

## Marine Conservation Zone : Selection Assessment Document

<b>Version and Issue date</b> V1.0 07.09.11	<b>Amendments made</b> 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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<b>1. Site name</b> Stour and Orwell Estuaries rMCZ no 2	<b>2. Site surface area</b> 8690 ha                      86.90 km <sup>2</sup>
<b>3. Site centre location</b> ETRS89 N51 55' 46.111" E1 14' 33.812" N51 55.769' E1 14.564' (N.B. WGS 84 UTM 31N coordinates are provided in the map vertices)	<b>4. Biogeographic region</b> Southern North Sea

### 5. Features proposed for designation within Stour & Orwell Estuaries<sup>1</sup>

Feature Type	Feature name	Area <sup>2</sup> / no of records
Broad-scale habitats	A1.3 low energy intertidal rock	0.61 km <sup>2</sup>
	A2.4 Intertidal mixed sediments	0.11 km <sup>2</sup>
	A5.1 subtidal coarse sediment	31.11 km <sup>2</sup>
Habitat FOCI	Blue mussel beds	0.58 km <sup>2</sup>
	Estuarine rocky habitats	0.19 km <sup>2</sup>
	Honeycomb worm ( <i>Sabellaria alveolata</i> ) reef	0.02 km <sup>2</sup>
	Oyster beds	0.59 km <sup>2</sup>
	Peat and clay exposures	0.01 km <sup>2</sup>
	Rossworm ( <i>Sabellaria spinulosa</i> ) reef	0.45 km <sup>2</sup>
	Sheltered muddy gravels	28 point records
	Subtidal sands and gravels	1.05 km <sup>2</sup>

### 6. Features within Stour & Orwell Estuaries not proposed for designation<sup>3</sup>

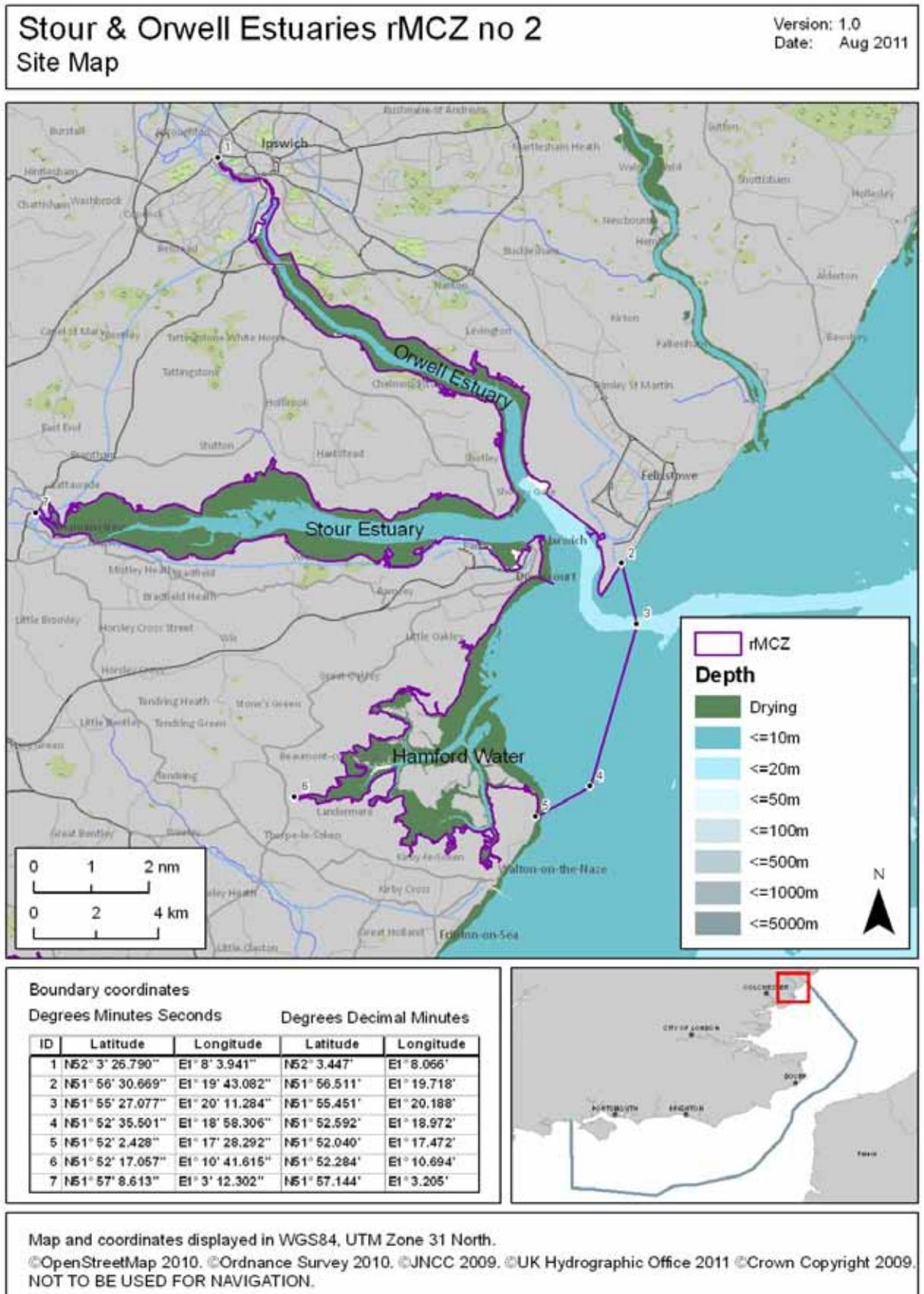
Feature Type	Feature name	Reason that feature has not been proposed for designation
Broad-scale habitats	A2.1 intertidal coarse sediment	Only small areas occur
	A2.2 Intertidal sand and muddy	Only small areas occur
	A2.3 Intertidal mud	Fully protected in Hamford Water SPA, Orwell Estuary SSSI, Stour Estuary SSSI, Stour & Orwell Estuaries SPA
	A2.5 Coastal saltmarshes and saline reedbeds	Fully protected in Hamford Water SSSI, Stour & Orwell Estuaries SPA
	A2.6 Intertidal sediments dominated by aquatic	Fully protected in Hamford Water, Orwell Estuary and Stour Estuary SSSIs
	A5.3 subtidal mud	Not a priority (only occurs at the mouth)
	A5.4 subtidal mixed sediments	Not a priority (only occurs at the mouth)
Species low mobility	Tentacled Lagoon Worm (A.	Fully protected within the Stour Estuary SSSI
	Starlet Sea Anemone	Fully protected within the Stour Estuary SSSI
High mobility Species FOCI	European Eel ( <i>Anguilla anguilla</i> )	Important here, but considered to receive protection under other regulations
	Smelt ( <i>Osmerus eperlanus</i> )	Not of particular conservation importance here
	Undulate Ray ( <i>Raja undulata</i> )	Not of particular conservation importance here
Habitat FOCI	Seagrass beds	Fully protected in Hamford Water SSSI, Orwell Estuary SSSI and Stour Estuary SSSI

