⁴ and then sense-checked at the national level⁵. 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

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

⁵ VA results were standardised across all four regional projects but the fisheries activity data is still undergoing assessment.

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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.

Feature	Draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
5.3 Subtidal Mud	RECOVER	Fishing - benthic trawling (bottom gear)	IFCA byelaw	The LG agreed RECOVER within separate 'management unit' areas within the site but not outside these.
Mud habitats in deep water	RECOVER	Fishing - benthic trawling (bottom gear)	Split management could be an option if a suitable area within it could be agreed with industry for full protection (this was agreed)	At the RSG, the local trawling fleet representative agreed that a code of conduct requiring avoidance by trawlers of the distinct 'management areas' within the site, would be acceptable.
Sea-pen and burrowing megafauna communities	RECOVER	Fishing - benthic trawling (bottom gear)		RSG suggested that trawling activity levels in the rest of the site should be maintained at their current level , and that displacement into the site of commercial fishing effort from other areas should not be considered acceptable

16. Evolution of the site recommendations

A larger area in Hythe Bay was suggested by the Sussex & South Kent Local Group at their meeting in July 2010, and this area was then also proposed for consideration by the RSG by the SEEBF (South East England Biodiversity Forum) at its Inshore Task Group in December 2010 (SEEBF, 2010). The area as proposed was not acceptable to the local trawling fleet who recognised that it might lead to restrictions on their activities, as it is a key area for them being the only fishing ground accessible to them above the 51 degree latitude line and thus within the North Sea fishing area, which allows them quota from another fishing district.

During the Dover Sites Meeting (07.01.2011), since no agreement was reached, fishing and conservation representatives met independently to find a solution and the fishing sector suggested zoning the site whereby various areas would be avoided by the trawling, potting and netting sectors. Four areas are proposed for no-trawling but with potting and set-netting allowed at current levels; two areas to be fully closed to fishing. Figure 3 shows the site boundaries as they were first proposed in the KWT proposal (2010), the 'management units' suggested at the wildlife and fishing sectors meeting with the associated activities that would be allowed, and a subsequent boundary adjustment proposed by KWT to take these units into account.

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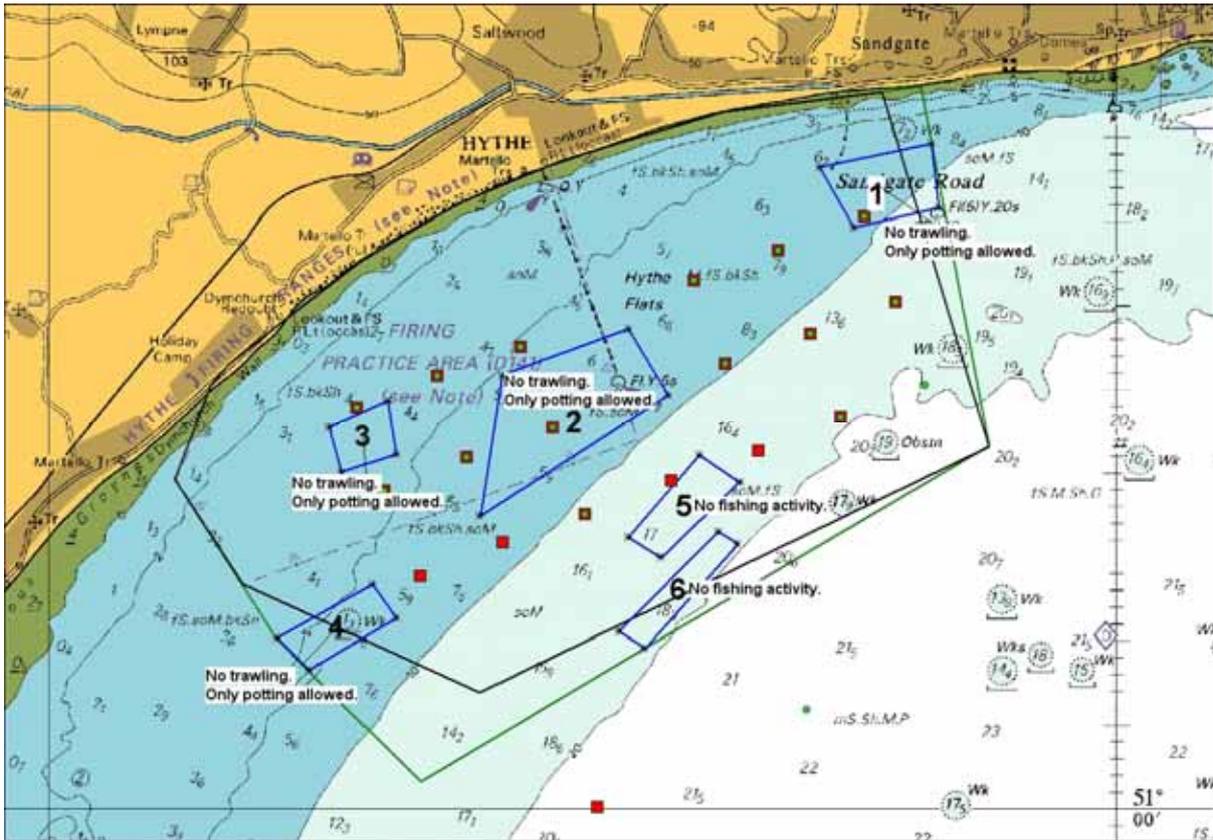


