Kentish Knock East rMCZ no 30

Marine Conservation Zone : Selection Assessment Document

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

1. Site name	3. Site surface area
Kentish Knock East rMCZ no 30	9630 ha 96.30 km^2
2. Site centre location	**4. Biogeographic region**
ETRS89 N51 39' 56.226" E1 47' 47.486" N51 39.937' E1 47.791' (**N.B.** WGS 84 UTM 31N coordinates are provided in the map vertices)	Eastern English Channel

5. Features proposed for designation within Kentish Knock East [1]

Feature type	Feature name	Area [2]
Broad-scale habitats	A5.1 subtidal coarse sediment	81.65 km^2
	A5.2 subtidal sand	2.82 km^2
	A5.4 Subtidal mixed sediments	11.52 km^2

6. Features within Kentish Knock East not proposed for designation

Feature type	Feature name	Comment
Geology	English Channel Outburst Flood feature	Was not identified until after final RSG. Very tip of feature. Already included as a feature for protection in several other rMCZs.

7. Site summary

This site is located outside the 6 nmi line, to the east of the Margate & Longsands SAC and overlapping with the Outer Thames Estuary SPA; it lies adjacent to the Balanced Seas/Net Gain boundary. The seabed here is predominantly subtidal coarse sediments (including sands and gravels) and small patches of subtidal sand. Grab sample data from the area show the coarse sediments contain moderate species richness in relation to others in the region. Persistent thermal fronts and regular summer/winter bird foraging areas highlight that the area has high pelagic biodiversity.

This site was introduced into the developing network at the end of May 2011, following an RSG request that the project team undertake some analysis to identify suitable areas to meet shortfall broad-scale habitats, particularly subtidal coarse sediment (A5.1). Given the distribution of this particular habitat, three areas were suggested in the Outer Thames Estuary, all of which were considered to have an impact on the fishing fleet, but this site was considered to be the 'least worst'. The RSG and local stakeholders subsequently adjusted the boundaries to reduce the impact on the fishing fleet and avoid the aggregate licence area. The site now extends beyond 12nm to capture the entire sediment bank and three broad-scale habitats: A5.1, A5.2 and A5.4.

The draft conservation objective of RECOVER for two of the habitats has implications for benthic trawling. However, this site is an important fishing area for both UK and non UK fleets and further assessment of the ecological and activity data is required, as well as finalisation of the conservation objectives for all three habitats; it might be possible to mitigate damage through the use of gear adaptations or restriction to light mobile gears only. An aggregate option area immediately north