<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.

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

7. Map of site



### 8. Site summary

The site contains the Stour Estuary, Orwell Estuary and Hamford Water, as well as the inlet of subtidal sand where they all converge, prior to meeting the Southern North Sea. The site contains a large amount of the regional distribution of low energy intertidal rock (A1.3), which is a primary reason for its recommendation, along with the large number of habitat FOCI present. The Stour and Orwell estuaries contain several examples of estuarine rocky habitats including an example of the Harwich Stone Band (Cementstone) habitat supporting interesting algal communities, which is known only from the Stour, Orwell and Deben Estuaries. Both estuaries also contain wild and unharvested Native Oyster beds, sheltered muddy gravels, peat and clay exposures, Rossworm (*Sabellaria spinulosa*) reef and subtidal sands and gravels, as well as extensive Blue Mussel beds. This site is also only one of two sites where the Honeycomb worm (*Sabellaria alveolata*) reef biotope has been recorded in the region. A population of Tentacled Lagoon Worm (*Alkmaria romijni*) and Starlet Sea Anemone (*Nematostella vectensis*) occur near the head of the Stour River, both protected by the Stour Estuary SSSI. The area is thought to be an important nursery area for various fish species and parts of the site have been identified as having high benthic species and biotope richness.

To achieve the draft conservation objectives in this site, benthic trawling and recreational anchoring might need to be managed. However, generally low levels of activity and existing byelaws mean that activities are generally considered to be at an acceptable level, according to the available information.

### 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 encompass the subtidal and intertidal areas of the Stour and Orwell Estuaries and Hamford Water, extending from the upstream mean high water limits to just beyond the mouth of the estuary confluences, including the deeper channel that runs from the Orwell Estuary mouth along the site's northern boundary and out to meet the sea. The Stour and Orwell Estuaries are relatively rich in species compared to other UK estuaries, with over 250 taxa recorded (Dyer, 2000), including a diverse fish, invertebrate and shrimp fauna (Dyer, 2006; Dyer, 2001). This high biological diversity is attributed to the saline stability present within these waters.

According to the UKSeaMap/MESH data (JNCC 2011 v.7), the site contains low energy intertidal rock, intertidal mixed sediments and subtidal coarse sediments (see Broad-scale habitats map.) Additional biotope data collected under various EIA surveys (Unicomarine) and provided by Harwich Haven Authority were translated by JNCC into the relevant EUNIS Level 3 habitats, with a view to incorporating this into the existing UKSeaMap/MESH data. However, the confidence assessment demonstrated the existing UKSeaMap/MESH survey data to be of higher quality and therefore the Harwich Haven data was not used for planning purposes. Two separate surveys have been conducted on the biology of the sediment in the Harwich Harbour Area and the adjoining areas of the River Stour and Orwell (Unicomarine, 1992), which found large differences between sites in terms of the number of species and individuals identified, likely to be due to dredging activities. Biological sampling of areas around the Deep Water Approach Channel to Harwich and Felixstowe Docks (Unicomarine 1998) indicated that coarser sediments supported a richer benthic fauna than areas with mobile sand. Here, the sediment seemed to be considerably firmer than at nearby sites, indicating that it is unlikely that water quality is responsible for the relative scarcity of species in the Harwich Harbour area (for further detail, please see Unicomarine, 1992).

Several examples of sheltered muddy gravels and estuarine rocky habitats can be found in both estuaries and in the case of the former, also in Hamford Water (see FOCI map). An example of the Harwich Stone Band (Cementstone) habitat is found just south of Harwich. This feature is a type of the habitat FOCI

'estuarine rocky habitats' and is only known from the Stour, Orwell and Deben Estuaries (Titley 2009), though Balanced Seas only have a single record for its occurrence where it has been identified as an Important Plant Area (Brodie *et al.* 2007) (see FOCI map). Both estuaries contain peat and clay exposures, subtidal sands and gravels, as well as extensive Blue Mussel beds (all of which have been recorded in numerous Unicomarine surveys). The Eastern IFCA have spatial data to confirm the presence of wild and unharvested Native Oyster beds in the Stour and Orwell Estuaries from their survey work, though these data may overestimate the distribution of this feature (Suffolk & Essex Local Group Meeting, July 2011). This site is also only one of two sites in the Balanced Seas region where both Rossworm (*Sabellaria spinulosa*) reef and the Honeycomb worm (*Sabellaria alveolata*) reef biotopes have been recorded together (project data shows both just east of Harwich), supported by data provided by Harwich Haven Authority from Unicomarine surveys. Biological surveys carried out to the south and south-east of Harwich and Felixstowe Harbours (Unicomarine 1993) found much richer fauna, largely based around these *Sabellaria* reefs. The distribution of the Rossworm reef appears to have changed very little between similar surveys (Dyer, 2004), though local stakeholders suggest that the presence of *Sabellaria* is doubtful around the Harwich Haven area (RSG 10, July 2011) and have also expressed concern that data for other ENG FOCI (e.g. Blue Mussel Beds) within the wider site may no longer be accurate. Nationally scarce brackish water species have been found in these estuaries and two ENG FOCI species are already protected by the Stour Estuary SSSI: Starlet Sea Anemone (*Nematostella vectensis*), typically found in creeks that run over the mudflats of both estuaries and near the head of the Stour, and the Tentacled Lagoon worm (*Alkmaria romijini*), located near the head of the Stour Estuary (Worsfold, 2002). The European Eel has been noted as one of the most important taxa present in the Stour and Orwell estuaries (Worsfold, 2002). The RSG believed the species to receive protection under existing regulations and did not select it for protection in the rMCZ, though this should be thoroughly verified, given its high priority in this site.

