Department for Environment, Food and Rural Affairs

Marine Conservation Zones: Consultation on proposals for designation in 2013

Annex A1 – Part 1. – Balanced Seas - Sites proposed for designation in 2013

Defra is proposing that up to 31 sites are good candidates for designation in 2013. Site specific information for each site is set out below. An explanatory note for the site summaries is included in Annex B.

Further Information

SNCB Advice

The SNCB advice can be found at:
http://publications.naturalengland.org.uk/category/1723382

For specific site information please go to the page stated in the site summary.

For information on data certainty see section 5 of the SNCB advice and for advice on certainty of conservation objectives please see SNCB – supplementary advice and information at: http://publications.naturalengland.org.uk/category/1725455

Impact Assessment

For additional information on the Consultation Impact Assessment please use the following link: www.defra.gov.uk/environment/marine/protect/mpa/mcz/

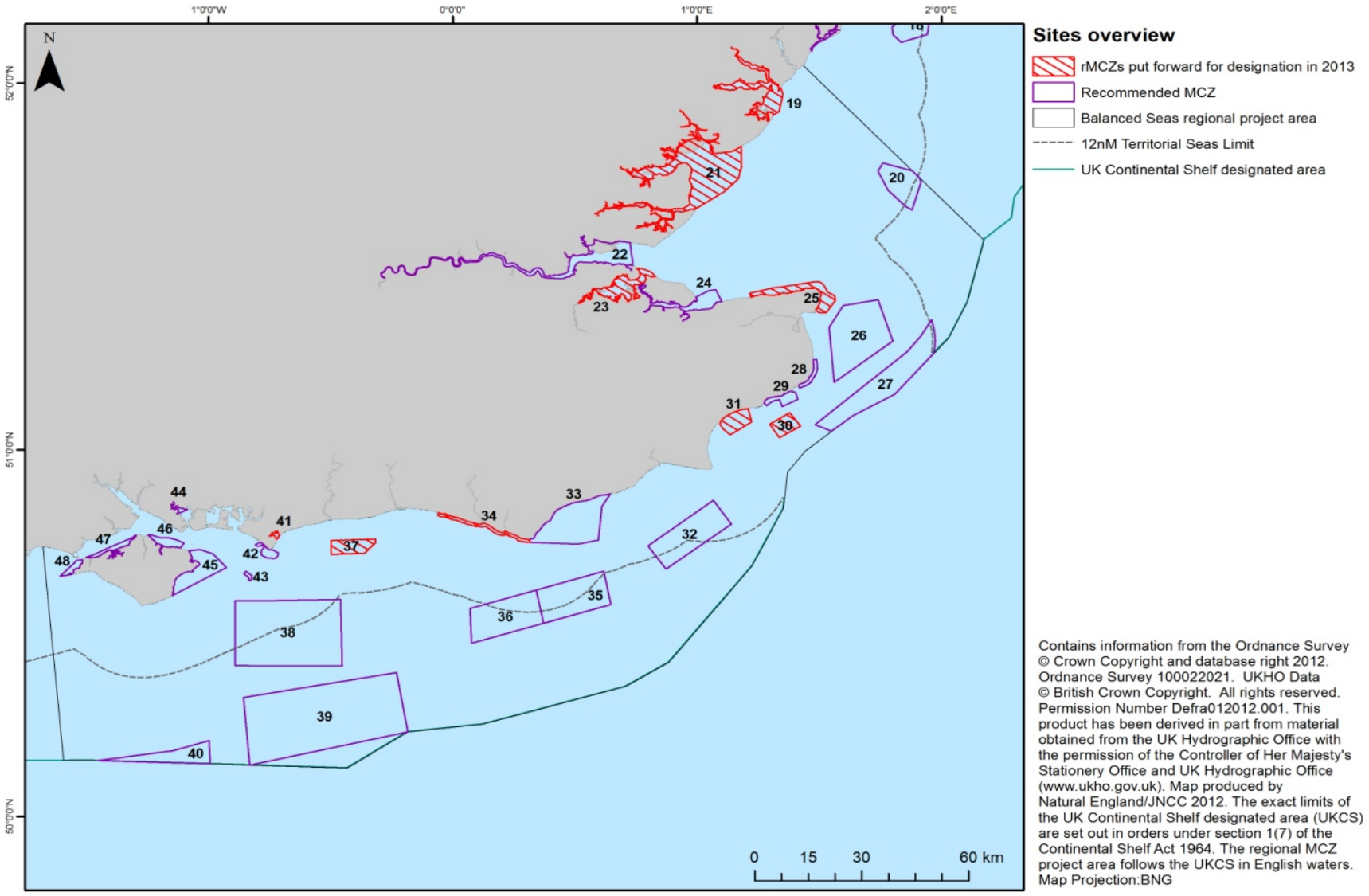
Within this link there are a series of documents including the Consultation Impact Assessment and supporting Annexes. For site specific information please open the section state in the individual site summary (Example: Chesil Beach and Stennis Ledges – Annex I2 Option 2 Page 3)

Balanced Seas

For additional information on the proposed first tranche sites in Balanced Seas please use the following link - http://publications.naturalengland.org.uk/publication/1463173

For site specific information please use the link below and click on the site name for further information. http://webarchive.nationalarchives.gov.uk/20120502155440/http://www.balancedseas.org/page/RSG%20Resources.html

Regional MCZ Map – Eastern Channel (Balanced Seas)



Map Label	Site Name	Regional Project Number	**Map Label**	Site Name	Regional Project Number
19	Stour and Orwell	2	**34**	Beachy Head West	13.2
20	Kentish Knock East	30	**35**	East Meridian (Eastern section)	29.2
21	Blackwater, Crouch, Roach and Colne Estuar	3	**36**	East Meridian	29
22	Thames Estuary	5	**37**	Kingmere	16
23	Medway Estuary	6	**38**	Offshore Overfalls	17
24	The Swale Estuary	10	**39**	Offshore Brighton	14
25	Thanet Coast	7	**40**	Wight-Barfleur Extension	21
26	Goodwin Sands	8	**41**	Pagham Harbour	25.1
27	Offshore Foreland	9	**42**	Selsey Bill and the Hounds	25.2
28	Dover to Deal	11.1	**43**	Utopia	28
29	Dover to Folkestone	11.2	**44**	Fareham Creek	24.2
30	Folkestone Pomerania	11.4	**45**	Bembridge	22
31	Hythe Bay	26	**46**	Norris to Ryde	19
32	Inner Bank	31	**47**	Yarmouth to Cowes	23
33	Beachy Head East	13.1	**48**	The Needles	20

Consultation Site Summary: Stour and Orwell

Additional information for this site can be found in the SNCB Advice (page 671), Impact Assessment (Annex I2 Option 2, Page 249) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 87 km^2	**Biogeographic Region:** Southern North Sea
Site Location: ETRS89 N51 55’ 46.111” E1 14’ 33.812” N51 55.769’ E1 14.564’ **Inshore/Offshore:** Inshore		

Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Low energy intertidal rock	1 km^2	Maintain
Broad Scale Habitat	Intertidal mixed sediments	0.1 km^2	Maintain
Broad Scale Habitat	Subtidal coarse sediment	31 km^2	Maintain
Habitat FOCI	Blue mussel beds	1 km^2	Maintain
Habitat FOCI	Estuarine rocky habitats	0.2 km^2	Maintain
Habitat FOCI	Honeycomb worm reef (*Sabellaria alveolata)*	0.02 km^2	Recover

Habitat FOCI	Native oyster beds	1 km^2	Recover
Habitat FOCI	Peat and clay exposures	0.01 km^2	Maintain
Habitat FOCI	Rossworm reef (*Sabellaria spinulosa*)	0.02 km^2	Recover
Habitat FOCI	Sheltered muddy gravels	28 records	Recover
Habitat FOCI	Subtidal sands and gravels	1 km^2	Maintain

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	**Best Estimate Costs (£ per year)**
UK Commercial Fishing	1,000
Ports and Harbours	27,000
Recreational anchoring	Unquantified
Archaeological heritage	Unquantified
	Best Estimate Total Cost =£28,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

The Stour and Orwell recommended MCZ is an estuary site measuring 87 km². Within this site there are a variety of features including three Broad Scale Habitats and eight Habitat FOCI. Of particular interest within this site are the Honeycomb worm reefs

(*Sabellaria alveota) and* Rossworm reefs (*Sabellaria spinulosa)* with this being only one of two sites in Balanced Seas where they occur together. For Honeycomb worm (*Sabellaria alveolata)* reefs this is also only one of two sites that it's recorded in the Balanced Seas region. The site also features one of the most distinctive examples of estuarine rocky habitats in the region, particularly the Harwich Stone Band. More broadly the site makes an important contribution regionally to protecting Subtidal coarse sediment and Low energy intertidal rock and is an important spawning and nursery ground for flat fish species and important for other marine creatures such as the Starlet sea anemone *(Nematostella vectensis)* and Tentacled lagoon worm (*Alkmaria romijni)*.

Socio-Economics

The Stour and Orwell recommended MCZ had support from a range of stakeholders during the Regional Project process although some had reservations such as the ports and harbours sector. The main sector impacted by this site is the Ports and Harbour sector with an annual best estimate quantified cost of £27,000.

Data Certainty

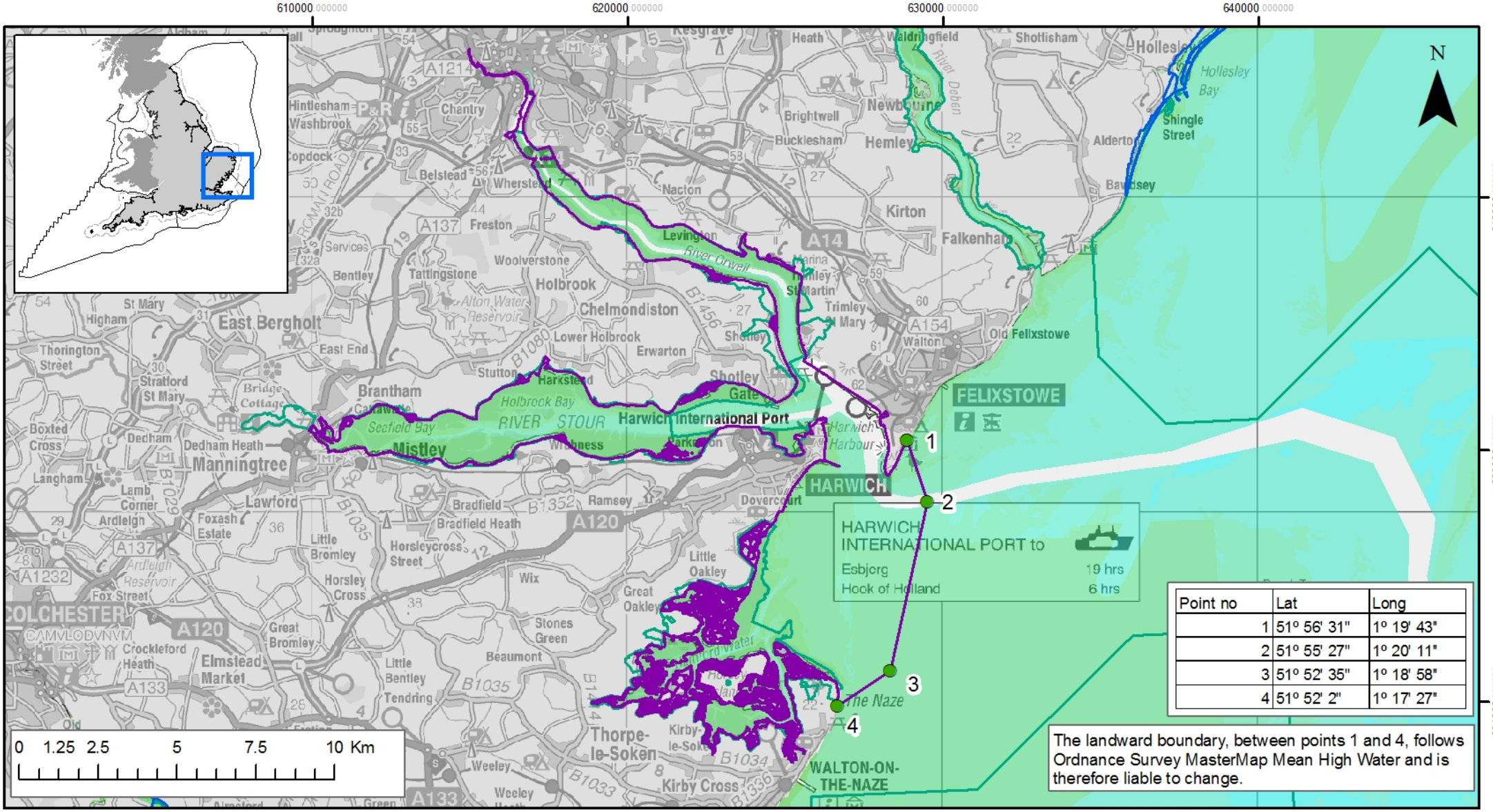
The Stour and Orwell recommended MCZ has acceptable data certainty for five features, of these features Native oyster beds, Honeycomb worm reef (*Sabellaria alveolate)* and Rossworm reef (*Sabellaria spinulosa*) have been identified as higher risk features. Within this site six features have unacceptable data certainty; these features include Low energy intertidal rock, Intertidal mixed sediments, Blue mussel beds, Estuarine rocky habitats, Peat and clay exposures and Sheltered muddy gravels and will require further work prior to their designation.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs, and the SNCBs have highlighted this site as at higher risk, this site has been proposed for designation in 2013 for the features as demonstrated in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Subtidal coarse sediment	Low energy intertidal rock
Honeycomb worm reef (*Sabellaria alveolata)*	Intertidal mixed sediments
Native Oyster beds	Blue mussel beds
Rossworm reef (*Sabellaria spinulosa*)	Estuarine rocky habitats
Subtidal sands and gravels	Peat and clay exposures
	Sheltered muddy gravels



Point no	Lat	Long
1	51º 56' 31"	1º 19' 43"
2	51º 55' 27"	1º 20' 11"
3	51º 52' 35"	1º 18' 58"
4	51º 52' 2"	1º 17' 27"

The landward boundary, between points 1 and 4, follows Ordnance Survey MasterMap Mean High Water and is therefore liable to change.