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

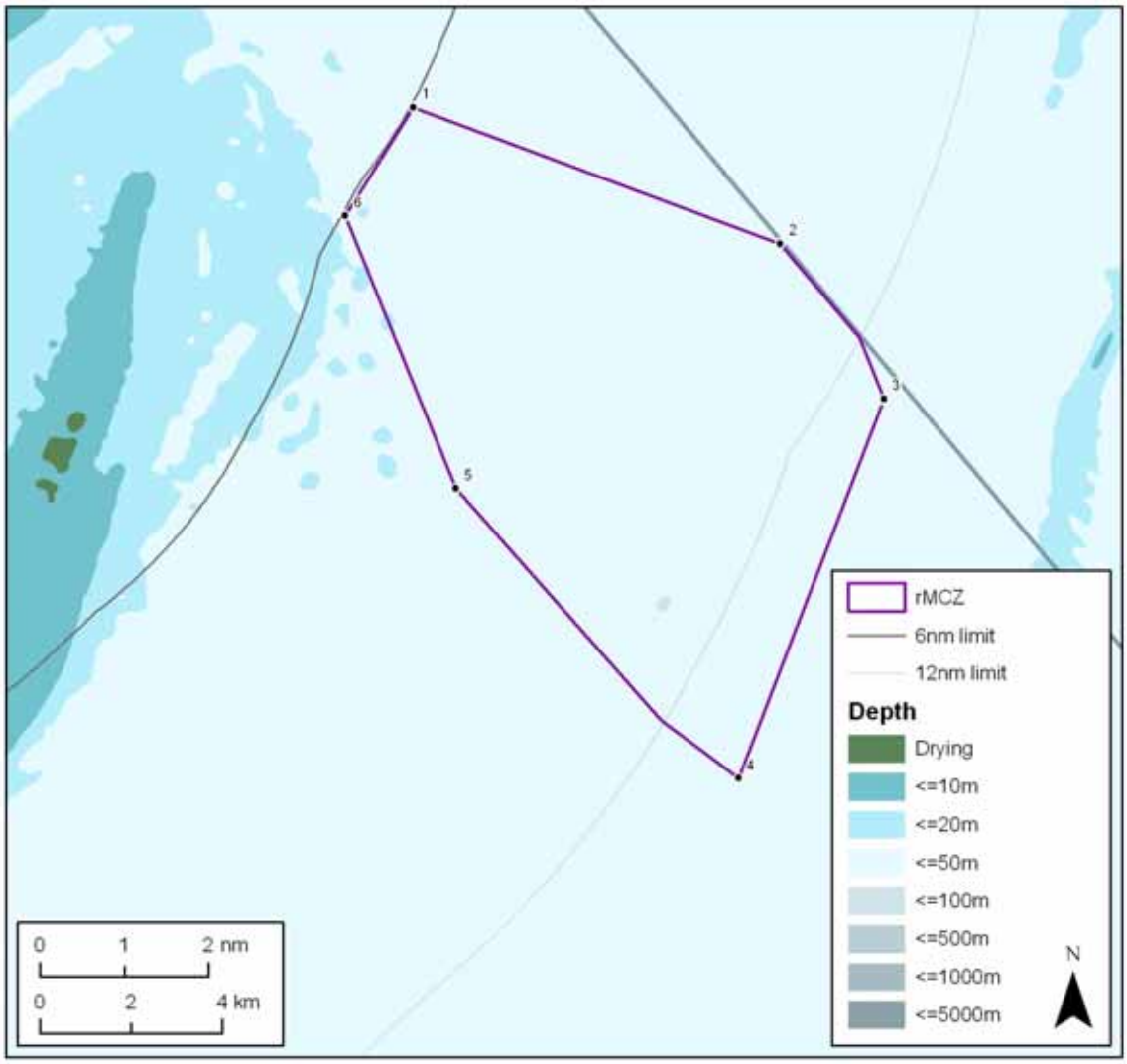
[2] Areas have been calculated according to spatial GIS data and are indicative only.

west of the site may result in secondary impacts on the rMCZ, which this may require a re-assessment of the vulnerability assessment.

8. Map of site (see below)

Kentish Knock East rMCZ no 30
Site Map

Version: 1.0
Date: Aug 2011



Boundary coordinates

ID	Degrees Minutes Seconds Latitude	Degrees Minutes Seconds Longitude	Degrees Decimal Minutes Latitude	Degrees Decimal Minutes Longitude
1	N51° 43' 27.082"	E1° 43' 39.856"	N51° 43.451'	E1° 43.664'
2	N51° 41' 54.328"	E1° 50' 41.863"	N51° 41.905'	E1° 50.698'
3	N51° 40' 5.015"	E1° 52' 42.988"	N51° 40.084'	E1° 52.716'
4	N51° 35' 32.819"	E1° 50' 3.830"	N51° 35.547'	E1° 50.064'
5	N51° 38' 56.059"	E1° 44' 35.832"	N51° 38.934'	E1° 44.597'
6	N51° 42' 8.996"	E1° 42' 24.106"	N51° 42.150'	E1° 42.402'

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

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.

This site is located outside the 6 nmi line, to the east of the Margate & Longsands SAC and overlapping with the Outer Thames Estuary SPA; it lies adjacent to the Balanced Seas/Net Gain boundary. According to the UKSeaMap/MESH (v7 JNCC) data, the broad-scale habitats are shown to be subtidal coarse sediments (A5.1), sand (A5.2) and mixed sediments (A5.4), all of which have been selected for protection (See Broad-scale habitats map). The site extends beyond 12nm to capture the entire sediment bank.