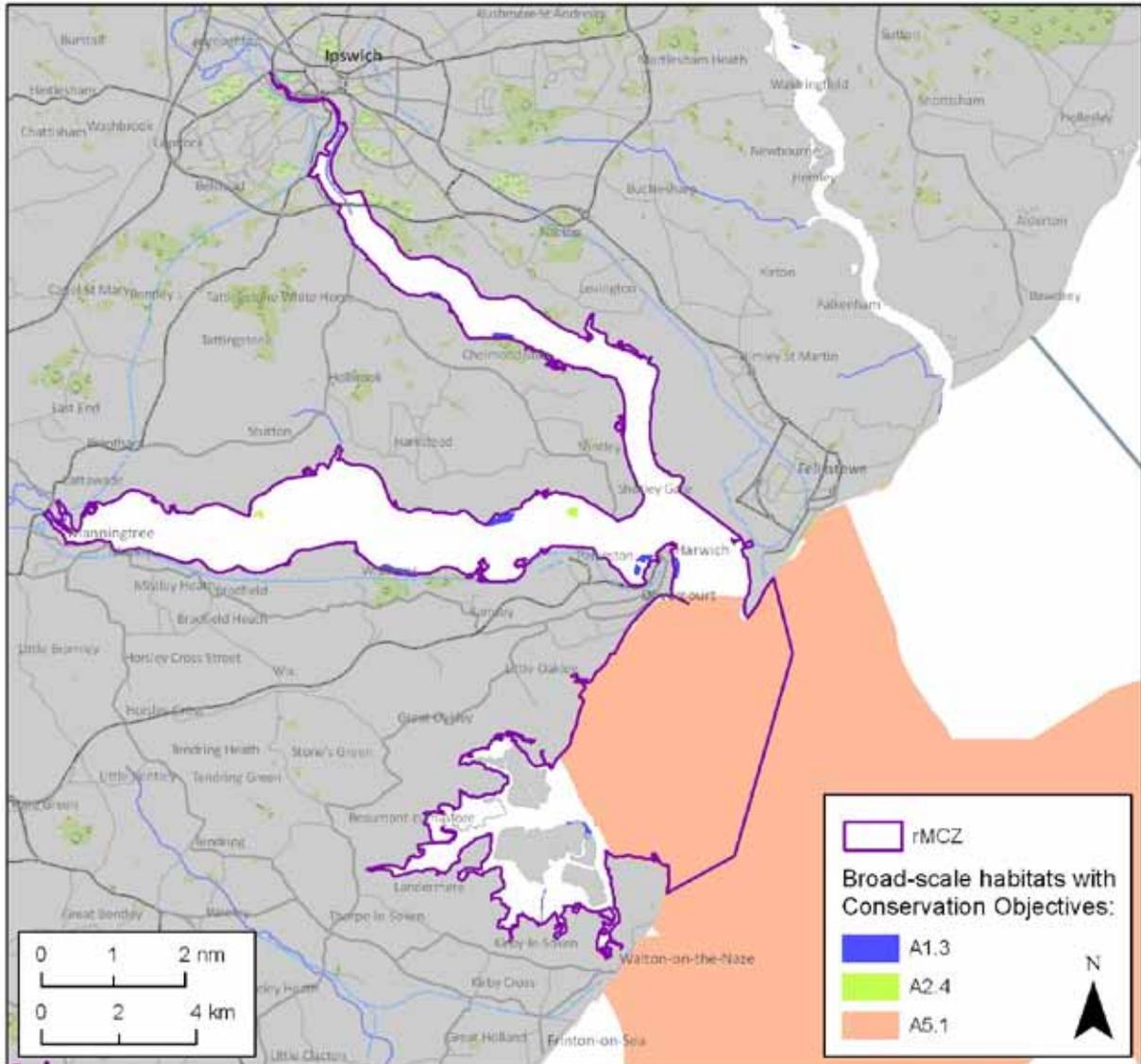
The Wildlife Trusts have identified various habitats and species considered to be important or rare in the Southeast and have provided spatial data records to the Balanced Seas (see Southeast Features map). According to their records (from the National Biodiversity Network), the Sea anemone (*Diadumene cincta*) and Horned wrack (*Fucus ceranoides*) were recorded in 1992 (the latter in several locations). Peacock Worm beds (*Sabella pavonina*) have also been recorded as 'Common' in two locations in the same year. This 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).

Brown/Pink Shrimp, Dover Sole, Herring, Bass, Cod and Whiting have been identified as the most important species present in the Stour and Orwell estuaries (Worsfold, 2002). In the Orwell estuary, Colclough (2010) found Sand-smelt nurseries and bass nurseries along the estuary; many nursery sites seem to be present for most of the year. Data from 6 sites that have been fished in Orwell since 2004 suggest that the whole estuary is a very important bass nursery ground, with the number of bass increasing significantly from none identified in a fish monitoring survey conducted in 1999 (Dyer, 2005) to many spotted in a survey conducted between December 2003 – 2004 (Ashelby, 2005). In addition, the Environment Agency considers the almost permanent presence of juvenile bass here to be unprecedented amongst British estuaries (Environment Agency unpublished dataset). Flounder nurseries are also present at Trimley and off Colimer Point, and appear to be concentrated towards the head of the Stour Estuary at Doverhouse and Mistle (Colclough, 2010).