Figure 3. Original KWT proposal boundary (black line) was adjusted (green line) to incorporate 'management units' (blue polygons) suggested by local fishing sector where fishing activities would be voluntarily restricted

The rationale and boundaries agreed at this meeting were presented to the RSG at their meeting in February 2011, where they added the suggestion of licensing existing vessels to prevent boats from other fleets using the area. It was also suggested that management unit no 5 (see Fig 3) offered good potential as a reference area, being likely to contain the feature for protection but no fishing activity (see sheet for rRA 8 Hythe Flats).

During the vulnerability assessment, the SNCBs considered the management units to be too small to deliver the appropriate ecological benefits necessary, and so concluded that a CO of RECOVER was needed over the entire extent of A5.3 Subtidal Mud (i.e. the full extent of the site) in relating to benthic trawling. At the Local Group meeting (26.07.11), the inshore trawling sector made it clear that it would accept the restriction on their fishing proposed for rMCZs 11.1, 11.2 and 11.4 (Dover to Deal, Dover to Folkestone and Folkestone Pomerania, respectively) only if the previously agreed arrangement of management units at Hythe Bay was put forward; if the recommendation for Hythe Bay were to be accompanied with a proposal to ban trawling throughout, they would withdraw their support from the other three rMCZs.

At their final meeting in August, the RSG agreed that, since it was preferable to recommend a site with local stakeholder support than without, it would continue to recommend Hythe Bay only with the proposed 'management units' as agreed, but strongly suggest that trawling activity in the site be maintained at its current level to prevent increased effort from new vessels or displacement of vessels into this site from elsewhere.

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 the site:

- Although initially contentious with the fishing industry, mixed management of the site is acceptable with this sector providing the agreement reached is adhered to: i.e. six management areas in which there would be no trawling: four areas to have no-trawling but potting and set-netting to be allowed at current levels; the two seawards areas to be fully closed to fishing; and continuation of fishing outside these areas. It should be noted that trawling in the proposed management areas is already partially restricted because of the presence of wrecks.
- It is recognised that the SNCBs do not consider that this arrangement provides adequate protection for A5.3 subtidal mud. Nevertheless, the RSG consider that a compromise is better, in order to obtain some protection for the important features found in the site.
- Hythe firing ranges and Danger Area overlap with this site and an extension is proposed to this area. During the meetings, the MOD noted that they will be submitting a proposal for an extension to the Hythe Danger Area. It is considered that this extension should have no effect on the rMCZ or the rRA.

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.