Biotope data have been collated by the Environment Agency from various grab sample surveys and these data show that the coarse sediments contain moderate species richness in relation to others in the region. Persistent thermal fronts (national contract data) and regular summer/winter bird foraging areas (European Seabirds at Sea data) highlight that the area has high pelagic biodiversity.

From the national contract data (Natural England, Brooks *et al.* 2009), the majority of the site's seabed shows geomorphological evidence of the Eastern English Channel Outburst Flood, which occurred some 200,000 years ago when a huge glacial lake in the North Sea burst through the Dover Straits Isthmus which contained it, thus separating England from mainland Europe. Sonar evidence of the seabed reveals deeply gouged channels where the floodwaters broke through (Gupta *et al.* 2007). However, the presence of this feature was not recognised in time to allow stakeholder discussions to select it as a feature for protection should they have wished to.

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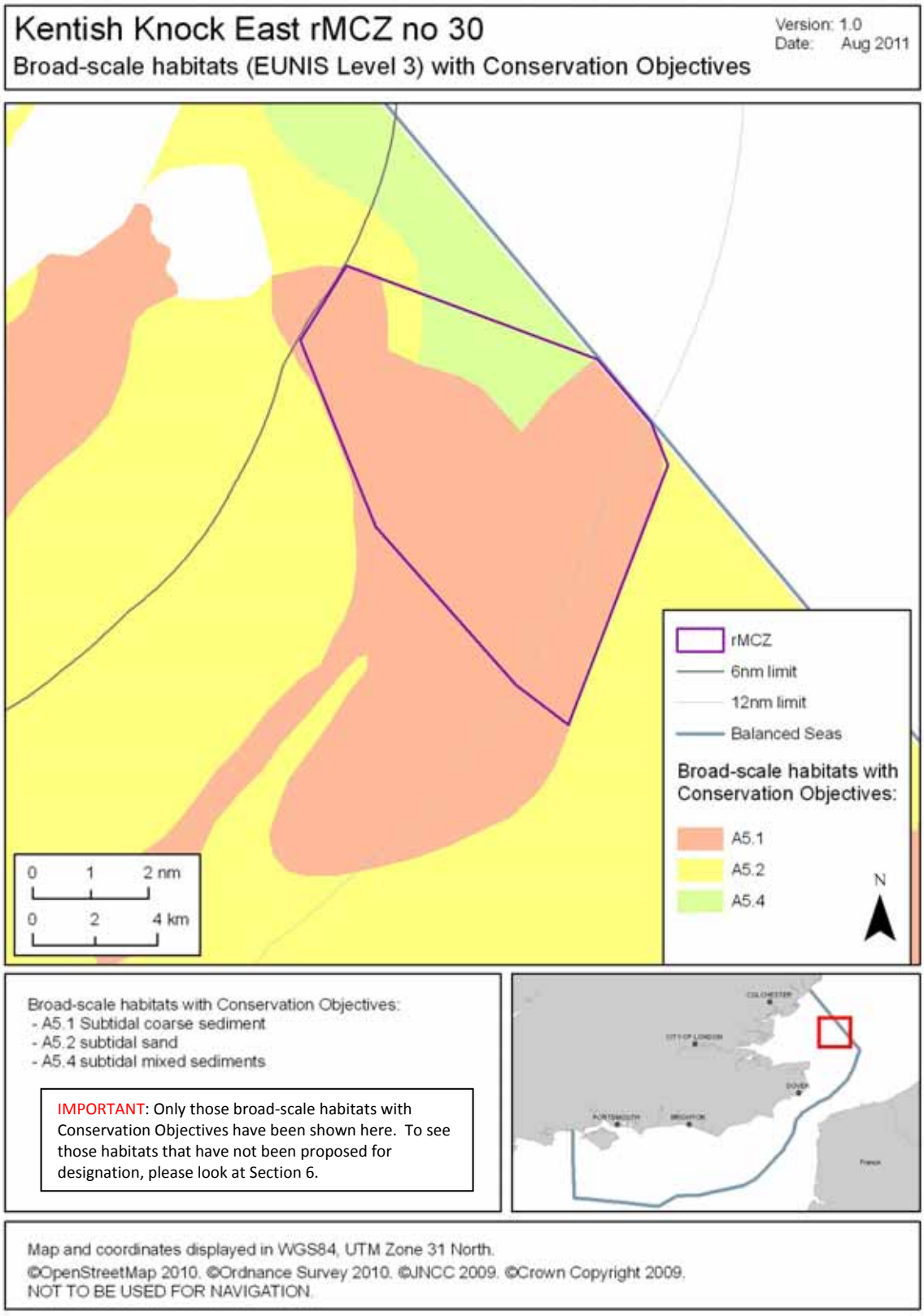