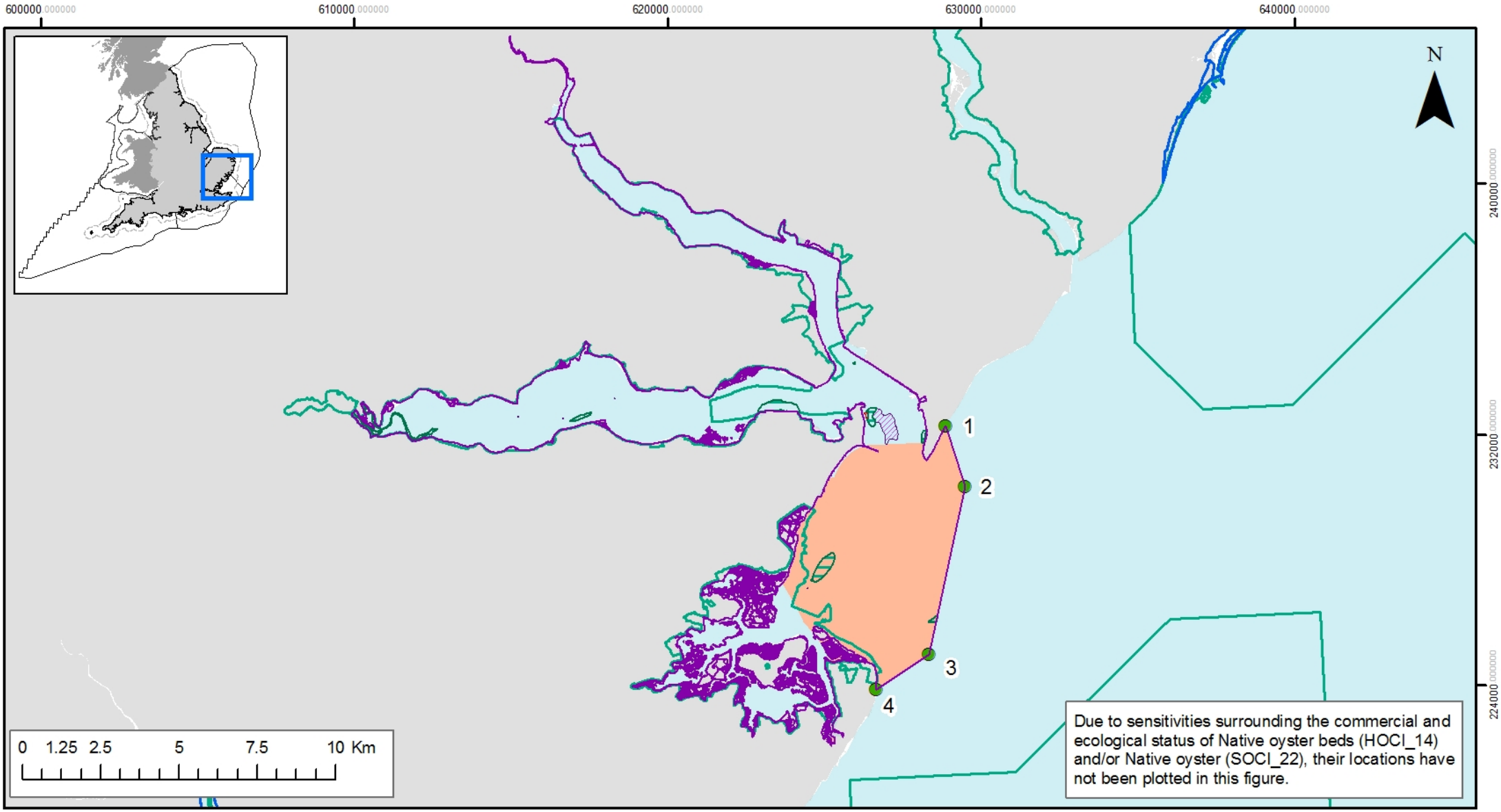
Stour & Orwell Estuaries rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- SPAs with Marine Components
- SAC with Marine Components

Depth Areas (metres)

-20.0 - -10.0	25.1 - 50.0
-9.9 - -5.0	50.1 - 100.0
-4.9 - 0.0	100.1 - 250.0
0.1 - 5.0	250.1 - 500.0
5.1 - 10.0	500.1 - 1000.0
10.1 - 25.0	

Reference: Theme ID: 1477555
Map Projection: British National Grid



Stour & Orwell Estuaries rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- SPAs with Marine Components
- SAC with Marine Components

Features proposed for 2013 desigination

- A5.1 Subtidal coarse sediment
- Subtidal sands and gravels
- Honeycomb worm (Sabellaria alveolata) reefs
- Ross worm (Sabellaria spinulosa) reefs

Reference: Theme ID: 1477555
Map Projection: British National Grid

Consultation Site Summary: Blackwater, Crouch, Roach and Colne Estuaries

Additional information for this site can be found in the SNCB Advice (page 677), Impact Assessment (Annex I2 Option 2, Page 267) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 305 km^2	**Biogeographic Region:** Southern North Sea
Site Location: ETRS89 N51 43' 14.012" E0 58' 20.552" N51 43.234' E0 58.343' **Inshore/Offshore:** Inshore		

Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	High energy intertidal rock	0.1 km^2	Maintain
Broad Scale Habitat	Intertidal mixed sediments	0.1 km^2	Maintain
Habitat FOCI	Native oyster beds	0.00001 km^2	Recover[1]
Species FOCI	Native oyster (*Ostrea edulis)*	17 records	Recover[1]
Species FOCI	Lagoon sea slug (*Tenellia adspersa*)	2 records	Maintain

[1] Following advice from the SNCBs, the conservation objective for this feature has changed from the original Regional Project recommendations

Species FOCI	European eel (*Anguilla anguilla)*	n/a	Maintain
Geology	Clacton Cliffs and Foreshore	n/a	Maintain

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	**Best Estimate Costs (£ per year)**
UK Commercial Fishing	101,000
Ports, harbours and shipping	7,000
Renewable Energy (wind, wave and tidal)	92,000
Archaeology	Unquantified
Coastal Development	Unquantified
National Defence	Non site specific cost
	Best Estimate Total Cost = £200,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

The Blackwater, Crouch, Roach and Colne estuaries recommended MCZ is an estuary site measuring 305 km^2. Within this site there are a variety of features including two Broad Scale Habitats, one FOCI Habitat, three FOCI species FOCI and a geological feature of interest. This site is deemed to be the most important area of both wild and cultivated Native oyster (*Ostrea edulis)* in the Balanced Seas region. It is also the only site in the region where the Lagoon sea slug (*Tenellia adspersa)* exists. More broadly,

the site is an important foraging area for birds and contains haul out and pupping areas for grey seals. The site is also an important spawning and nursery ground for numerous fish species such as thornback ray, whiting, sole, mullet and Blackwater herring.

Socio-Economics

The Blackwater, Crouch, Roach and Colne Estuaries recommended MCZ was supported by a range of stakeholders during the Regional Project process – particularly the Blackwater Oysterman and Essex Wildlife Trust who wish to protect Native oyster. During the Regional MCZ Project process the Crouch and Roach estuaries did have less support due to the uncertainty around conservation objectives and possible impacts upon the recreational sector. The main sector that could be impacted by this site is the Renewable sector with a best estimate quantified cost of £92,000 per year. The change in conservation objective could also result in a best estimate impact of £101,000 for dredging.

Data Certainty

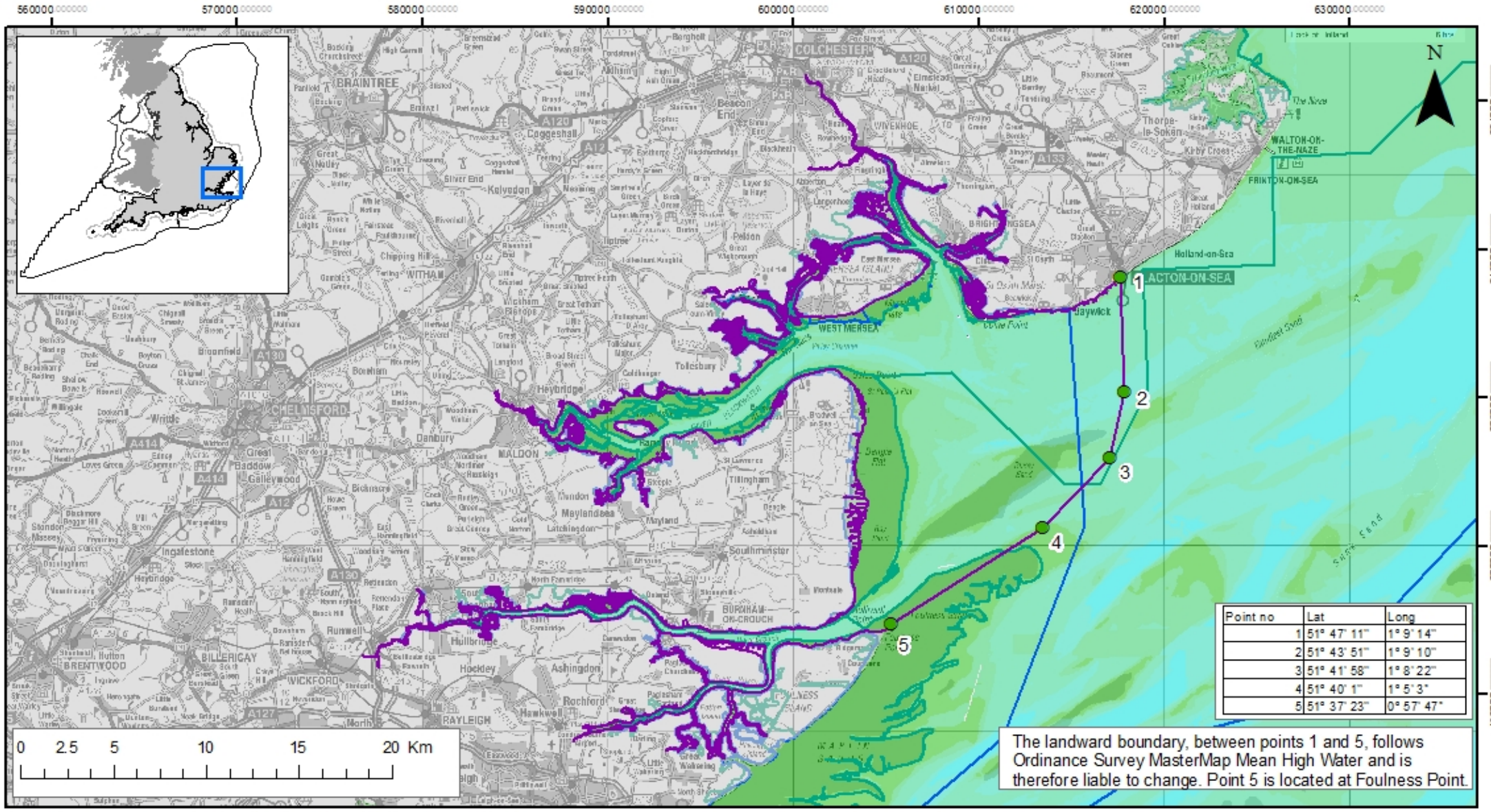
The Blackwater, Crouch, Roach and Colne recommended MCZ has acceptable data certainty for four features. Within this site three features have unacceptable data certainty; these include High energy intertidal rock, Native oyster (*Ostrea edulis)* and Native oyster beds and will require further work prior to their designation.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs and the data certainty is acceptable for sufficient features this site has been proposed for designation in 2013 for the features as demonstrated in the table 4. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Intertidal mixed sediments	High energy intertidal rock
Lagoon sea slug (*Tenellia adspersa)*	Native oyster (*Ostrea edulis*)
European eel (*Anguilla Anguilla)*	Native oyster beds
Clacton Cliffs and Foreshore	



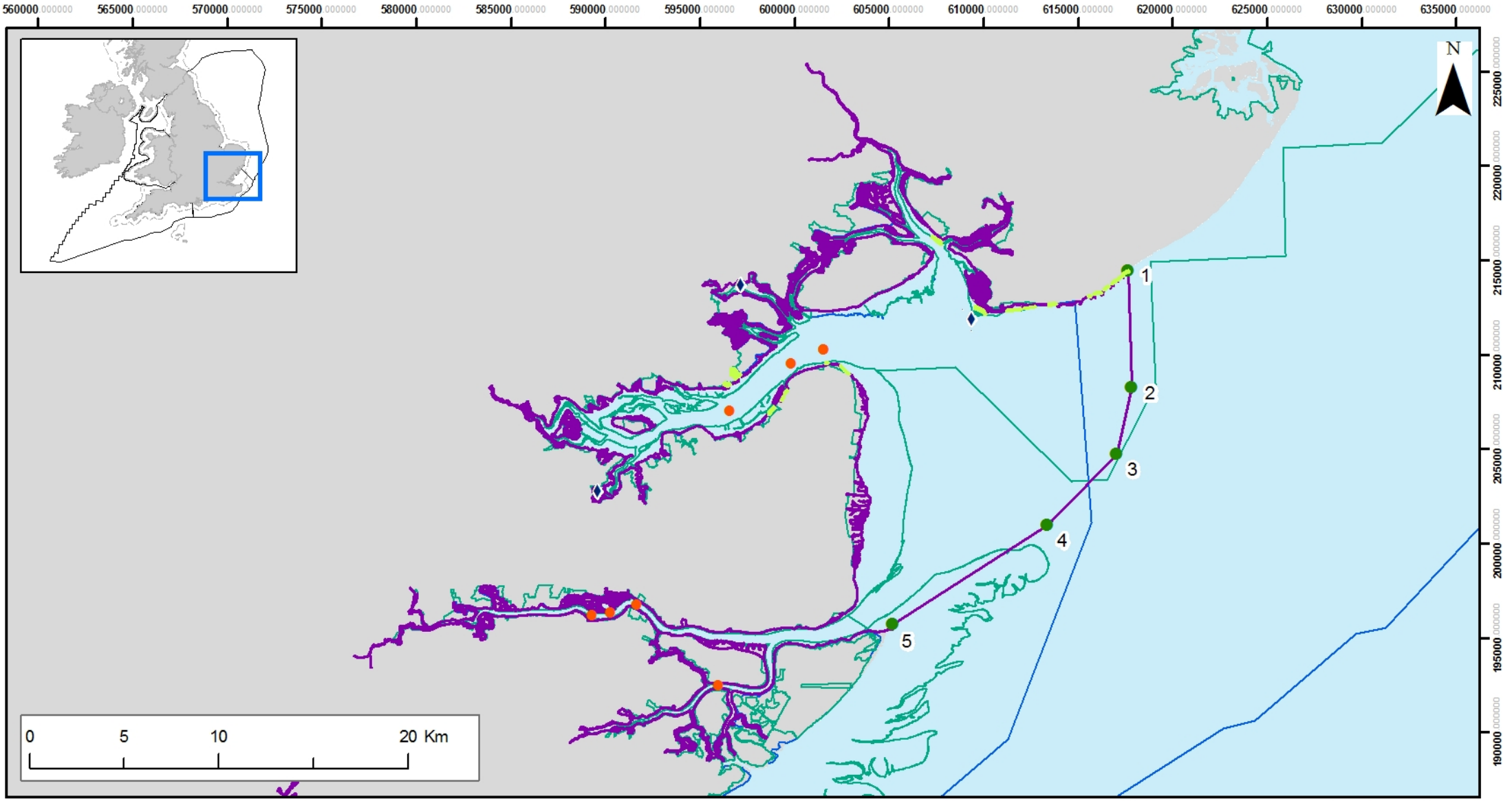
Blackwater, Crouch, Roach & Colne Estuaries rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- SAC with Marine Components
- SPAs with Marine Components