Stour & Orwell Estuaries rMCZ no 2

Version: 1.0  
Date: Aug 2011

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



Broad-scale habitats with Conservation Objectives:

- A1.3 low energy intertidal rock
- A2.4 intertidal mixed sediments
- A5.1 subtidal coarse sediment

**IMPORTANT:** 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.

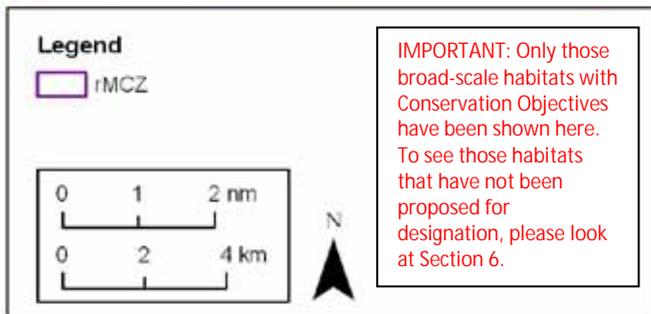
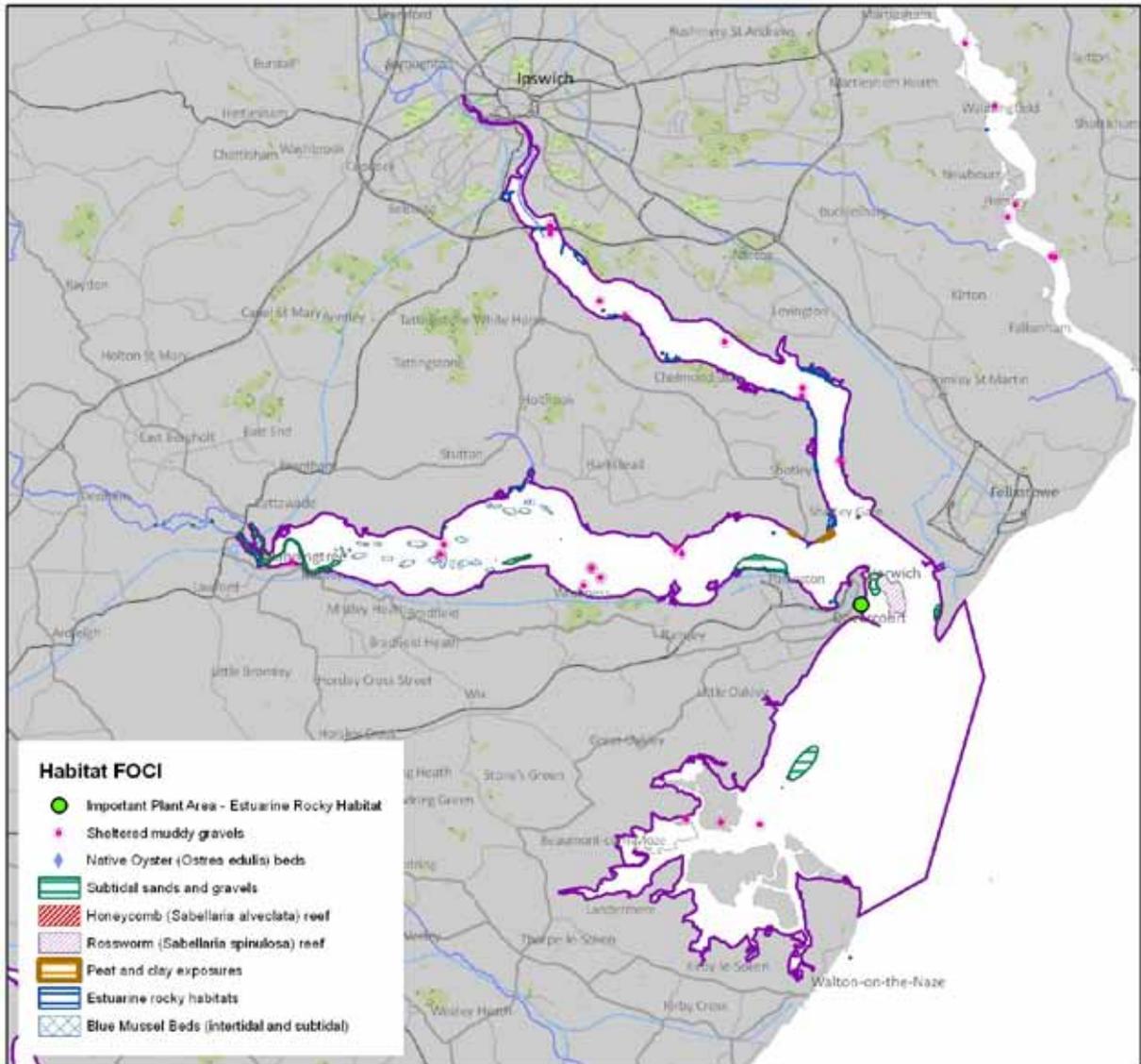


Map and coordinates displayed in WGS84, UTM Zone 31 North.

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Stour & Orwell Estuaries rMCZ no 2  
Habitat and Species FOCI Conservation Objectives