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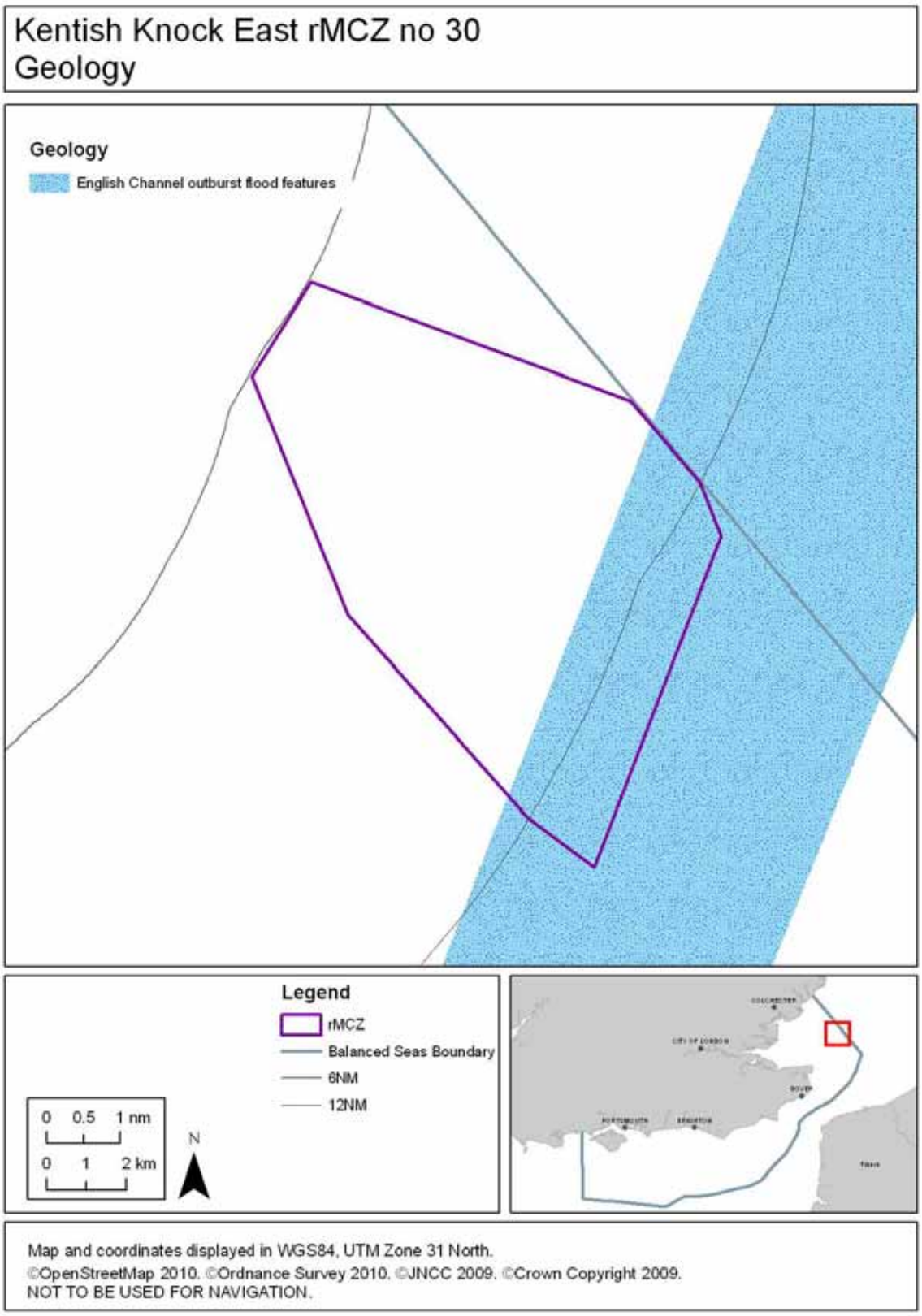