Depth Areas (metres)

- -20.0 - -10.0
- -9.9 - -5.0
- -4.9 - 0.0
- 0.1 - 5.0
- 5.1 - 10.0
- 10.1 - 25.0
- 25.1 - 50.0
- 50.1 - 100.0
- 100.1 - 250.0
- 250.1 - 500.0
- 500.1 - 1000.0

Reference: Theme ID: 1477556
Map Projection: British National Grid



Blackwater, Crouch, Roach & Colne Estuaries

Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land
- SAC with Marine Components
- SPA with Marine Components

Features proposed for 2013 designation

- Intertidal mixed sediments (A2.4)
- European eel (Anguilla anguilla)
- Lagoon sea slug (Tenellia adspersa)
- Intertidal mixed sediments (A2.4)

Reference: Theme ID 1477556,
Map Projection:British National Grid

Consultation Site Summary: Medway Estuary

Additional information for this site can be found in the SNCB Advice (page 687), Impact Assessment (Annex I2 Option 2, Page 292) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 65 km^2	**Biogeographic Region:** Southern North Sea
Site Location: ETRS89 N51 24' 55.486" E0 39' 12.297" N51 24.925 E0 39.205' **Inshore/Offshore:** Inshore		

Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Low energy intertidal rock	0.5 km^2	Maintain
Broad Scale Habitat	Intertidal sand/muddy sand	0.10 km^2	Maintain
Broad Scale Habitat	Intertidal mixed sediments	0.1 km^2	Maintain
Broad Scale Habitat	Subtidal coarse sediments	4 km^2	Maintain
Broad Scale Habitat	Subtidal sand	3 km^2	Maintain
Broad Scale Habitat	Subtidal mud	20 km^2	Maintain
Habitat FOCI	Estuarine rocky habitats	0.02 km^2	Maintain

Habitat FOCI	Peat and clay exposures	0.0003 km^2	Maintain
Habitat FOCI	Sheltered muddy gravels	41 records	Recover[1]
Species FOCI	Tentacled lagoon Worm (*Alkmaria romijni*)	2 records	Maintain

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	**Best Estimate Costs (£ per year)**
UK Commercial Fishing	2,000
Ports, Harbours and Commercial Shipping	3,000
Archaeology	Unquantified
Coastal Development	Non site specific cost
National Defence	Non site specific cost
	Best Estimate Total Cost = £5,000

[1] Following advice from the SNCBs, the conservation objective for this feature has changed from the original Regional Project recommendations

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

The Medway Estuary recommended MCZ is an estuary site measuring 65 km². Within this rMCZ there are six Broad Scale Habitats, three FOCI Habitats and one species FOCI. The site makes an important contribution to the regional targets for Low energy intertidal rock and is one of only four sites proposed for the Tentacled lagoon worm (*Alkmaria romijni*). The site is also an important fish nursery and spawning ground for bass, herring, plaice, sole and cod.

Socio-Economics

The Medway Estuary recommended MCZ has an annual best estimate quantified cost to the ports and harbour sector of £3,000 and to commercial fisheries of £2,000.

Data Certainty

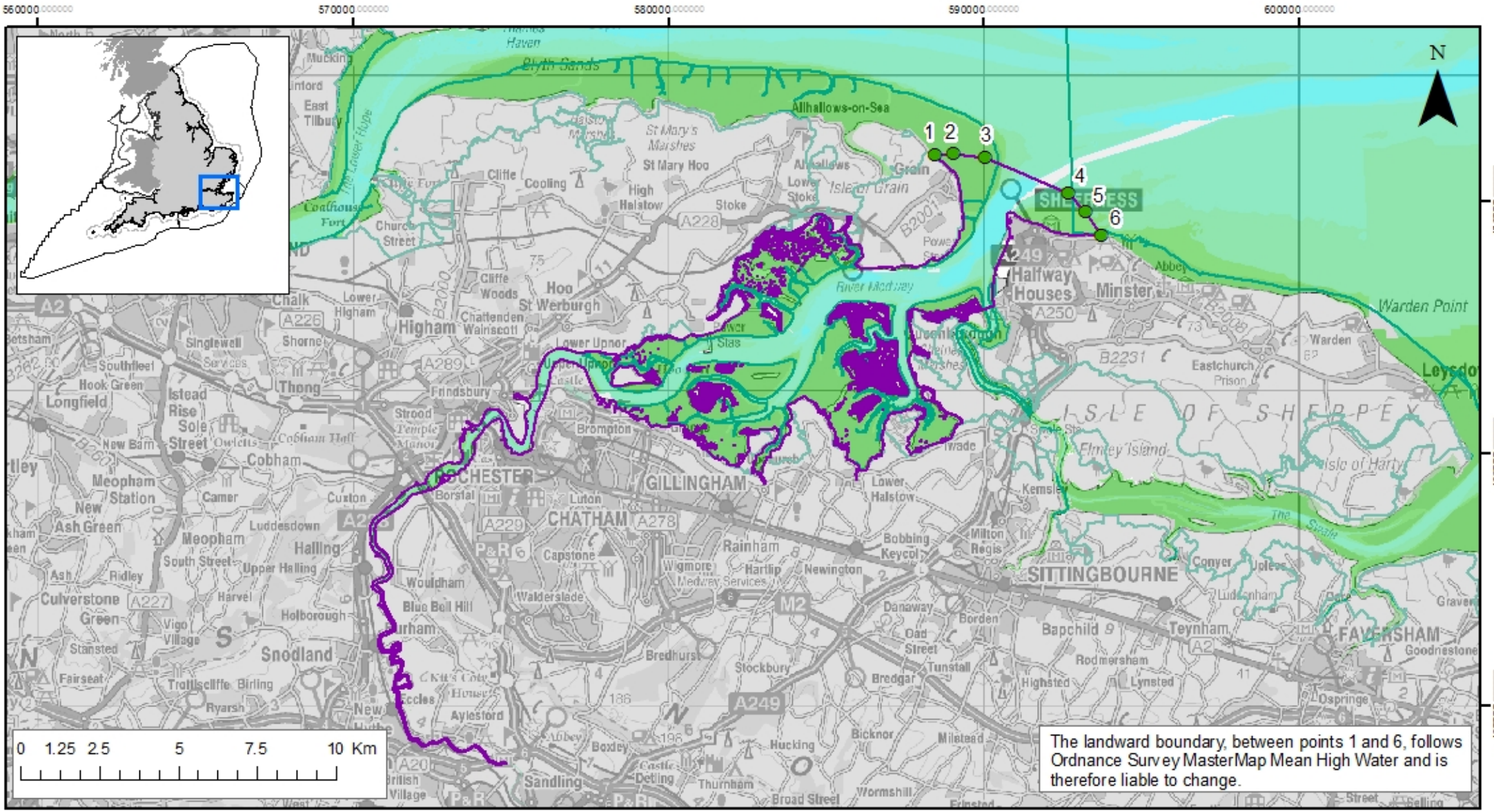
The Medway Estuary recommended MCZ has acceptable data certainty for three features, of these features Tentacled lagoon worm (*Alkmaria romijni*) has been identified as higher risk. Within this site seven features have unacceptable data certainty; these include Low energy intertidal rock, Interidal mixed sediments, Subtidal coarse sediments, Subtidal sand, Estuarine rocky habitats, Peat and clay exposures and Sheltered muddy gravels and will require further work prior to their designation.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs, and the SNCBs have highlighted this site as at higher risk, this site has been proposed for designation in 2013 for the features as demonstrated in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Intertidal sand/muddy sand	Low energy intertidal rock
Subtidal mud	Intertidal mixed sediments
Tentacled lagoon worm *(Alkmaria romijni*)	Subtidal coarse sediments
	Subtidal sand
	Estuarine rocky habitats
	Peat and clay exposures
	Sheltered muddy gravels



Medway Estuary rMCZ

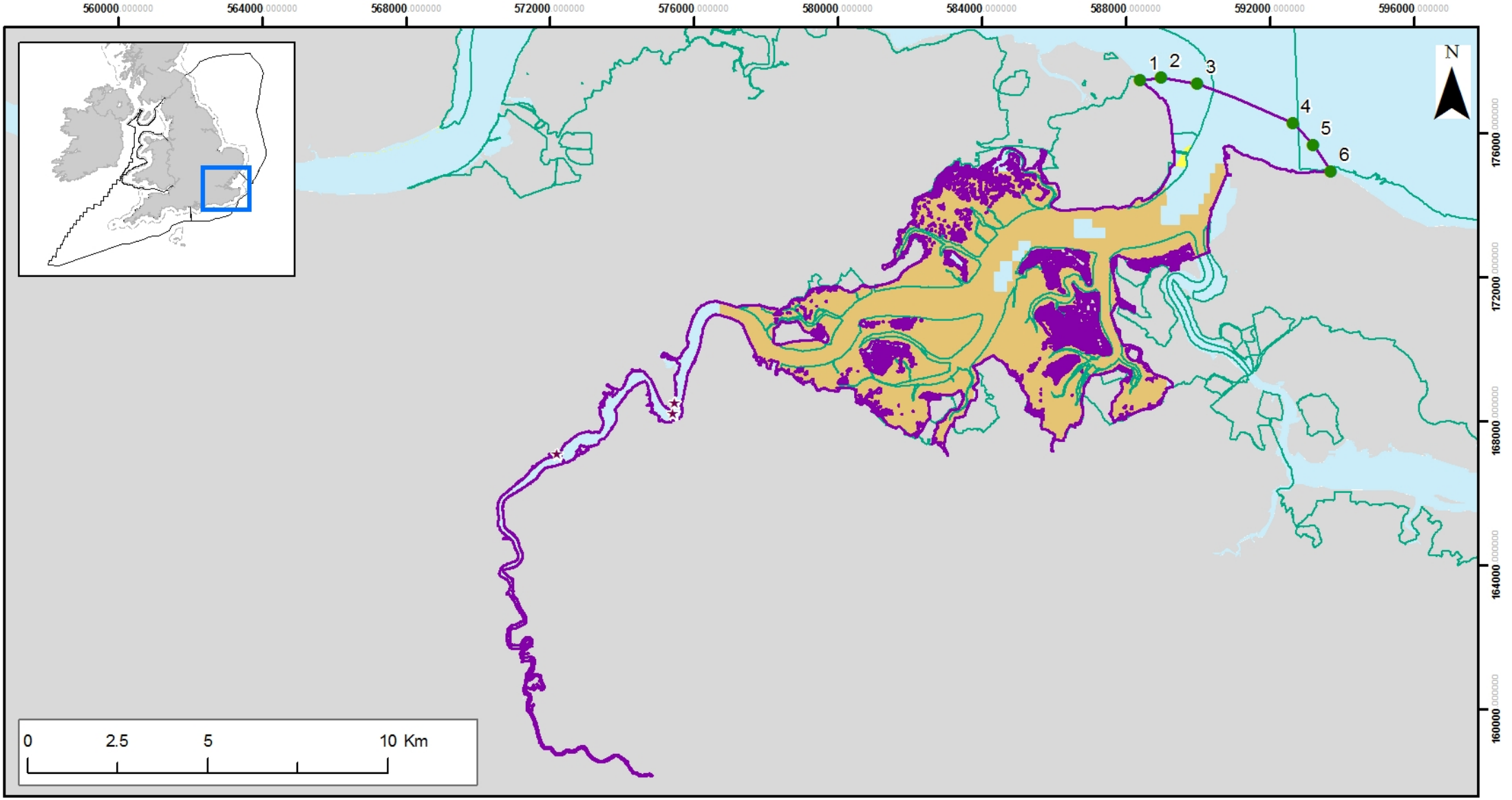
- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- SPAs with Marine Components

Point no	Lat	Long
1	51° 27' 53"	0° 42' 40"
2	51° 27' 55"	0° 43' 11"
3	51° 27' 48"	0° 44' 2"
4	51° 27' 9"	0° 46' 17"
5	51° 26' 49"	0° 46' 45"
6	51° 26' 25"	0° 47' 9"

Depth Areas (metres)

- -20.0 - -10.0
- -9.9 - -5.0
- -4.9 - 0.0
- 0.1 - 5.0
- 5.1 - 10.0
- 10.1 - 25.0
- 25.1 - 50.0
- 50.1 - 100.0
- 100.1 - 250.0
- 250.1 - 500.0
- 500.1 - 1000.0

Reference: Theme ID: 1477558
Map Projection: British National Grid



Medway Estuary

Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land
- SPA with Marine Components

Features proposed for 2013 designation

- Tentacled lagoon-worm (Alkmaria romijni)
- Intertidal sand and muddy sand (A2.2)
- Subtidal mud (A5.3)

Reference: Theme ID 1477558,
Map Projection:British National Grid

Consultation Site Summary: Thanet Coast

Additional information for this site can be found in the SNCB Advice (page 690), Impact Assessment (Annex I2 Option 2, Page 314) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 63 km^2	**Biogeographic Region:** Southern North Sea
Site Location: ETRS89 N51 22’ 40.556” E1 22’ 44.002” N51 22.676’ E1 22.733’ **Inshore/Offshore:** Inshore		

Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Moderate energy infralittoral rock	0.3 km^2	Maintain
Broad Scale Habitat	Moderate energy circalittoral rock	8 km^2	Maintain
Broad Scale Habitat	Subtidal coarse sediment	9 km^2	Maintain
Broad Scale Habitat	Subtidal sand	6 km^2	Maintain
Broad Scale Habitat	Subtidal mixed sediments	13 km^2	Maintain
Habitat FOCI	Blue mussel beds	0.01 km^2	Maintain
Habitat FOCI	Peat and clay exposures	0.001 km^2	Maintain

Habitat FOCI	Rossworm reef (*Sabellaria spinulosa)*	0.002 m^2	Recover
Habitat FOCI	Subtidal chalk	9 km^2	Maintain
Habitat FOCI	Subtidal sands and gravel	6 km^2	Maintain
Species FOCI	St John's Jellyfish (*Lucernariopsis cruxmelitensis)*	1 record	Maintain
Species FOCI	Kaleidoscope Jellyfish (*Haliclystus auricula)*	1 record	Maintain

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	**Best Estimate Costs (£ per year)**
UK Commercial Fishing	4,000
Ports, harbours and shipping	4,000
Archaeology	Unquantified
Oil and gas exploration and production, gas interconnectors and gas storage (including carbon capture and storage	Non site specific costs
	Best Estimate Total Cost = £8,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

Thanet Coast recommended MCZ is an inshore site measuring 63 km². Within this site there are five Broad Scale Habitats, five FOCI Habitats and two FOCI species. The site has a range of unusual features that are limited in distribution and deemed the best examples within the Balanced Seas region. These include an unusual habitat composition of Rossworm reefs (*Sabellaria spinulosa)* forming a biogenic reef with Blue mussel beds. This is the only MCZ proposed for the St John's Jellyfish (*Lucernariopsis cruxmelitensis)* and one of two MCZs for the Kaleidoscope Jellyfish (*Haliclystus auricula)*. The site also contains the best regional examples of chalk habitats – forming a progression of chalk from intertidal chalk cliffs to subtidal chalk reefs. SNCBs have also identified that additional occurrences of Peat and clay exposures occur outside the boundary of the site.

Socio-Economics

The Thanet Coast recommended MCZ had broad support from most sectors during the Regional Project process, mainly due to the strong community engagement already in existence on marine conservation in the area. The quantified annual best estimate cost is £8,000 and is split between commercial fisheries and ports and harbours.

Data Certainty

Thanet Coast recommended MCZ has acceptable data certainty for nine features, of these features Rossworm Reef (*Sabellaria spinulosa)* has been identified as a higher risk feature. Within this site three features have unacceptable data certainty; these features include Peat and clay exposures, St John's Jellyfish (*Lucernariopsis cruxmelitensis)* and Kaleidoscope Jellyfish (*Haliclystus auricula)* and will require further work prior to their designation.

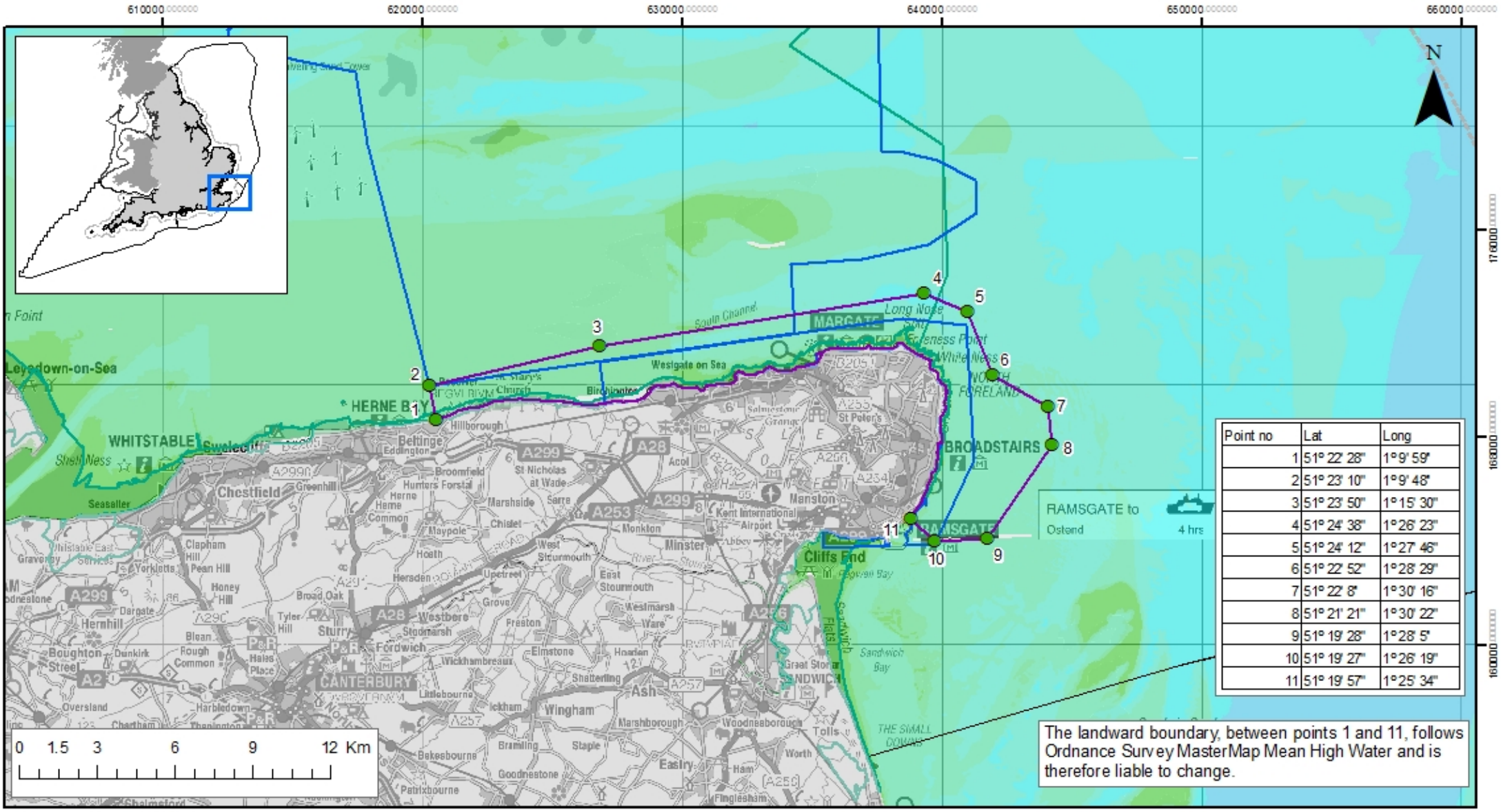
Conclusion

Therefore, as the advantages for this site justify the socio-economic costs and the data certainty is acceptable for sufficient

features this site has been proposed for designation in 2013 for the features as demonstrated in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Moderate energy infralittoral rock	Peat and Clay Exposures
Moderate energy circalittoral rock	St John's Jellyfish (*Lucernariopsis cruxmelitensis)*
Subtidal coarse sediment	Kaleidoscope Jellyfish (*Haliclystus auricula)*
Subtidal sand	
Subtidal mixed sediments	
Blue mussel beds	
Rossworm reef (*Sabellaria spinulosa)*	
Subtidal chalk	
Subtidal sands and gravel	



Point no	Lat	Long
1	51° 22' 28"	1° 9' 59"
2	51° 23' 10"	1° 9' 48"
3	51° 23' 50"	1° 15' 30"
4	51° 24' 38"	1° 26' 23"
5	51° 24' 12"	1° 27' 46"
6	51° 22' 52"	1° 28' 29"
7	51° 22' 8"	1° 30' 16"
8	51° 21' 21"	1° 30' 22"
9	51° 19' 28"	1° 28' 5"
10	51° 19' 27"	1° 26' 19"
11	51° 19' 57"	1° 25' 34"

The landward boundary, between points 1 and 11, follows Ordnance Survey MasterMap Mean High Water and is therefore liable to change.

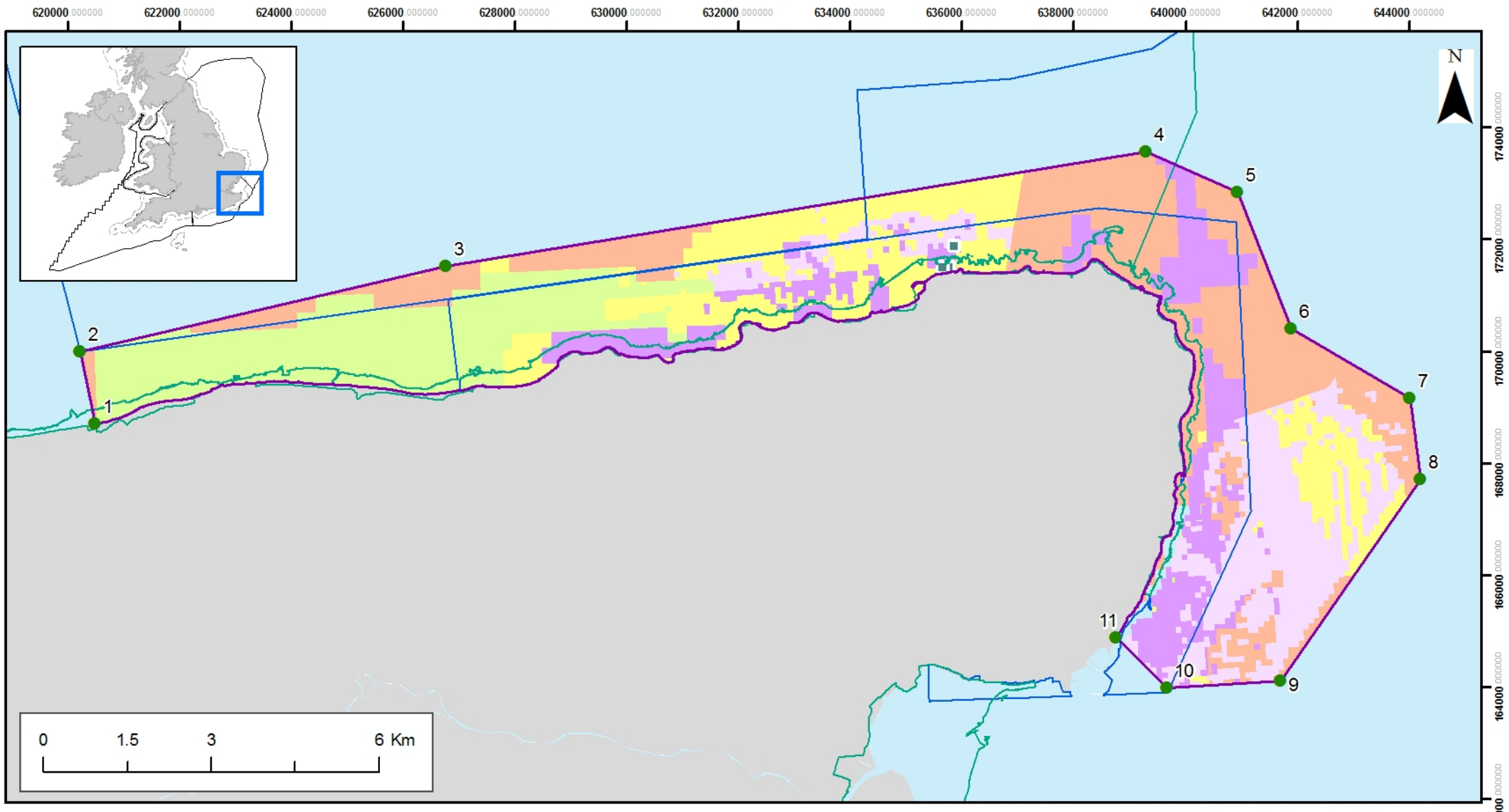
Thanet Coast rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- SAC with Marine Components
- SPAs with Marine Components

Depth Areas (metres)

-20.0 - -10.0	25.1 - 50.0
-9.9 - -5.0	50.1 - 100.0
-4.9 - 0.0	100.1 - 250.0
0.1 - 5.0	250.1 - 500.0
5.1 - 10.0	500.1 - 1000.0
10.1 - 25.0	

Reference: Theme ID: 1477559
Map Projection: British National Grid



Thanet Coast

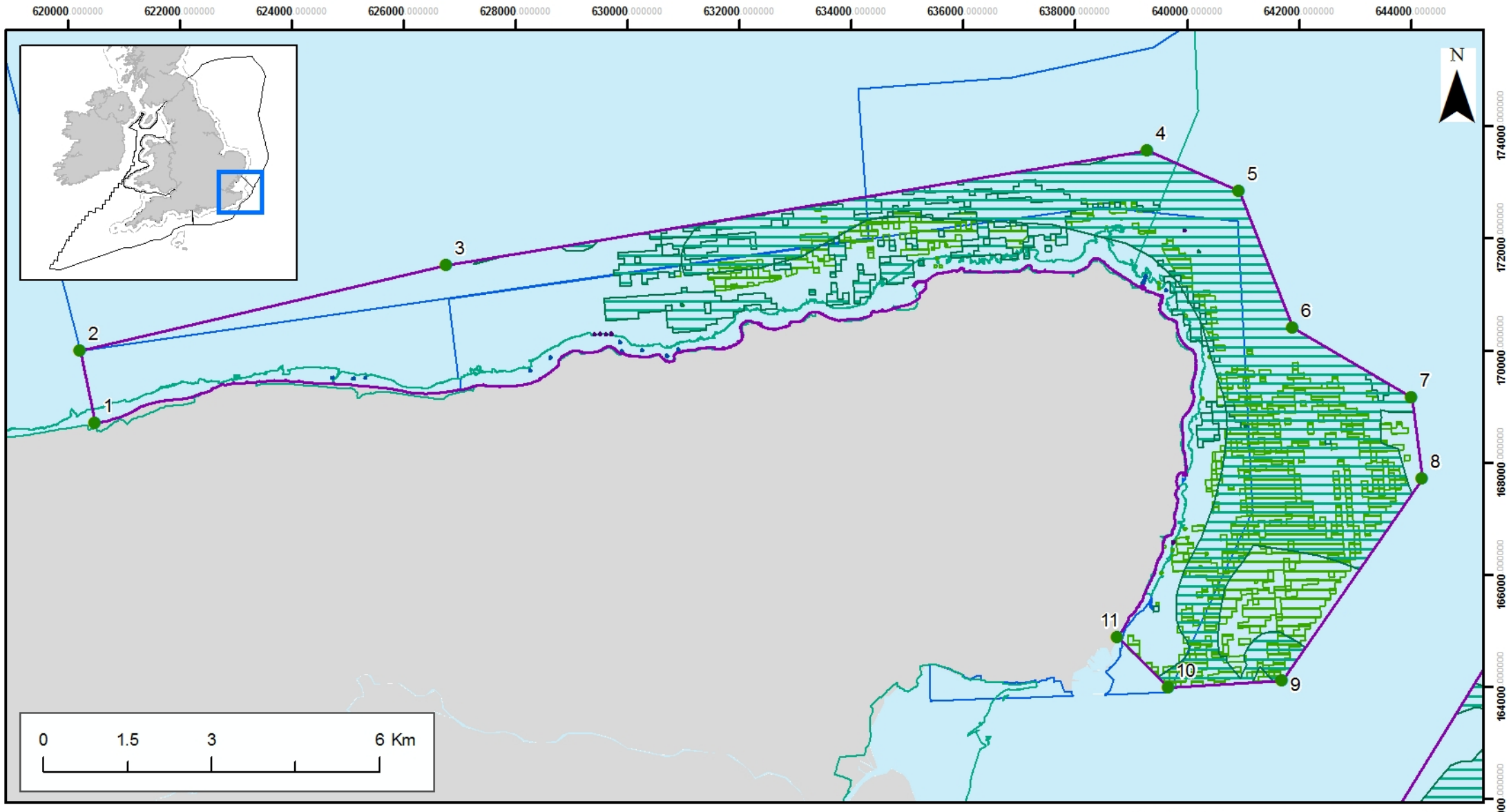
Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land
- SAC with Marine Components
- SPA with Marine Components