Version: 1.0  
Date: Aug 2011



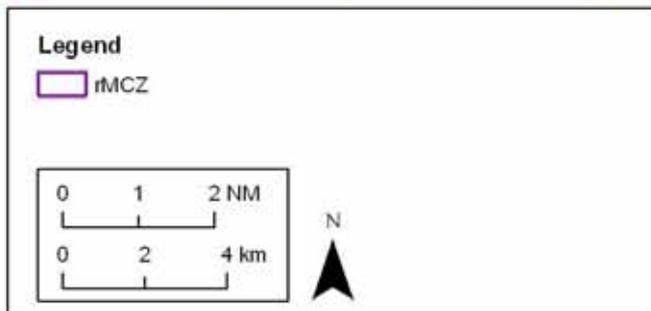
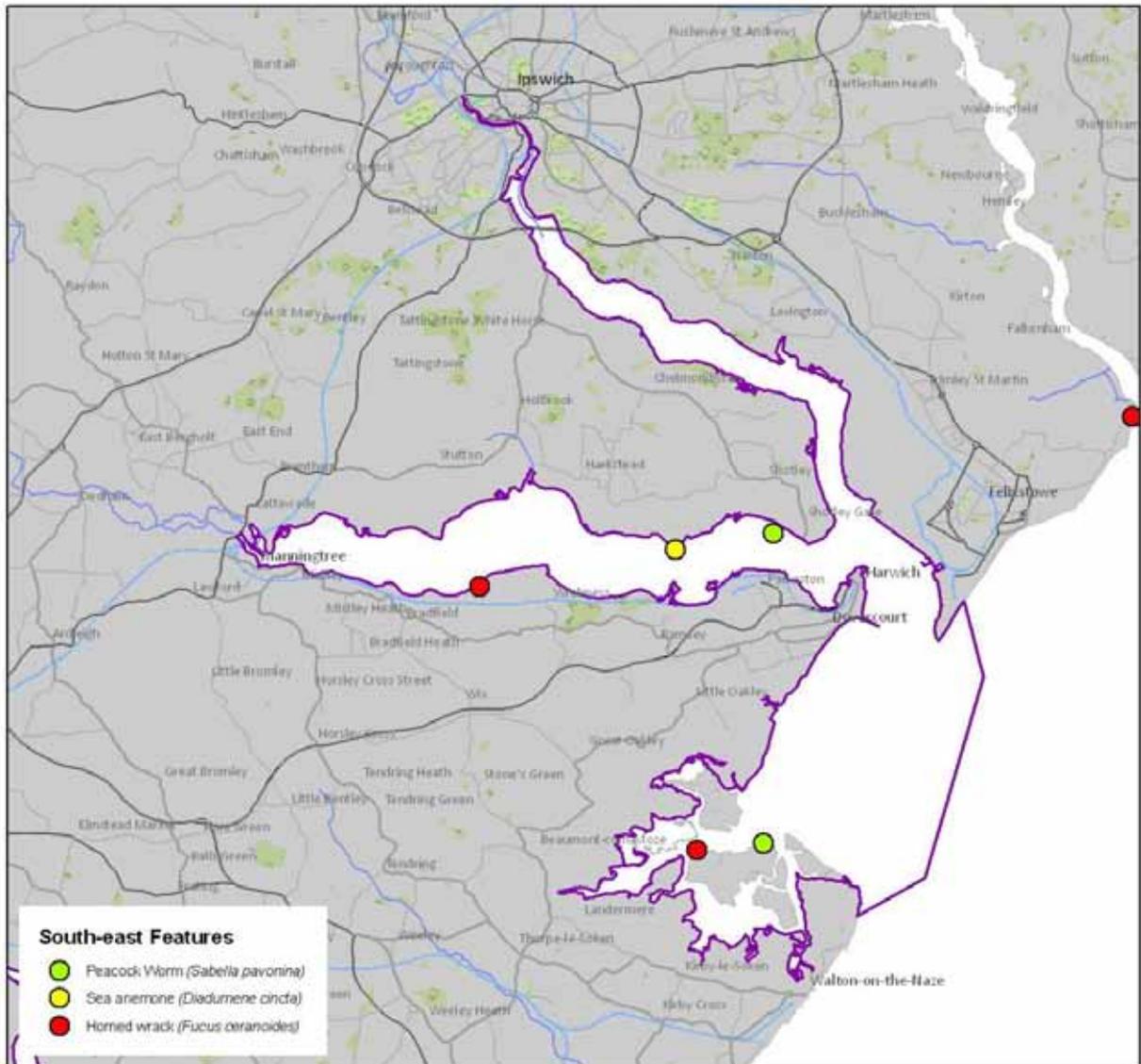
**IMPORTANT:** Only those broad-scale habitats with Conservation Objectives have been shown here. To see those habitats that have not been proposed for designation, please look at Section 6.



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Stour & Orwell Estuaries rMCZ no 2  
South-east Features

Version: 1.0  
Date: Aug 2011



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## 10. Site boundary

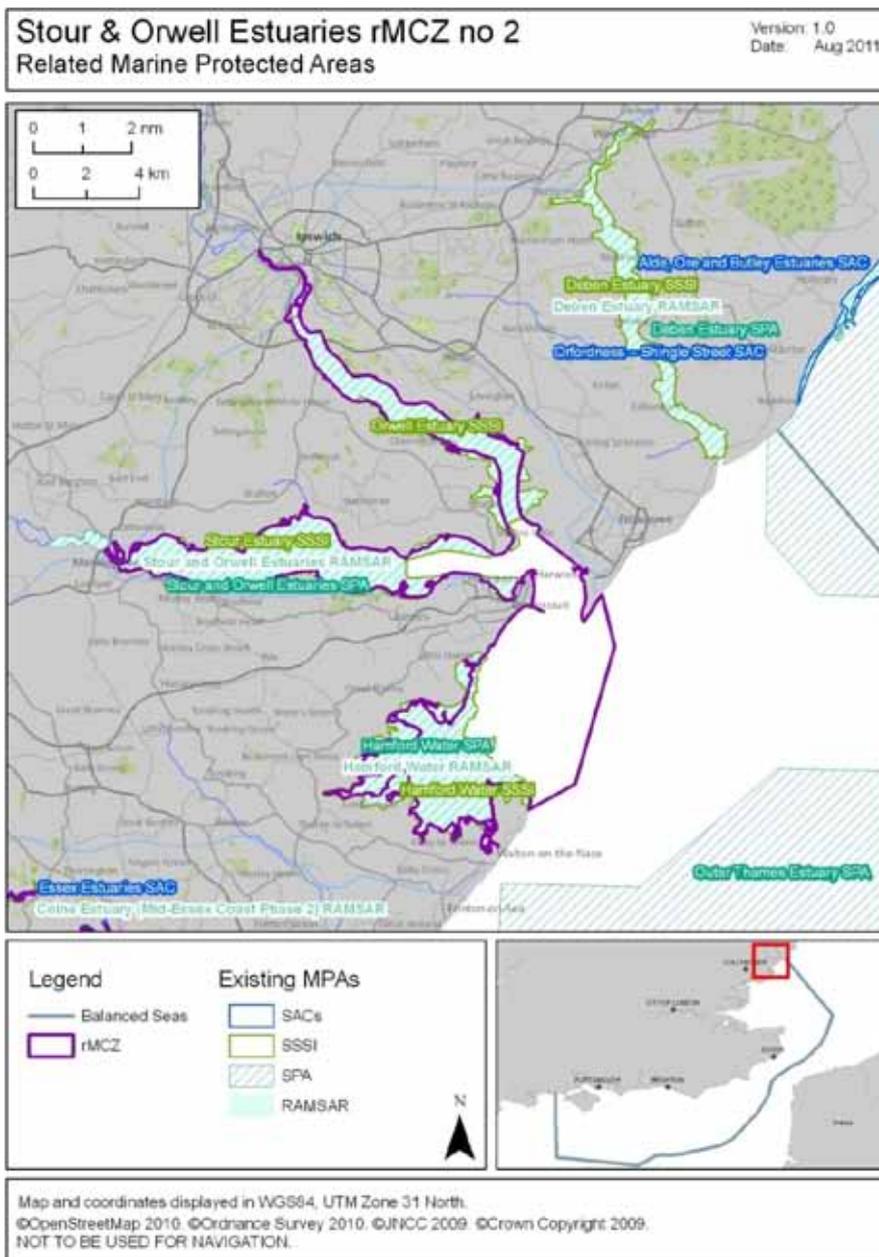
The landward side of the site is defined by the Mean High Water mark (from OS data) extent of the Stour and Orwell Estuaries, Harwich Haven and Hamford Water. The seaward boundary is defined to include the entire estuary mouth.