10. Site boundary

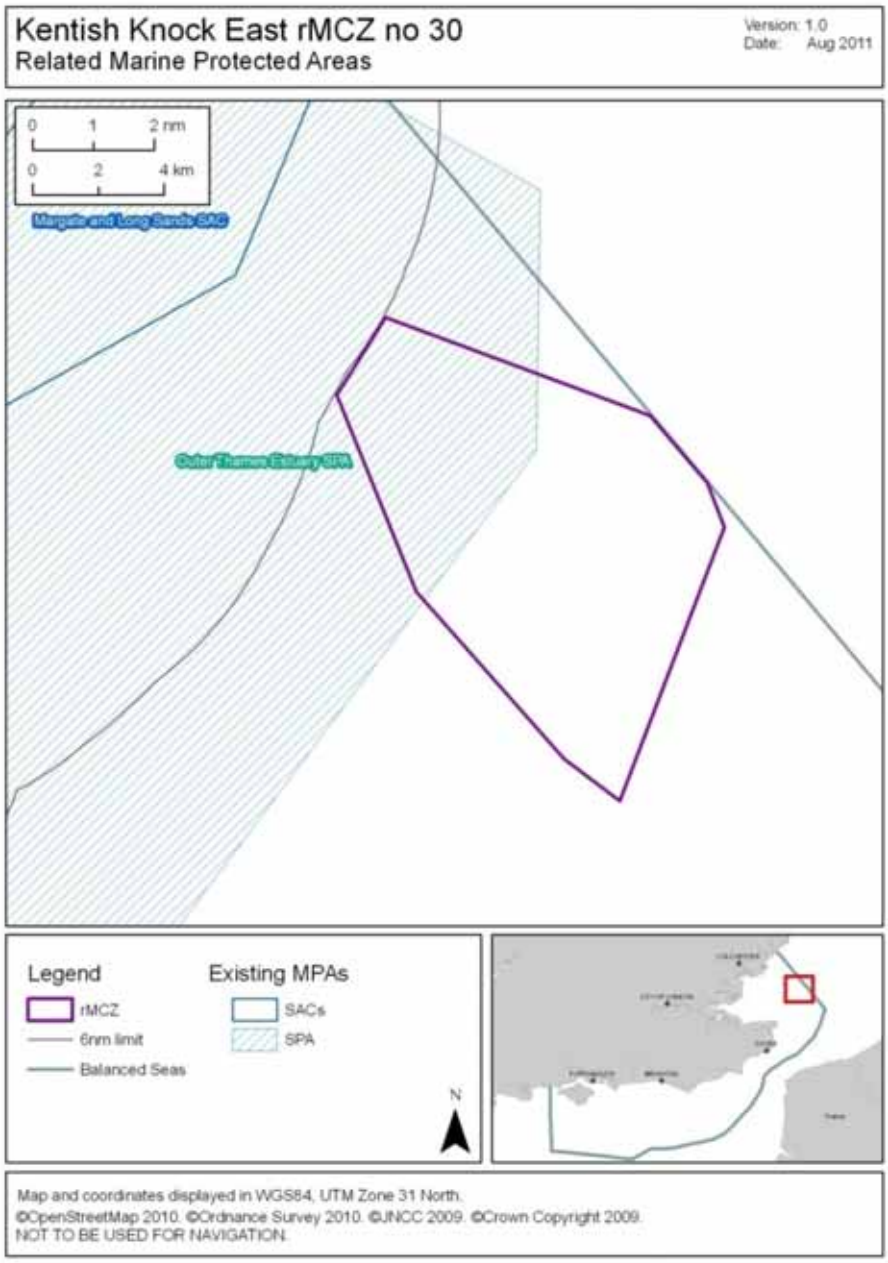
The boundary of the site has been drawn to capture as much of the subtidal coarse sediment as possible, using straight lines wherever possible. Due to the presence of an aggregate dredging license area just within the 6nm line to the northwest, the site boundaries were set at the 6nm to avoid this. The seaward side of the site extends beyond 12nm to follow the edge of the sediment bank.