Features proposed for 2013 designation

- Moderate energy infralittoral rock (A3.2)
- Moderate energy infralittoral rock (A3.2)
- Moderate energy circalittoral rock (A4.2)
- Subtidal coarse sediment (A5.1)
- Subtidal sand (A5.2)
- Subtidal mixed sediments (A5.4)

Reference: Theme ID 1477559,
Map Projection:British National Grid



Thanet Coast

Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land
- SAC with Marine Components
- SPA with Marine Components

Features proposed for 2013 designation

- Blue Mussel beds
- Ross worm reefs (Sabellaria spinulosa)
- Subtidal chalk
- Subtidal sands and gravels

Reference: Theme ID 1477559,
Map Projection:British National Grid

Consultation Site Summary: Folkestone Pomerania

Additional information for this site can be found in the SNCB Advice (page 745), Impact Assessment (Annex I2 Option 2, Page 334) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 34 km^2		**Biogeographic Region:** Eastern English Channel
Site Location: ETRS89 N51 1' 20.489" E1 16' 44.422" N51 1.341' E1 16.740' **Inshore/Offshore:** Inshore			
Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Moderate energy circalittoral rock	2 km^2	Recover
Broad Scale Habitat	Subtidal coarse sediment	25 km^2	Maintain
Broad Scale Habitat	Subtidal sand	7 km^2	Maintain[2]
Habitat FOCI	Blue mussel beds	0.0003 m^2	Maintain[1]
Habitat FOCI	Fragile sponge and anthozoan communities	3 records	Recover

[2] Following advice from the SNCBs, the conservation objective for this feature has changed from the original Regional Project recommendations

Habitat FOCI	Honeycomb worm reef (*Sabellaria alveolata)*	0.01 km^2	Recover
Habitat FOCI	Rossworm reef (*Sabellaria spinulosa)*	0.1 km^2	Recover
Habitat FOCI	Subtidal sands and gravels	29 km^2	Maintain[1]

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	**Best Estimate Costs (£ per year)**
UK Commercial Fishing	5,000
Archaeological heritage	Unquantified
Oil & Gas	Non site specific costs
	Best Estimate Total Cost = £5,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Advantages

The Folkestone Pomerania recommended MCZ is an inshore site measuring 34 km^2. Within this site there are three Broad Scale Habitats and five FOCI Habitats. The site contains only one of two examples of Fragile sponge and anthozoan communities on Subtidal rocky habitats in the Balanced Seas region. They form on exposed rock ledges at the top of large depressions in the sea bed. There are also unusual mixes of mud biotopes not known to occur elsewhere in Balanced Seas contained in the dense

biogenic reefs of Rossworm (*Sabellaria spinulosa)*. The SNCBs have identified that the Rossworm reef (*Sabellaria spinulosa)* extends beyond the current site boundary. There are also biogenic reefs of Blue mussel beds which are important for storing carbon and fixing and processing nutrients from the water. The area of Subtidal sand is also making a significant contribution to the adequacy targets for this feature and has been identified by the SNCBs to extend beyond the site's current boundary.

Socio-Economics

The Folkestone Pomerania recommended MCZ went through several iterations during the Regional Project process. The site has support and agreement from the local fishing fleet to cease trawling as long as trawling in Hythe Bay rMCZ is not restricted beyond a zoned management proposal put forward by them. The annual best estimate cost is £5,000 for the commercial fisheries sector.

Data Certainty

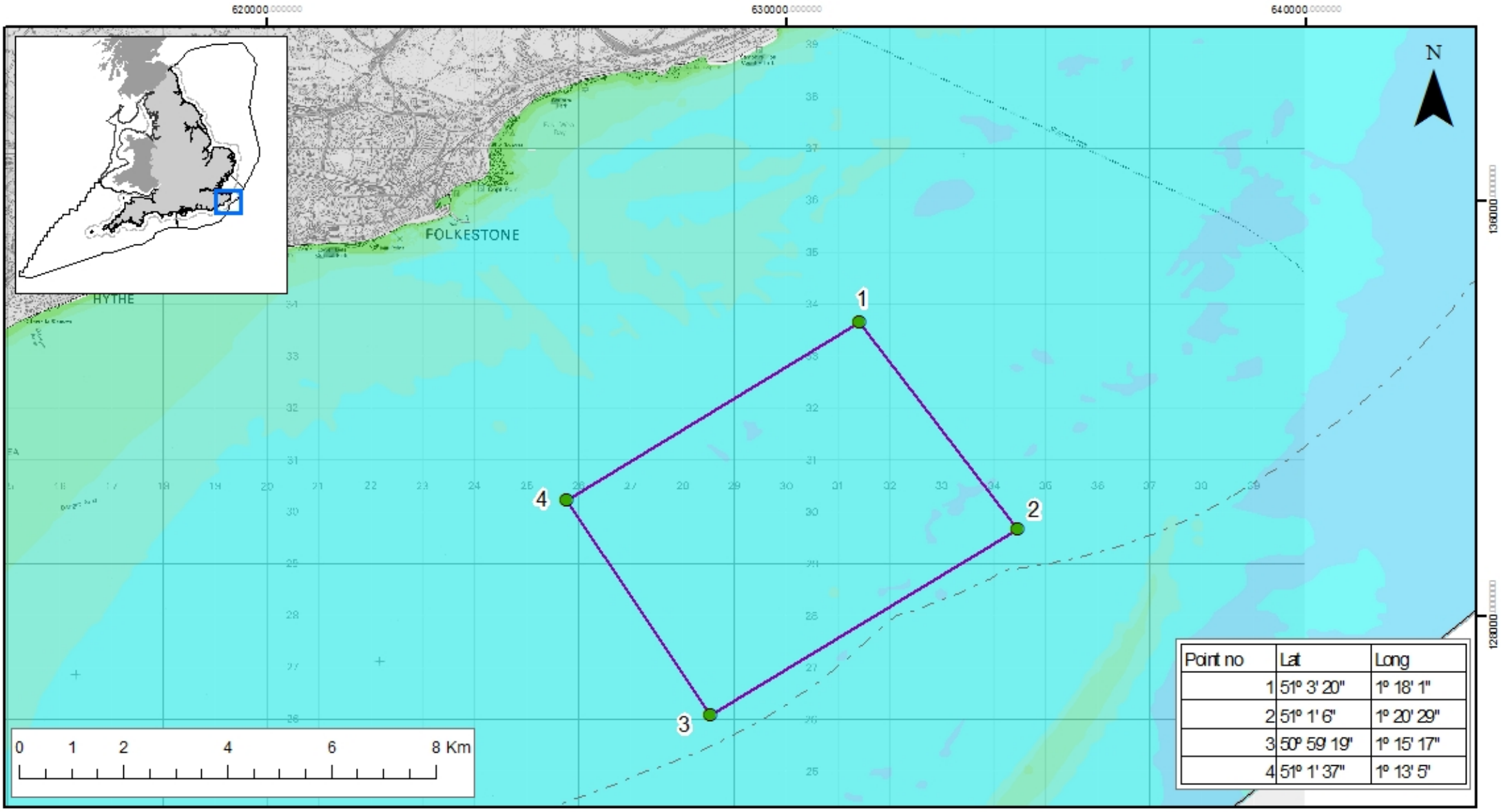
The Folkestone Pomerania rMCZ has acceptable data certainty for five features, of these features Fragile sponge and anthozoan communities, Honeycomb worm reef (*Sabellaria alveolata)* and Rossworm reef (*Sabellaria spinulosa)* have been identified as being at higher risk. Within the site three features have unacceptable data certainty; these include Moderate energy circalittoral rock, Blue mussel beds and Subtidal sands and gravels and will require further work prior to their designation.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs, and the SNCBs have highlighted this site as at higher risk, this site has been proposed for designation in 2013 for the features as demonstrated in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Subtidal coarse sediment	Moderate energy circalittoral rock
Subtidal sand	Blue mussel beds
Rossworm reef (*Sabellaria spinulosa)*	Subtidal sands and gravels
Fragile sponge and anthozoan communities	
Honeycomb worm reef (*Sabellaria alveolata)*	



Point no	Lat	Long
1	51° 3' 20"	1° 18' 1"
2	51° 1' 6"	1° 20' 29"
3	50° 59' 19"	1° 15' 17"
4	51° 1' 37"	1° 13' 5"

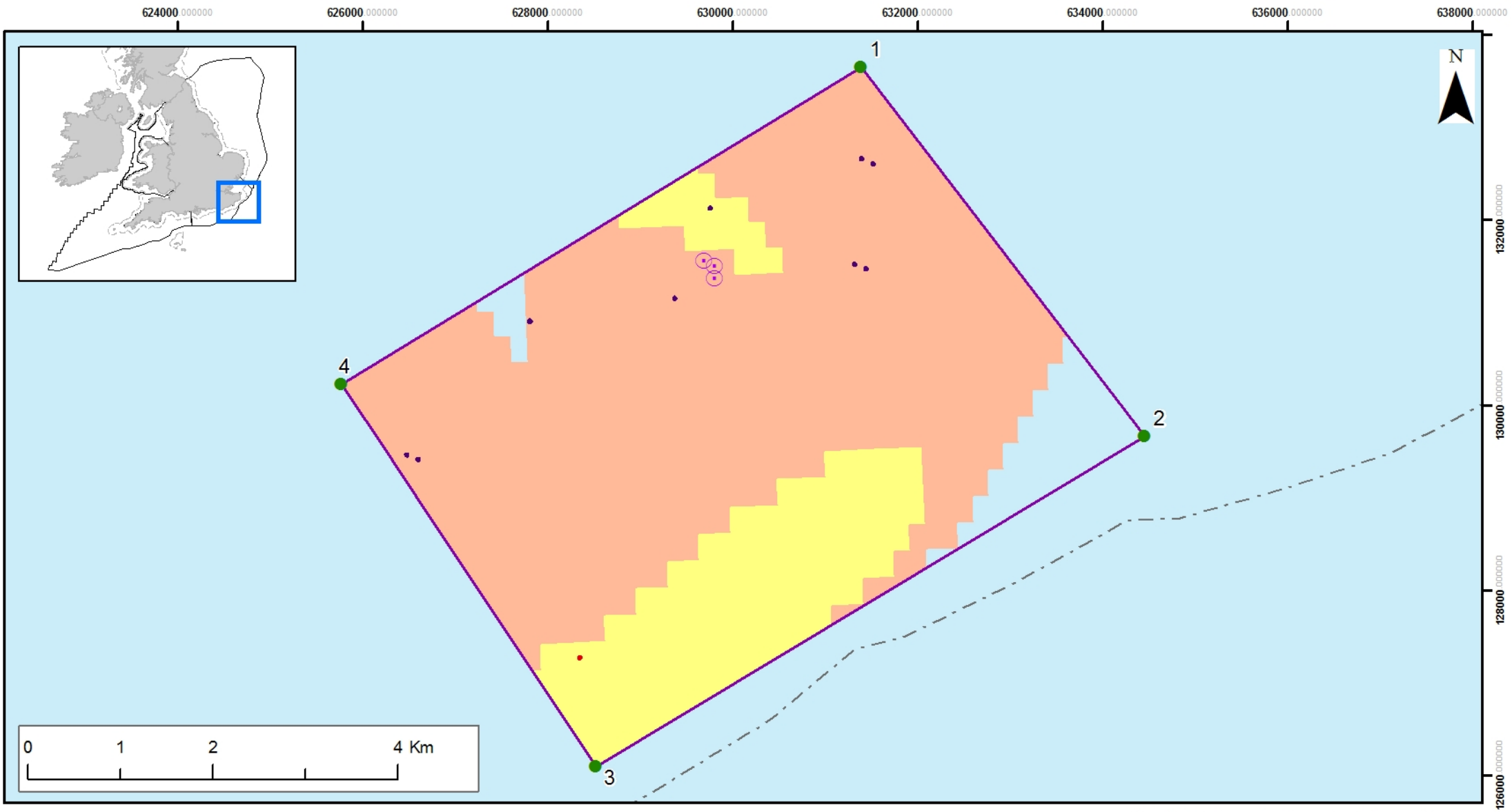
Folkestone Pomerania rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- 6nM Territorial Seas Limit
- Land

Depth Areas (metres)

-20.0 - -10.0	25.1 - 50.0
-9.9 - -5.0	50.1 - 100.0
-4.9 - 0.0	100.1 - 250.0
0.1 - 5.0	250.1 - 500.0
5.1 - 10.0	500.1 - 1000.0
10.1 - 25.0	

Reference: Theme ID: 1477565
Map Projection: British National Grid



Folkestone Pomerania

Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 6nm Limit
- England 12nM Territorial Seas Limit
- Land

Features proposed for 2013 designation

- Subtidal coarse sediment (A5.1)
- Subtidal sand (A5.2)
- Fragile sponge & anthozoan communities on subtidal rocky habitats
- Honeycomb worm reefs (Sabellaria alveolata)
- Ross worm reefs (Sabellaria spinulosa)

Reference: Theme ID 1477565,
Map Projection:British National Grid

Consultation Site Summary: Hythe Bay

Additional information for this site can be found in the SNCB Advice (page 724), Impact Assessment (Annex I2 Option 2, Page 401) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 42 km^2		**Biogeographic Region:** Eastern English Channel
Site Location: ETRS89 N51 2' 28.204" E1 5' 4.698"N51 2.470' E1 5.078' **Inshore/Offshore:** Inshore			
Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Subtidal mud	37 km^2	Recover
Habitat FOCI	Mud habitats in deep water	79 records	Recover
Habitat FOCI	Seapens & burrowing megafauna	28 records	Recover

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	Best Estimate Costs (£ per year)
UK Commercial Fishing	3,000
Archaeology	Unquantified
National Defence	Non site specific cost
Flood and Coastal Erosion Risk Management	Non site specific cost
	Best Estimate Total Cost = £ 3,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

The Hythe Bay rMCZ is an inshore site measuring 42 km². Within this site there is one Broad Scale Habitat and two FOCI Habitats. The site is rich in Sea pen and burrowing megafauna such as Spoonworms, the Burrowing anemone and Large burrowing shrimps. The site's species richness is deemed higher than the national biotope description and many of the mud habitats in the site are important for the formation of species habitat and biogeochemical cycling. These mud habitats all make significant contributions to the replication and adequacy targets in the Balanced Seas region. The site also contains foraging grounds for Great cormorant, Tern and Gull species; as well as nursery and spawning areas for fish such as the Undulate ray and Sole.