## 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

The recommended MCZ partially overlaps with the Stour Estuary SSSI, Orwell Estuary SSSI, Stour and Orwell Estuaries SPA, Hamford Water SSSI and Hamford Water SPA; and, the Hamford Water RAMSAR and Stour and Orwell Estuaries RAMSAR. Two recommended Reference Areas have been suggested within the site: rRA 24 Harwich Haven and rRA 22 North Mistley.



## Stour & Orwell Estuaries rMCZ no 2

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

Information	Type of information	Source	Name of survey	No of points	Dates
Broad scale habitats	Modelled and survey data	UKSeaMap/MESH v7	Combined	n/a	2011
estuarine rocky habitats	Survey	National contract data. DEFRA MB102 2C	JNCCMNCR10000342	18	1992
estuarine rocky habitats	Survey	National contract data. DEFRA MB102 2C	JNCCMNCR10000481	1	18/05/1993
estuarine rocky habitats	Survey	National contract data. DEFRA MB102 2C	GB000372	1	13/09/2006
Cementstone/London Ashfall Clay Band (form of estuarine rocky habitat but not included within this FOCI data)	Survey	Important Plant Areas	Important Plant Areas	1	IPA data 2007
Blue mussel beds	Survey	Unicomarine		27	10/05/2011
Honeycomb worm ( <i>Sabellaria alveolata</i> ) reef	Survey	Unicomarine		4	10/05/2011
Peat and clay exposures	Survey	Unicomarine		13	10/05/2011
Rossworm ( <i>Sabellaria spinulosa</i> ) reef	Survey	EA Anglian Region Eastern Area (Sourced from: Environment Agency database)	Stour Estuary and Copperas Bay Quinquennial Survey 1994	2	01-Apr-94
Rossworm ( <i>Sabellaria spinulosa</i> ) reef	Survey	EA Anglian Region (Sourced from: Environment Agency database)	Stour WFD Benthic Sampling 2008	1	14-Mar-08
Rossworm ( <i>Sabellaria spinulosa</i> ) reef	Survey	EA Anglian Region (Sourced from: Environment Agency database)	Hamford Water Quinquennial Survey 2006	1	26-May-06
Rossworm ( <i>Sabellaria spinulosa</i> ) reef	Survey	Unicomarine		7	10/05/2011
Native oyster beds	Survey	Eastern IFCA	Holbrook region		March 2011
Sheltered muddy gravels	Survey	EA Anglian Region Eastern Area (Sourced from: Environment Agency database)	Stour Estuary macrobenthic survey 1999 at selected sites	7	01-Jan-99
Sheltered muddy gravels	Survey	National Marine Service (Sourced from: Environment Agency database)	WFD intercalibration TW survey	1	22-Apr-04
Sheltered muddy gravels	Survey	EA Anglian Region (Sourced from: Environment Agency database)	Quinquennial Survey in Stour estuary 2004	2	21-Apr-04
Sheltered muddy gravels	Survey	EA Anglian Region (Sourced from: Environment Agency database)	Hamford Water Quinquennial Survey 2005	1	14-Apr-05
Sheltered muddy gravels	Survey	EA National Marine Service (Sourced from: Environment Agency database)	WFD Survey in Hamford Water 2005	1	14-Apr-05
Sheltered muddy gravels	Survey	EA Anglian Region Eastern Area (Sourced from: Environment Agency database)	Hamford Water Intertidal Survey	1	01-Jan-94
Sheltered muddy gravels	Survey	EA Anglian Region Eastern Area (Sourced from: Environment Agency database)	Orwell Subtidal survey April 1989	1	26-Apr-89
Sheltered muddy gravels	Survey	EA Anglian Region Eastern Area (Sourced from: Environment Agency database)	Stour and Copperas Estuaries 1999a investigation into algal mats with regards to the Habitats Directive	6	30-Nov-99
Sheltered muddy gravels	Survey	EA National Marine(Sourced from: Environment Agency database)	Deben WFD intertidal water body assessment trial	2	23-Nov-06
Subtidal sands and gravels	Survey	National contract data. DEFRA MB102 2C		1	13/09/2006
Subtidal sands and gravels	Survey	National contract data. DEFRA MB102 2C	JNCCMNCR10311117	1	13/11/1992
Subtidal sands and gravels	Survey	National contract data. DEFRA MB102 2C	JNCCMNCR10310789	1	26/04/1989
Subtidal sands and gravels	Survey	Unicomarine		11	10/05/2011

### References (additional information can be found in the bibliography)

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## Stour & Orwell Estuaries rMCZ no 2

### 14. Stakeholder support for the site

The RSG as a group reached consensus that this site should be put forward in their final recommendations. Within the group, there was broad support for the site from several sectors. The Stour and Orwell Estuary Management Group will provide an important stakeholder forum for taking discussions about this rMCZ forward.