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 in close proximity to the Margate and Long Sands SAC and in the northwest and overlaps with the Outer Thames Estuary SPA.



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
Geology	Literature search	National Contract Data. DEFRA MB102 2A	Mapping of Geological and Geomorphological Features	2009

References (additional information can be found in the Bibliography)

BROOKS, A.J., ROBERTS, H. KENYON, N.H. & HOUGHTON, A.J. 2009. *Accessing and Developing the Required Biophysical dataset and Data Layers for Marine Protected Areas Network Planning and Wider Marine Spatial Planning Purposes. Report No 8 Task 2A: Mapping of Geological and Geomorphological Features.* DEFRA, London.

GUPTA S, COLLIER J.S., PALMER-FELGATE, A. & POTTER G. 2007. Catastrophic flooding origin of shelf valley systems in the English Channel. *Nature.* 448 : 342-345

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 Kentish Knock East rMCZ 30
Yachting	RYA	Support subject to agreement on boundary.
Sea Angling		Not a major concern to RSA but the shape should be looked at.
Fisheries	Local Fisheries Representatives	CO of recovery unacceptable on such dynamic BSH. Back LG and reasons for a maintain CO.
Marine Ecology	Seasearch	Strongly support this site with a recover CO, particularly as it is seen as mobile but Sabellaria and mussel beds, which are present periodically, will have the opportunity to establish better.
Marine Wildlife	Marine Conservation Society	Support. Will only provide benefit if bottom trawling is restricted. Extend boundary seawards to encompass the entire sandbank.
French fishing interests	CRPMEM Nord - Pas de Calais / Picardie	Presence of the trawling fishery from Boulogne-sur-Mer, already impacted by the dMCZs 9, 14, 17, 21, 29 and 31 and Net Gain MCZs.
Dutch Fishing Interests	VisNed, Netherlands fishing industry	We strongly oppose this site, as it is hugely productive for our sole fisheries, especially using low impact [?] pulse gear.

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[3] and then sense-checked at the national level[4]. 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.

N.B. Boundaries for this site have been changed since the Vulnerability Assessment was undertaken and draft CO was set, and the COs will therefore need to be reviewed.

Feature	draft CO	Activity exerting pressure	IFCA/MMO/EA/NE Comments	Stakeholder comments on draft COs and potential management measures
A5.1 Subtidal coarse sediment & A5.2 Subtidal sand	RECOVER (to be reviewed against the final agreed boundary)	Fishing - benthic trawling (bottom)	NE said that some restriction of mobile gear types will be considered necessary (hence a CO of RECOVER) although it is understood that light mobile gears have less impact than heavy gears.	LG (July 2011) felt that the CO should be changed to MAINTAIN as this is a highly dynamic area with shifting habitat and they did not feel that current activities would have an impact. LG commercial fishing representatives stated that French fishing vessels are thought not to operate in this area at present, although they traverse it on the way to other fishing grounds. At the RSG (2/3 Aug 2011), aggregate dredging sector noted the location of an aggregate option area immediately north west of the site, which might result in secondary impacts on the rMCZ and this may require a re-assessment of the VA. RSG members questioned the RECOVER objective for this mobile BSH in a highly dynamic area and requested further clarification from SNCBs.
A5.4	To be assessed			Habitat was added too late for the vulnerability assessment

[3] The process of establishing conservation objectives is outlined in the Conservation Objectives Guidance (JJNCC /NE 2011)
[4] VA results were standardised across all four regional projects but the fisheries activity data is still undergoing assessment.