Socio-Economics

The Hythe Bay rMCZ invoked considerable stakeholder discussion during the Regional Project process. The trawling sector has proposed a zoned management approach to management to reduce the impacts upon the sector and the compatibility of this with meeting the conservation objectives would be considered by the regulatory authorities once the site is designated. If the zoned management approach is not appropriate, there could be implications of reduced support for three other rMCZs (Dover to Deal,

Dover to Folkestone, Folkestone Pomerania).

Data Certainty

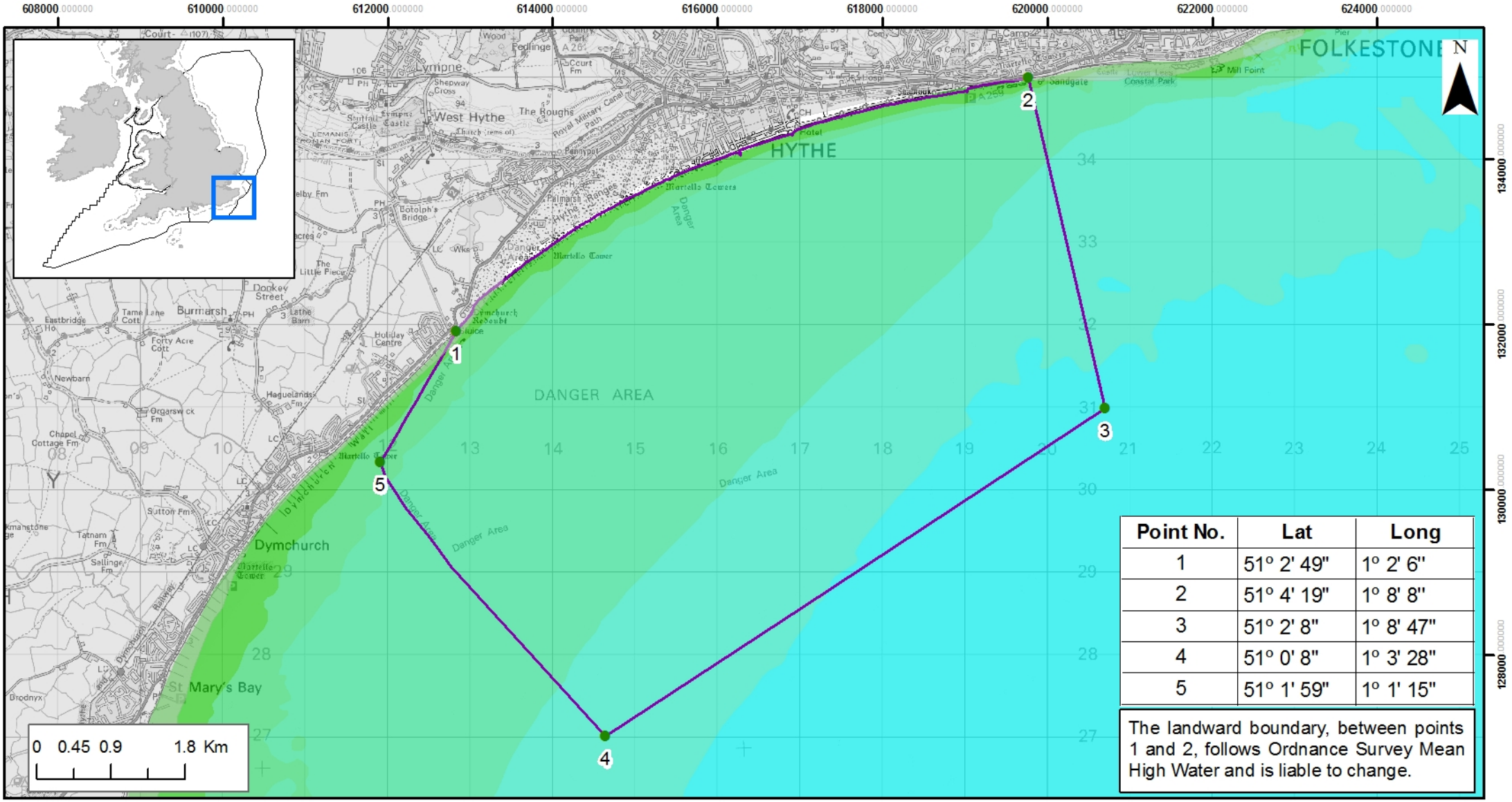
Hythe Bay has acceptable data certainty for all three features. Of these features, Mud habitats in deep water has been identified as a higher risk feature within this site.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs and the data certainty is acceptable for all features, and it is a site deemed higher risk by the SNCBs, this site has been proposed for designation in 2013 for all features.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013
Subtidal mud
Mud habitats in deep water
Seapens & burrowing megafauna



Point No.	Lat	Long
1	51° 2' 49"	1° 2' 6"
2	51° 4' 19"	1° 8' 8"
3	51° 2' 8"	1° 8' 47"
4	51° 0' 8"	1° 3' 28"
5	51° 1' 59"	1° 1' 15"

The landward boundary, between points 1 and 2, follows Ordnance Survey Mean High Water and is liable to change.

Hythe Bay

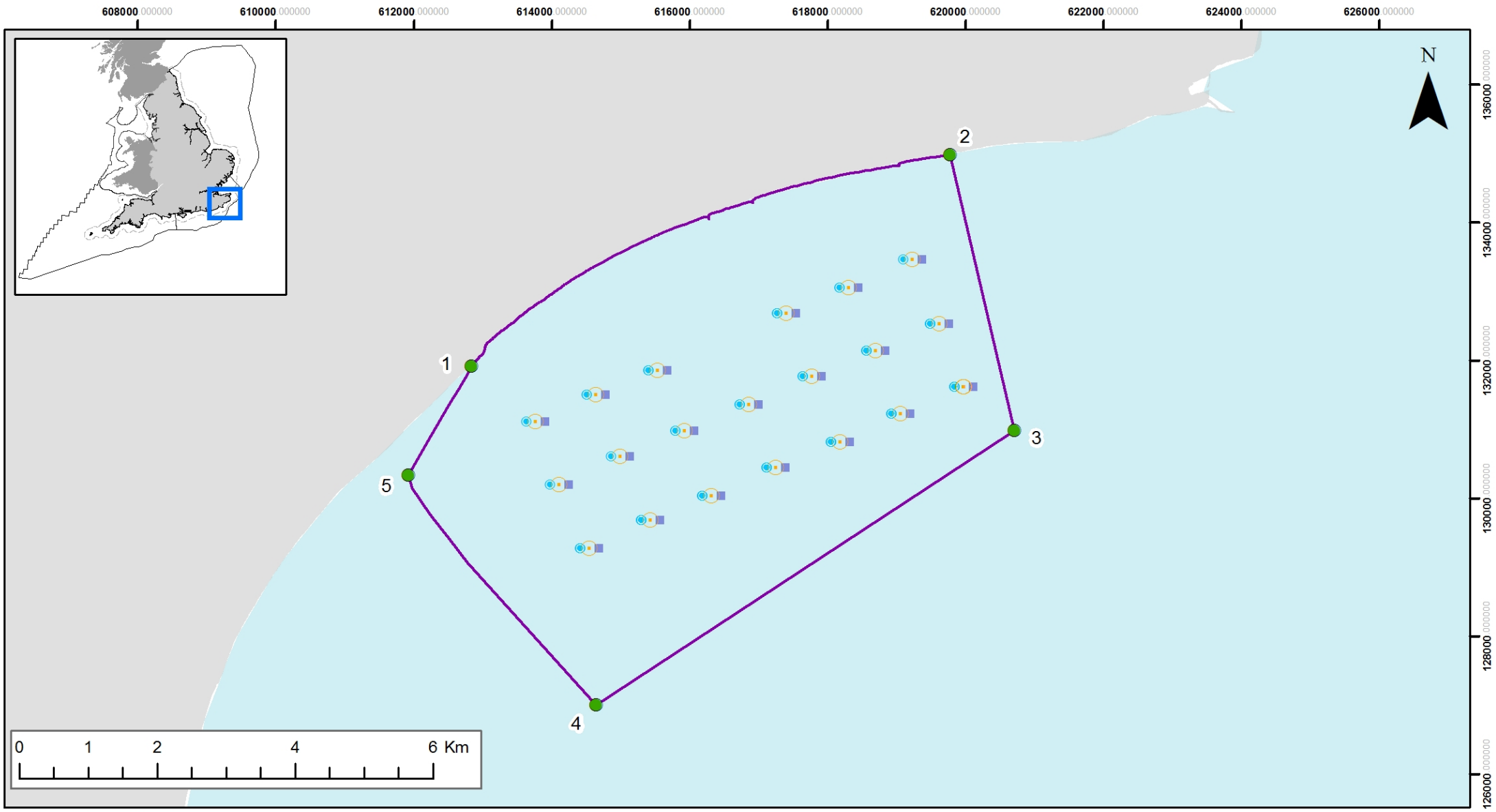
Recomended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- England 12nM Territorial Seas Limit
- Land

Depth Areas (m)

-20.0 - -10.0	25.1 - 50.0
-9.9 - -5.0	50.1 - 100.0
-4.9 - 0.0	100.1 - 250.0
0.1 - 5.0	250.1 - 500.0
5.1 - 10.0	500.1 - 1000.0
10.1 - 25.0	

Reference: Theme ID 1477577,
Map Projection:British National Grid



Hythe Bay rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- Sea

Features proposed for 2013 designation

- Subtidal Mud (A5.3)
- Mud habitats in deep water
- Sea pens and burrowing megafauna

Reference: Theme ID: 1477577
Map Projection: British National Grid

Consultation Site Summary: Beachy Head West

Additional information for this site can be found in the SNCB Advice (page 755), Impact Assessment (Annex I2 Option 2, Page 352) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 24 km^2		**Biogeographic Region:** Eastern English Channel
Site Location: ETRS89 N50 46' 17.831" E0 3' 48.658" N50 46.297' E0 3.811' **Inshore/Offshore:** Inshore			
Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Intertidal coarse sediment	0.0007 km^2	Maintain
Broad Scale Habitat	Subtidal sand	8 km^2	Maintain
Broad Scale Habitat	Subtidal mud	2 km^2	Maintain
Broad Scale Habitat	Subtidal mixed sediments	5 km^2	Maintain
Broad Scale Habitat	Infralittoral muddy sand[3]	n/a	Maintain

[3] This is a non ENG feature derived from REC habitat classification put forward by the Regional Project. For the purpose of assessing the site's ecological contribution against the ENG this feature will be back-translated to Subtidal sand

Broad Scale Habitat	Infralittoral rock and thin sandy sediment[1]	N/A	Maintain
Broad Scale Habitat	Infralittoral sandy mud[4]	N/A	Maintain
Broad Scale Habitat	Infralittoral rock and thin mixed sediments[5]	N/A	Maintain
Habitat FOCI	Blue mussel beds	0.001 km^2	Maintain
Habitat FOCI	Littoral chalk communities	1 km^2	Recover
Habitat FOCI	Subtidal chalk	1 km^2	Maintain
Species FOCI	Long-snouted seahorse (*Hippocampus guttulatus)*	1 record	Maintain
Species FOCI	Short-snouted seahorse (*Hippocampus hippocampus)*	2 records	Maintain
Species FOCI	Native Oyster (*Ostrea edulis)*	10 records	Maintain
Species FOCI	European eel (*Anguilla Anguilla)*	n/a	Maintain

[4] This is a non ENG feature derived from REC habitat classification put forward by the Regional Project. For the purpose of assessing the site's ecological contribution against the ENG this feature will be back-translated to Subtidal mud

[5] This is a non ENG feature derived from REC habitat classification put forward by the Regional Project. For the purpose of assessing the site's ecological contribution against the ENG this feature will be back-translated to Subtidal mixed sediments.

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	Best Estimate Costs (£ per year)
UK Commercial Fishing	2,000
Ports, harbours and shipping	13,000
Flood and Coastal Erosion Risk Management	No cost or one off cost of 10,000 (shared with Beachy Head East)
Archaeology	Unquantified
Recreation (including boating and sea angling)	Unquantified
Oil and gas exploration and production, gas interconnectors and gas storage (including carbon capture and storage)	Non site specific cost
	Best Estimate Total Cost = 15,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

The Beachy Head West recommended MCZ is an inshore site measuring 24 km². Within this rMCZ there are eight Broad Scale Habitats, three FOCI Habitats and four FOCI species. Because of the dynamic nature of this site, the Regional MCZProject felt that some of the EUNIS level 3 classifications of broad scale features were not appropriate because they do not represent the complex mosaic of habitats for some specific areas in this site. This is why the Regional Projects recommended using REC classifications that better describe features at a finer scale. More information on classifications used are contained in the Balanced

Seas final recommendations report.