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 Stour and Orwell rMCZ 2
Yachting	RYA	Moderate support if there is voluntary agreement on anchoring. Otherwise needs to establish where Sabellaria needs protection.
Kite Surfing	British Kite Surfing Association	Supported.
Sea Angling		Accept maintain for all features. More research required to move to recover.
Fishing	Local Fisheries Representatives	BSH A5.1 CO maintain is inconsistent with dMCZ 17 A5.1 which is highly dynamic and constantly changed with tides and has CO recover. Unable to support recover CO.
Ports		Serious port concerns with regards to this: -Ipswich dredge and disposal within river - needs to continue for existing MPA. -Would make sense to exclude Harwich Haven's dredged approach channel. -Oysterbeds conservation objective amendments. -Inclusion of man-made structures as estuarine rocky habitats, which will need to be maintained.
Shipping	Chamber of Shipping	Anchoring restriction must <u>only</u> apply over features (native oyster beds) set to "recover". These must not be a more general prohibition. Manmade structures in use by port infrastructure must not be included for management. Also, cannot support site because concern regarding increased cost of licensing during any port operations.
Fishing - FPO, beam trawling		I have no real knowledge of this area, or expertise, but fisheries sector overriding principle is that "current activities must be allowed to continue".
Birds	RSPB	Stour + Orwell - support - MCZ will support seabird foraging grounds.
Wildlife Trusts	Hampshire Wildlife Trust	I support this site but have concerns regarding downgrading of Sabellaria CO, point data is indicative of presence, the species may be more widespread and overlap with trawling activity which is damaging.
Marine ecology	Seasearch	Strongly support site designation, particularly for estuarine rock at Harwich.
Marine Wildlife	Marine Conservation Society	<u>Benthic trawling</u> should be <u>restricted</u> from all the site, particularly sensitive features. <u>Support</u> the site.
Statutory environmental	Environment Agency	Broadly support - though need to fully understand implications new site features (July RSG) on FCRM interests.
Heritage and Archaeology	English Heritage	Stour and Orwell. Support. Management measures favourable to research in intertidal site and occasionally of peat exposures.

### 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 information and data warranted 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.

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<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.

## Stour & Orwell Estuaries rMCZ no 2

Feature	draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
A1.3 Low energy intertidal rock	MAINTAIN			
A2.4 Intertidal mixed sediments	MAINTAIN		The vulnerability assessment and associated conservation objective were completed for the final RSG meeting in August and they were therefore not discussed by the Local Groups.	
A5.1 subtidal coarse sediment	MAINTAIN			Further information on overlap with maintenance dredging had been requested by the SNCBs. Meeting participants (July 2011) gave the following information: <ul style="list-style-type: none"> <li>• In relation to A5.1, maintenance dredging only occurs in Erwarton Bay; however a subsequent e-mail from HHA (22/8/11 to A. Pryor) stated that no maintenance dredging occurs here.</li> <li>• This will be licensed (from April 2012 through MMO) subject to consents</li> <li>• Maintenance dredging protocols have nearly been completed and are being discussed between Harwich Haven Authority(HHA) and NE.</li> </ul>
Sheltered muddy gravels	RECOVER	Fishing - benthic trawling (bottom gear)	IFCA code of conduct  IFCA feel confident that this is probably more a case of raising awareness of the habitat than needing any legislation	Some LG members (July 2011 meeting) felt the CO should change to MAINTAIN as the feature is mostly intertidal and there are only 2-3 vessels using light trawling gear which doesn't have a significant impact for commercial trawling activities. Management might then need to include a cap on commercial fishing vessel numbers.
Blue Mussel beds	MAINTAIN			RSG (2/3 August 2011) suggested that SNCBs obtain more robust data from the Eastern IFCA about the presence and distribution of this feature.
Estuarine rocky habitats	MAINTAIN			Despite the CO of 'Maintain', at the LG meeting 2011, ports sector expressed concern that estuarine rocky habitats occur in locations where they need to do maintenance work and these activities might thus be affected in the future. In several locations, this feature occurs on manmade structures such as working vessel berths which Felixstowe Port have consent to modify. They wish to exclude such areas to avoid any potential future planning constraints. Areas include: parts of Harwich International Port Quay, Parkston Quay, Mistley and Manningtree. Ports sector also wanted to note the importance of the dredging disposal site for Ipswich Port which needs to continue as this process helps to manage the sediment budget for the estuary.
Peat and clay exposures	MAINTAIN			
Subtidal sands and gravels	MAINTAIN			
<i>Sabellaria spinulosa</i> and <i>alveolata</i>	RECOVER MAINTAIN (see IFCA comment)	Fishing - benthic trawling (bottom gear)	IFCA recommended changing the CO for both species of <i>Sabellaria</i> to MAINTAIN as <i>Sabellaria alveolata</i> is found in the intertidal so there is not thought to be an activity overlap; and surveys are needed to ascertain the extent of <i>Sabellaria spinulosa</i> IFCA code of conduct if CO remains	There was support at the LG meeting of July 2011 for IFCA suggestion of CO change to MAINTAIN because the main concern is the <i>Sabellaria</i> population on the Harwich Shelf, but here there is only a very low level of trawling using light mobile gear which does not overlap with the main data point for <i>Sabellaria</i> .  If CO were to remain as Recover, there was support for IFCA management suggestion of a code of conduct to limit trawling to light gear, and to avoid <i>Sabellaria</i> areas.