16. Evolution of the site recommendations

The Outer Thames Estuary in the Balanced Seas project region was discussed at the Offshore Task Group meeting in March 2011, as part of the search for broad scale habitats A5.2 subtidal sand and A5.1 subtidal coarse sediment. At this meeting, three options were suggested, all abutting the project's boundary with Net Gain (BAI Option C, lying between 6 nm and 12 nm; BAI Option B2, lying outside 12 nm; and BAI option B, an extension northwards of the site 9 as it was then), as this general area had been identified through the Marxan work as the main distribution of these habitats and important for biodiversity. The importance of these areas for fishing by Belgian and UK fleets was noted at the time and it was felt that the Regional Stakeholder Group (RSG) should give these options more consideration.

At its meeting on 19th April 2011 (RSG 8), the RSG put forward Option C as proposed at the Offshore Working Group for further discussion, with the caveat that this area is important for UK and Belgian fishing and noting that the offshore renewable industry was concerned that it overlapped with the Thames Array windfarm site. Option B2 was dropped (for discussions about Option B, see rMCZ 9).

At RSG 9A (17th May 2011) there was still a significant short fall in the targets for the broad scale habitats A5.2 and A5.1, and the general area of Option C was reviewed again, with the results of a further Marxan analysis that continued to highlight the importance of this area for biodiversity. Option C2 was suggested as a result of this discussion, which compared this site with a number of other options in the project area (i.e. C, C2, C3, C4) (see Figure 1). Option C2 is a smaller area than Option C, placed overlapping but to the east of Option C. The RSG concluded that this site should go forward into the Draft Final Recommendations as a dMCZ. The interests of UK and Belgian fisheries were again noted. At RSG 9B, this dMCZ was confirmed (dMCZ 30 Kentish Knock East) and additional notes were added to point out that the French fishing fleet also has an interest in this area.

Figure 1. map of option areas discussed in the evolution of rMCZ 30.

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Subsequent to the submission of the draft final recommendations, feedback from representatives of the fishing fleets that use this area led the RSG to adjust the boundaries so that the southwestern corner of the rectangle was excluded because of fishing interests. In order to replace the habitat lost, the site was extended to the north and west to capture more A5.1 subtidal coarse sediment and northern boundaries were set to avoid the aggregate dredging license area by following the 6 nm line (RSG 10, see blue dashed boundary, Figure 2)). Participants at the meeting of the Essex and Kent Local Group in July 2011 suggested extending the seaward boundary beyond the 12 nm limit to include the full sediment bank (see red boundary, Figure 2).

At the final RSG meeting (RSG 11, August 2011), this proposed extension was debated by the RSG, and while it was noted that any part of the site extending beyond 12 nautical miles would impact the international fleets, the group decided that the boundaries should be set at the bottom of the sediment bank for ecological and navigational reasons, i.e. the boundaries proposed by the Local Group (red boundary, Figure 2).