It's considered that the site contains one of the best examples of Subtidal and Littoral chalk in the region and these extend beyond the boundaries of the site. Subtidal chalk is important because it's often bored by molluscs that then create new habitats for crevice dwelling creatures. Although there is low confidence in its presence, there is a degree of confidence that the Long snouted seahorse (*Hippocampus guttulatus)* exists – only one of two proposed sites in the region.

Socio-Economics

The Beachy Head West recommended MCZ has an estimated annual best estimate cost of £15,000, mainly falling on the ports and harbour sector. There is good support for the site from the commercial fisheries sector, mainly because of its location close to shore and already being subject to a ½ mile no trawling zone. There could also be a one off cost to flood and coastal erosion because of the possible need to monitor the impacts of the shingle recharge scheme on conservation objectives. This would be shared with Beachy Head East if both sites were designated.

Data Certainty

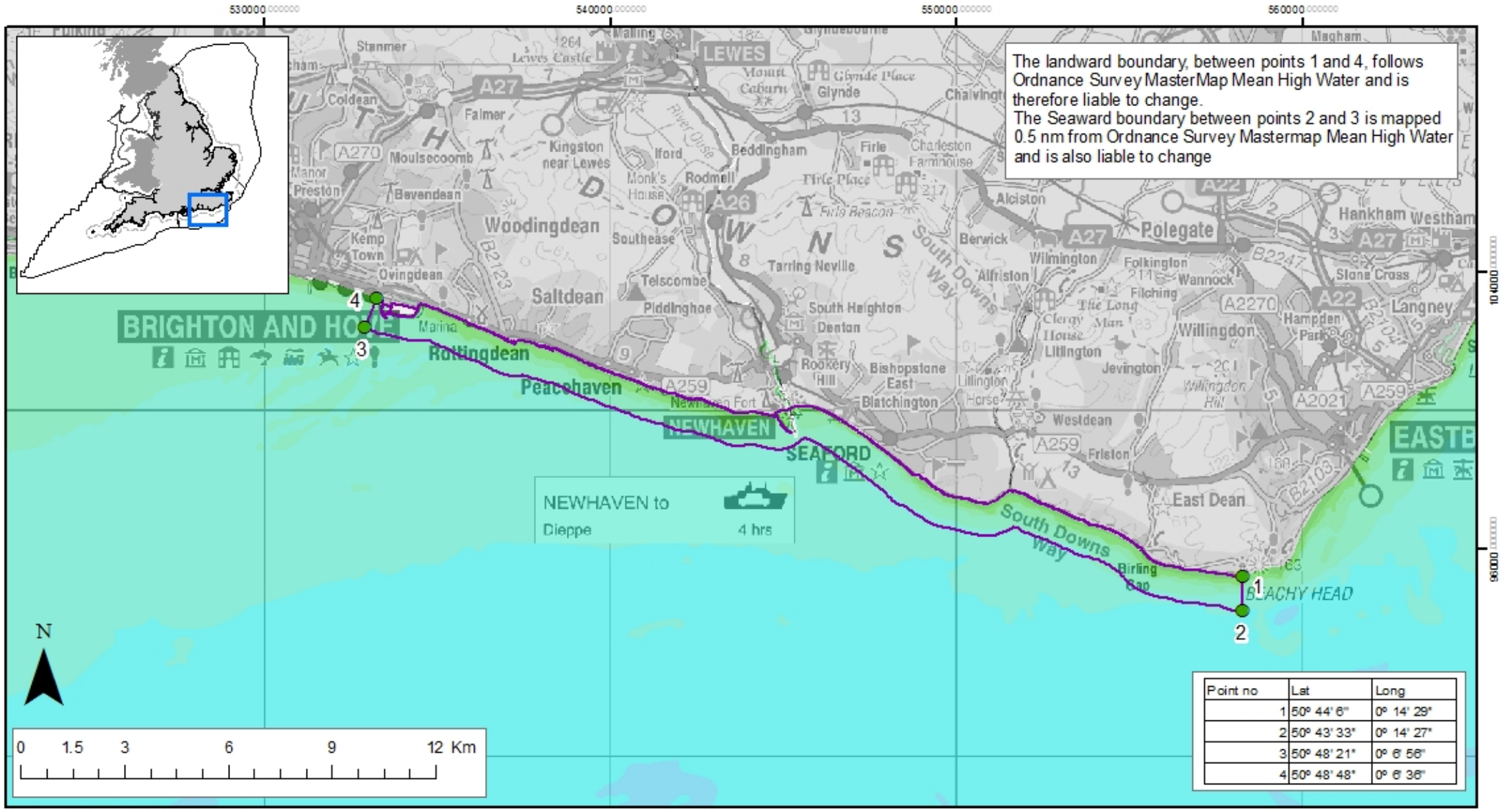
The Beachy Head West recommended MCZ has acceptable data certainty for seven features, of these features Littoral chalk communities has been identified as being at higher risk. Within this site there are eight features with unacceptable data certainty; these include Intertidal coarse sediment, Subtidal mud, Subtidal mixed sediments, Infralittoral rock and thin mixed sediments, Subtidal chalk, Long-snouted seahorse (*Hippocampus guttulatus),* European eel (*Anguilla anguilla) and* Blue mussel beds and will require further work prior to their designation.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs, and the SNCBs have highlighted this site as at higher risk, this site has been proposed for designation in 2013 for the features as demonstrated in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Littoral chalk communities	Intertidal coarse sediment
Native oyster (*Ostrea edulis)*	Subtidal mud
Infralittoral muddy sand	Subtidal mixed sediments
Infralittoral sandy mud	Infralittoral rock and thin mixed sediments
Infralittoral rock and thin sandy sediment	Subtidal chalk
Short snouted seahorse (*Hippocampus hippocampus)*	Long-snouted seahorse (*Hippocampus guttulatus)*
Subtidal sand	European eel (*Anguilla anguilla)*
	Blue mussel beds



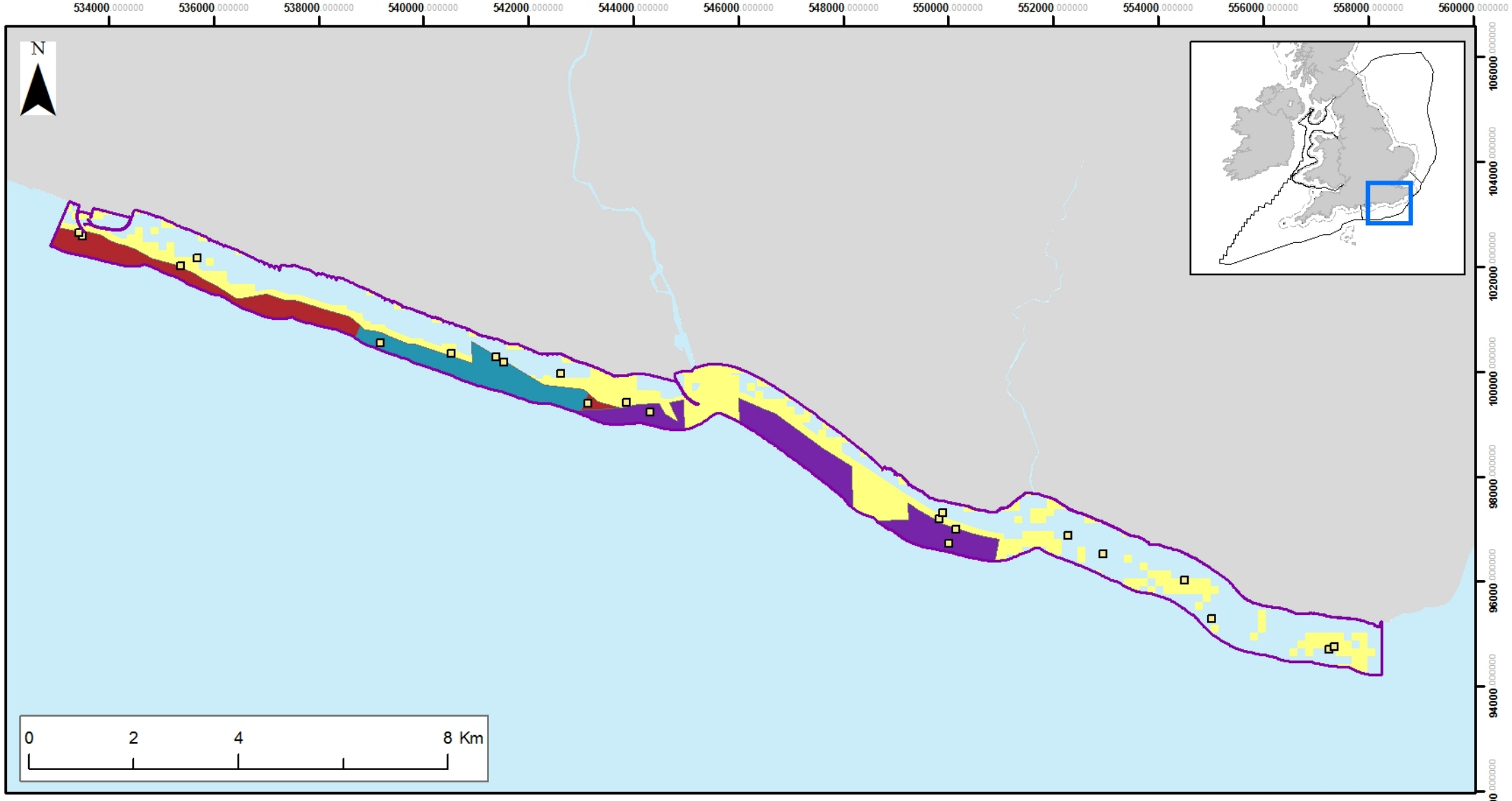
Beachy Head West rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land

Depth Areas (metres)

-20.0 - -10.0	25.1 - 50.0
-9.9 - -5.0	50.1 - 100.0
-4.9 - 0.0	100.1 - 250.0
0.1 - 5.0	250.1 - 500.0
5.1 - 10.0	500.1 - 1000.0
10.1 - 25.0	

Reference: Theme ID: 1477567
Map Projection: British National Grid



Beachy Head West - Broad Scale Habitats

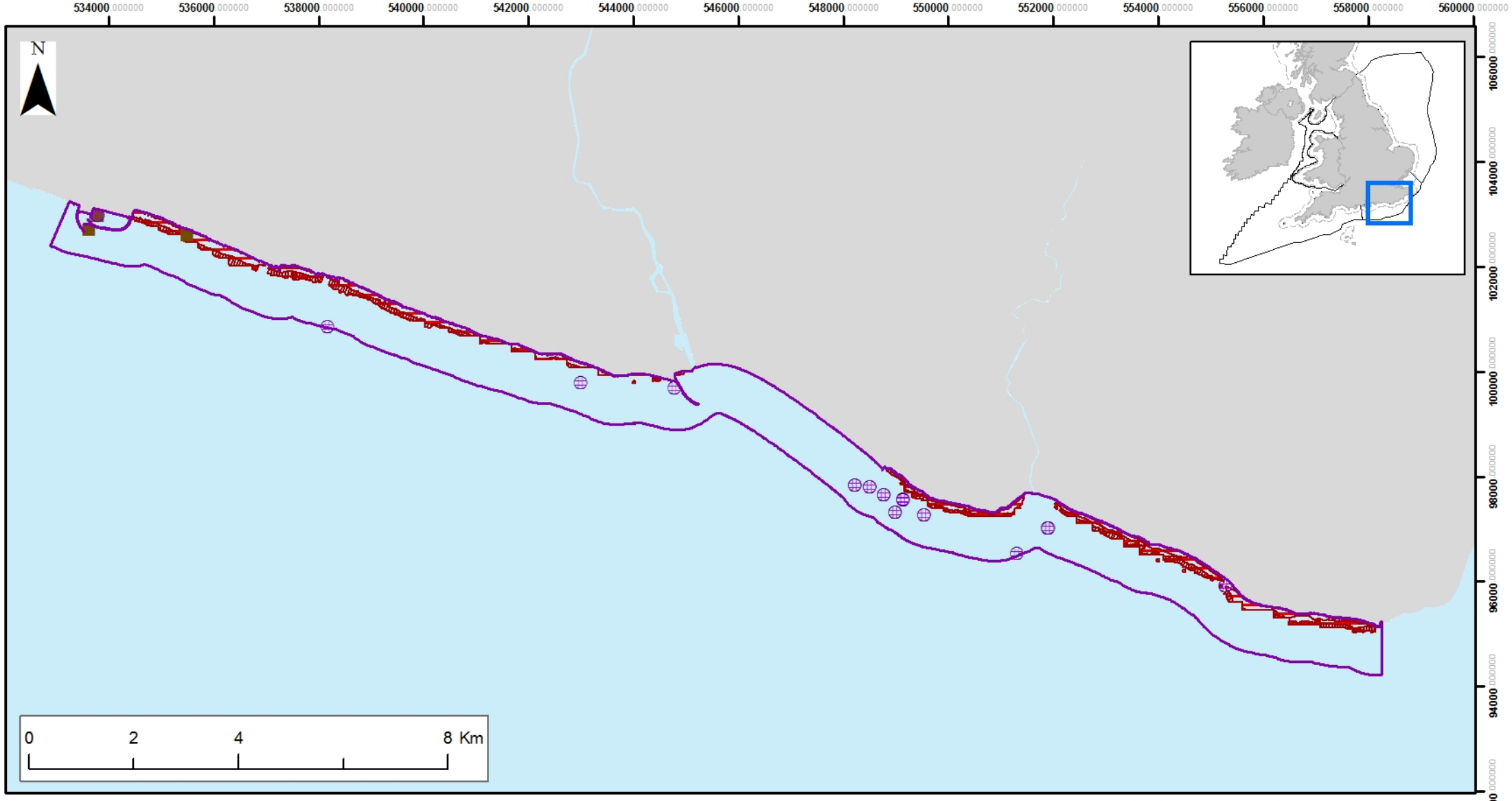
Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land

Features proposed for 2013 designation

- Subtidal sand (A5.2)
- Subtidal sand (A5.2)
- Low energy Infralittoral Rock and thin Sandy sediment (A3.A2)
- Infralittoral muddy sand (A5.24)
- Infralittoral sandy mud (A5.33)

Reference: Theme ID 1477567,
Map Projection:British National Grid



Beachy Head West - Features of Conservation Interest

Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land

Features proposed for 2013 designation

- Hippocampus hippocampus
- Ostrea edulis
- Littoral chalk communities
- Littoral chalk communities

Reference: Theme ID 1477567,

Map Projection:British National Grid

Consultation Site Summary: Kingmere

Additional information for this site can be found in the SNCB Advice (page 761, Impact Assessment (Annex I2 Option 2, Page 374) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 48 km^2		**Biogeographic Region:** Eastern English Channel
Site Location: ETRS89 N50 43' 39.980" W0 27' 54.772" N50 43.666' W0 27.913' **Inshore/Offshore:** inshore			
Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Broad Scale Habitat	Moderate energy infralittoral rock and thin mixed sediment[6]	26 km^2	Recover
Habitat FOCI	Subtidal chalk	0.02 km^2	Recover
Habitat FOCI	Native Oyster (*Ostrea edulis)*	2 records	Maintain

[6] This is a non ENG feature derived from REC habitat classification put forward by the Regional Project. For the purpose of assessing the site's ecological contribution against the ENG this feature will be back-translated to Subtidal mixed sediments.