## Stour & Orwell Estuaries rMCZ no 2

Feature	draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
			as RECOVER	
	RECOVER	Tourism & recreation (anchoring)	MMO code of conduct	<p>Only recreational anchoring was assessed in the VA (there was previously a commercial shipping anchorage on the Harwich Shelf but this is no longer used or designated as such (Harwich Haven Authority email 22.08.11).</p> <p>LG meeting July 2011 provided the following information on recreational anchoring: area not considered an important recreational anchorage as it is too exposed and not very attractive; vessels may use it for an hour or two: HHA licences about 6 moorings above the stone pier (this may not overlap with the <i>Sabellaria</i> data point). There are also moorings at Manningtree.</p> <p>Participants believe that <i>Sabellaria</i> occurs much more widely throughout the two estuaries than shown by the data</p>
Native oyster beds	RECOVER	Fishing - benthic trawling (bottom gear)	Existing IFCA byelaw prevents oyster dredging - the oyster fishery has been closed for a couple of years. The two IFCAs relevant to this area (Eastern and Kent & Essex) felt that a code of conduct would be sufficient to protect the feature, as the oyster fishery is currently closed. However, if the fishery was to reopen and the CO remains as RECOVER, this byelaw could possibly be amended to prevent some types of trawling.	<p>Some members of the LG (July 2011) felt this CO should be changed to MAINTAIN as although low level light trawling may occur in the areas of data points, this is not thought to impact the oysters.</p> <ul style="list-style-type: none"> <li>• Native oyster beds in the Stour are very small and not as extensive as shown in the data.</li> <li>• Eastern IFCA regularly surveys Holbrook Bay for oysters and there was some interest in dredging these beds 8-9 years ago; there are no other surveys so the distribution is not known.</li> <li>• Eastern IFCA is concerned that if oyster stocks recover there is potential for a commercial fishery in the future and an MCZ might prevent this; but this could be assessed through the SNCBs monitoring and review process.</li> <li>• There is a Several Order for oyster dredging currently operational in a small privately worked oyster bed in the Twizzle area of Hamford Water, Hamford Water itself and Kirby Creek.</li> </ul> <p>Several members of the RSG (2/3 Aug 2011) were uncertain whether a RECOVER CO will aid establishment/recovery of native oyster beds in this area. The area has been closed to oyster harvesting for nearly three years with no evidence of population increases. The shellfish representatives believe that some types of trawling are beneficial to oyster beds and the beds need to be worked in order to flourish.</p>
	RECOVER MAINTAIN	Shipping – anchoring	Port Authorities are responsible	Some members of the LG felt that the CO should be changed to MAINTAIN as there is no commercial anchoring in areas with known native oyster beds as these are too shallow; anchorages are in fact recreational. This was subsequently confirmed at a meeting between HHA and Natural England (NE email 19/8/11.). Further consideration to impact of recreational activity will be given later.
	RECOVER MAINTAIN	Waste disposal - navigational dredging (capital, maintenance)	Consented activity	<ul style="list-style-type: none"> <li>• Nearest disposal site is Erwarton Bay or Copperas Bay but this is not waste disposal; as confirmed at a meeting between HHA and Natural England, the dredged sediment is placed there as part of a beneficial sediment replacement programme, agreed through FEPA licences and previous consents and Natural England, and taking the location of native oysters into consideration (Harwich Haven Authority email 22.08.11; NE email 19/8/11.)</li> <li>• Maintenance dredging protocols are being prepared by Harwich Haven Authority (HHA) and will soon be finished but need to be checked;</li> <li>• Ports sector wanted to note the importance of the dredging disposal site for Ipswich Port which needs to continue as this process helps to manage the sediment budget for the estuary</li> </ul>

### 16. Evolution of the site recommendations

This site was one of the first Broad Areas of Interest to be identified by the RSG on the basis of local knowledge suggesting it is an area of exceptional beauty and ecological interest. It was removed from the developing network prior to the 2<sup>nd</sup> Progress Report as it did not contribute significantly or efficiently to meeting targets for either broad-scale habitat (most broad-scale habitats are protected by existing designations) or FOCI (at the time, the project had records for only sheltered muddy gravels and estuarine rocky habitats and targets for these FOCI were adequately met elsewhere). Concerns were expressed by a number of local stakeholders (primarily members of the Stour and Orwell Estuary Management Group), who felt that insufficient attention had been paid to other sources of information available for this area. Following a meeting that the Balanced Seas project specifically convened for Suffolk stakeholders in March 2011, Harwich Haven Authority provided biotope data from various EIA surveys (e.g. Unicomarine) which, when translated into the relevant habitat FOCI by JNCC, revealed that a considerable number of additional habitat FOCI occur in the area. Moreover, the Science Advisory Panel had recommended the RSG justify why the estuaries would not be included in the network, given the rarity of the cementstone/London Ashfall Clay Band rocky habitats. In mid May 2011 (RSG Mtg 9A), the RSG decided to reconsider the site as a Broad Area of Interest, to include the additional broad-scale habitats and FOCI features (A1.3 low energy intertidal rock, Blue Mussel beds, Honeycomb worm reef, Rossworm reef, peat and clay exposures, native oyster beds). The site became a draft MCZ in June 2011 and was discussed at the July local stakeholder meetings, where feedback was provided on the implications of the conservation objectives and potential management measures.

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

Issues that have arisen during the process are:

- The Haven ports are a major gateway for Roll-on/Roll-off trade with north Europe and there are major concerns that an MCZ will impede future activity, particularly if it were to impact the new developments being planned to accommodate the new large container ships at Felixstowe and at Bathside Bay (the fully consented Harwich International Container Terminal). Harwich Haven Authority and the ports sector are very concerned that any recommendation of this area as an MCZ may compromise port operations and potential expansion.
- The main channel into the estuary is subject to maintenance dredging and capital dredging, which must continue to allow the ports to function. There is a suggestion that these activities could be compatible with the conservation objectives for the relevant habitat if a maintenance dredging protocol is already in place, but the ports sector would prefer the patch of A5.1 broad scale habitat here to be excluded in case of undesired restrictions to the dredging activity. Stakeholder discussions have assumed that dredging activities would be allowed to continue in the site.
- Some of the habitat FOCI data have come from various EIA surveys undertaken over time. Some stakeholders are concerned that these may have been displayed cumulatively and might give an imprecise picture of the true distribution of the features. In particular, there is a suggestion that the patch of *Sabellaria alveolata* and *Sabellaria spinulosa* may no longer occur. There is a strong recommendation to review the ecological features of this site prior to designation.
- The Crown Estate have noted 2 active power cables, 10 inactive telecoms cables and leases for oyster farming, disposals, dredging, moorings, outfalls and wildfowling, but support the site.

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).