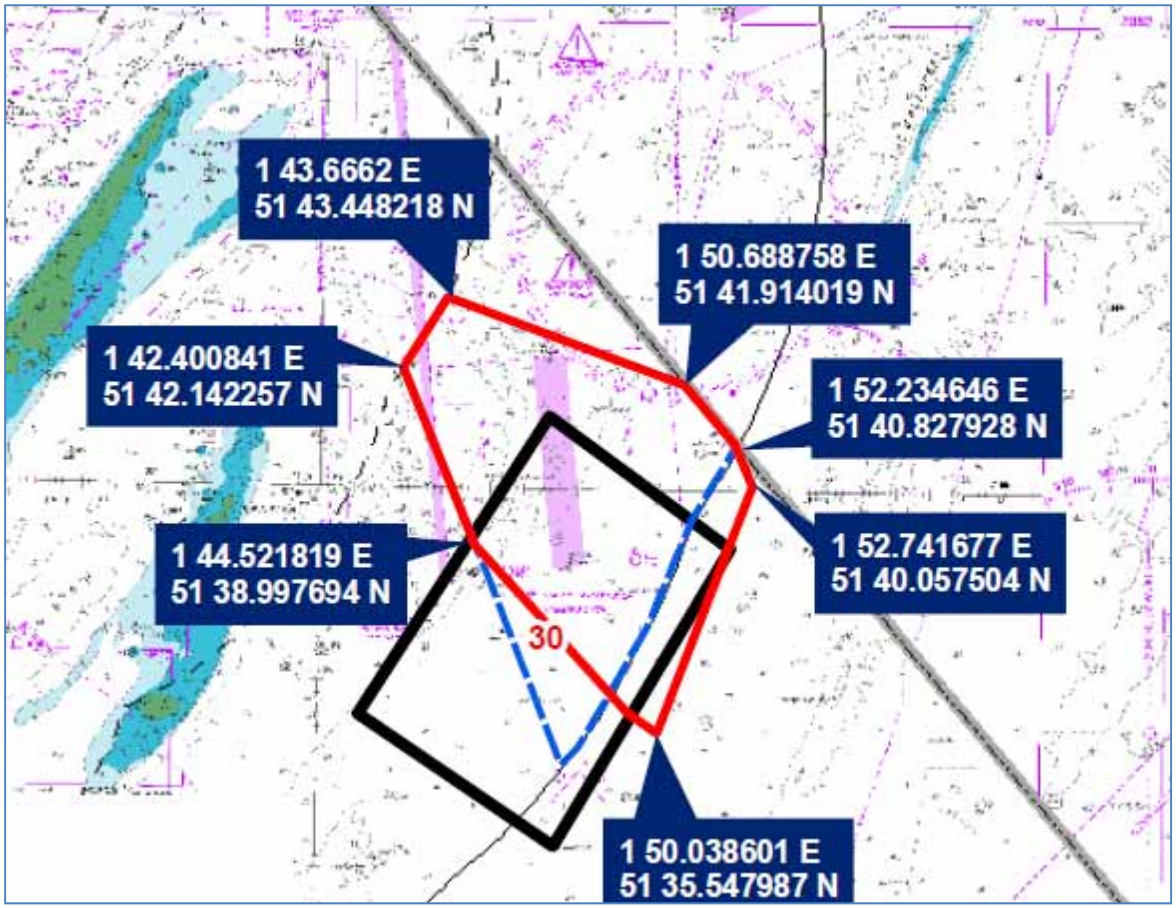

Figure 2. Evolution of rMCZ 30: Draft Final Recommendations (black line) were adjusted at RSG 10 (blue dash) and Essex and North Kent Local Group stakeholders (red line).

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

17. Implications for Stakeholders

The issues associated with this site are:

- Important area for Outer Thames Estuary fishing interests, but considered to be the 'least worst' option by the Kent/Essex fishing fleet
- The Dutch fleet have expressed their opposition to the site (see Stakeholder comment section above), as they operate in the area of the site outside 12nm; however they claim to use chainless gear.
- France and Belgium have historical fishing rights in the 6-12 nm area of this site; the area is used by both under and over 10m French vessels, in particular the Boulogne fleet (see Stakeholder comment section above)
- The vulnerability assessment was undertaken on the boundaries set at the Draft Final Recommendation stage and therefore need review in case the revision alters the CO.
- The Crown Estate note that site contains an active cable and a proposed CCS pipeline, but nevertheless 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.