Non ENG feature	Black Bream (*Spondyliosoma cantharus)*	4 records	Recover

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	**Best Estimate Costs (£ per year)**
UK Commercial Fishing	17,000
Aggregate Extraction	3,000
Recreation (including boating and sea angling)	Unquantified
Oil & Gas exploration and production, gas interconnectors and gas storage (including carbon capture and storage)	Non site specific cost
	Best Estimate Total Cost = £20,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

Kingmere recommended MCZ is an inshore site measuring 48 km². Within this site there is one Broad Scale Habitat, two FOCI Habitats and one non Eng feature. Because of the dynamic nature of this site, the Regional Projects felt that the EUNIS level 3 classifications of broad scale features were not appropriate because they do not represent the complex mosaic of habitats in this area. This is why the Regional Projects recommended using REC classifications that better describe features at a finer scale.

More information on classifications used are contained in the Balanced Seas final recommendations report.

The site is seen as the most important Black bream (*Spondyliosoma cantharus)* breeding site and the best studied in the UK. The site also contains excellent examples of Rocky habitats and Subtidal chalk outcropping reef systems. These chalk reef systems are also present beyond the boundary. The Sussex seabed also contains very small (3%) quantities of Sublittoral rocky reefs and the site also contains Kingmere Rocks. The Subtidal sediment in the site is a very important nursery ground for other commercially important fish species. SNCBs have recommended that the inner boundary of this site is moved landward to capture the additional benefits of Subtidal chalk. The SNCBs have also identified the presence of the Undulate ray within the site, although it is not a feature proposed for designation.

Socio-Economics

Kingmere recommended MCZ had strong support from all stakeholders during the Regional Project process, evidenced by draft management proposals being developed by Sussex IFCA. There is however, an annual best estimate cost of £20,000.

Data Certainty

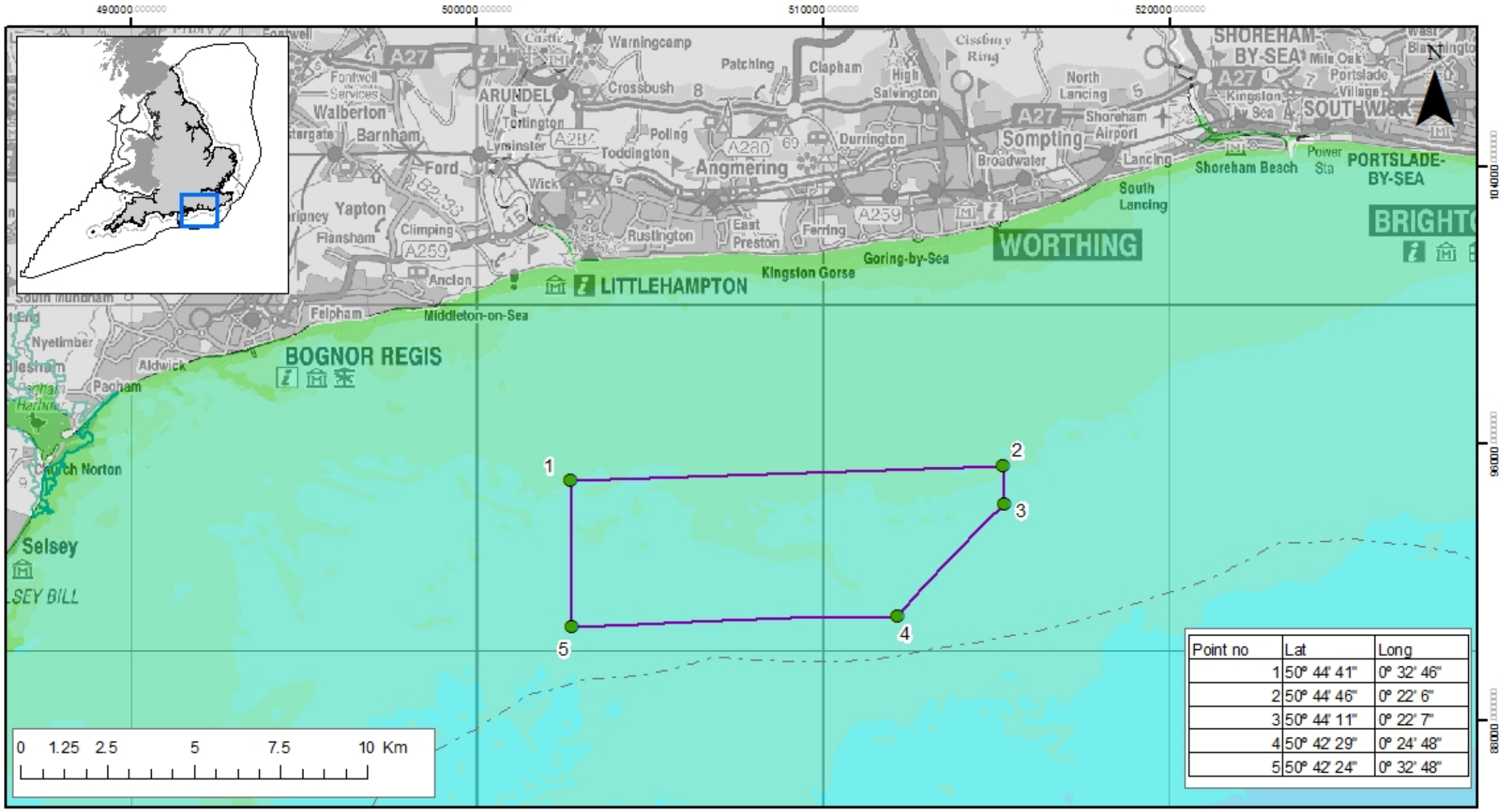
Kingmere recommended MCZ has acceptable data certainty for its features; of these features the Native Oyster (*Ostrea edulis)* and Subtidal chalk have been identified as being at higher risk.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs, and the SNCBs have highlighted this site as at higher risk, this site has been proposed for designation in 2013 for the features as demonstrated in the table below.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013
Subtidal chalk
Black Bream (*Spondyliosoma cantharus)*
Moderate energy infralittoral rock and thin mixed sediment
Native oyster (*Ostrea edulis)*



Point no	Lat	Long
1	50° 44' 41"	0° 32' 46"
2	50° 44' 46"	0° 22' 6"
3	50° 44' 11"	0° 22' 7"
4	50° 42' 29"	0° 24' 48"
5	50° 42' 24"	0° 32' 48"

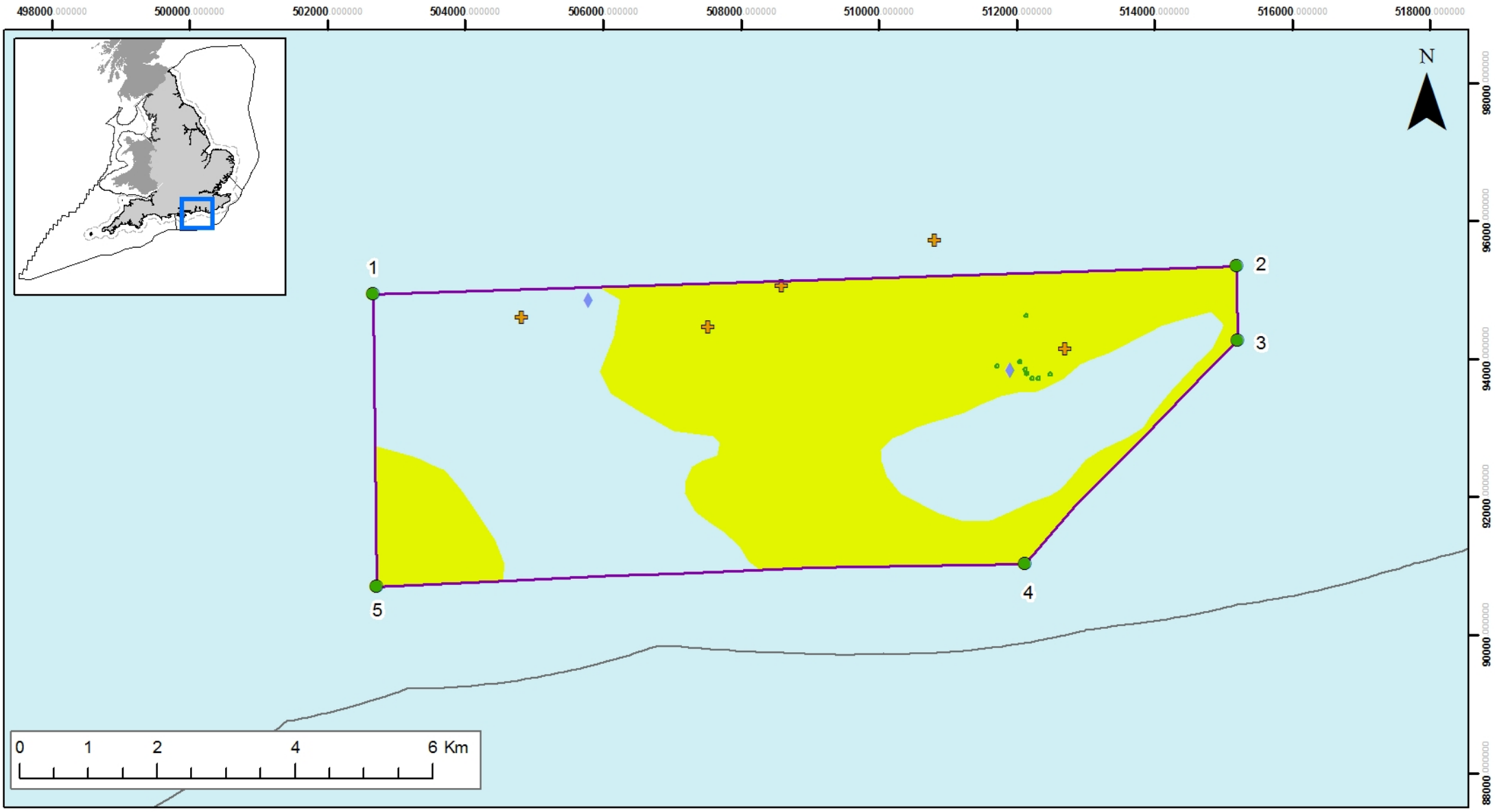
Kingmere rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- 6nM Territorial Seas Limit
- Land

Depth Areas (metres)

-20.0 - -10.0	25.1 - 50.0
-9.9 - -5.0	50.1 - 100.0
-4.9 - 0.0	100.1 - 250.0
0.1 - 5.0	250.1 - 500.0
5.1 - 10.0	500.1 - 1000.0
10.1 - 25.0	

Reference: Theme ID: 1477568
Map Projection: British National Grid



Kingmere rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- 6nM Territorial Seas Limit
- Land

Features proposed for 2013 designation

- Black bream (Spondyliosoma cantharus)
- Native oyster (Ostrea edulis)
- Subtidal chalk
- Moderate energy Infralittoral Rock and thin Mixed sediment (A3.94)

Reference: Theme ID: 1477568
Map Projection: British National Grid

Consultation Site Summary: Pagham Harbour

Additional information for this site can be found in the SNCB Advice (page 788), Impact Assessment (Annex I2 Option 2, Page 391) and Regional Project recommendations (Please use link to Balanced Seas at the top of the document).

Table 1. General Information on site and all features recommended by Regional Projects

Regional Project: Balanced Seas	**Site surface area:** 3 km^2	**Biogeographic Region:** Eastern English Channel
Site Location: ETRS89 N50 45' 46.500" W0 45' 52.680" N50 45.775' W0 45.878' **Inshore/Offshore:** Inshore		

Feature type	**Feature name**	**Area/no. of records**	**Conservation Objective**
Habitat FOCI	Seagrass beds	0.03 km^2	Maintain
Species FOCI l	Defolin's lagoon snail (*Caecum armoricum*)	1 record	Maintain
Species FOCI	Lagoon sand shrimp (*Gammarus insensibilis*)	3 records	Maintain
Species FOCI	European eel (*Anguilla anguilla*)	n/a	Maintain

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	Best Estimate Costs (£ per year)
Archaeology	Unquantified
Oil and gas exploration and production, gas interconnectors and gas storage (including carbon capture and storage)	Non site specific cost
	Best Estimate Total Cost = Unquantified

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche

Rationale for Decision:

Site Advantages

The Pagham Harbour recommended MCZ is a small inshore site measuring 3 km². Within this rMCZ there is one Habitat FOCI and three species FOCI. Of particular interest within this site is the Defolin's lagoon snail (*Caecum armoricum*), one of only three sites nationally proposed to protect this very rare creature. The site would also protect Seagrass beds, a habitat with high rates of primary production, and are a main source of food for overwintering wildfowl. Seagrass beds act as a nursery ground for juvenile fish and provide shelter for a wide range of species.

Socio-Economics

Pagham Harbour recommended MCZ has no quantified economic costs associated with its designation. During the Regional Project process there was concern that there could be an impact from the proposed reference area on future flood and coastal erosion defences. However, the reference area is not being proposed for designation in 2013.

Data Certainty

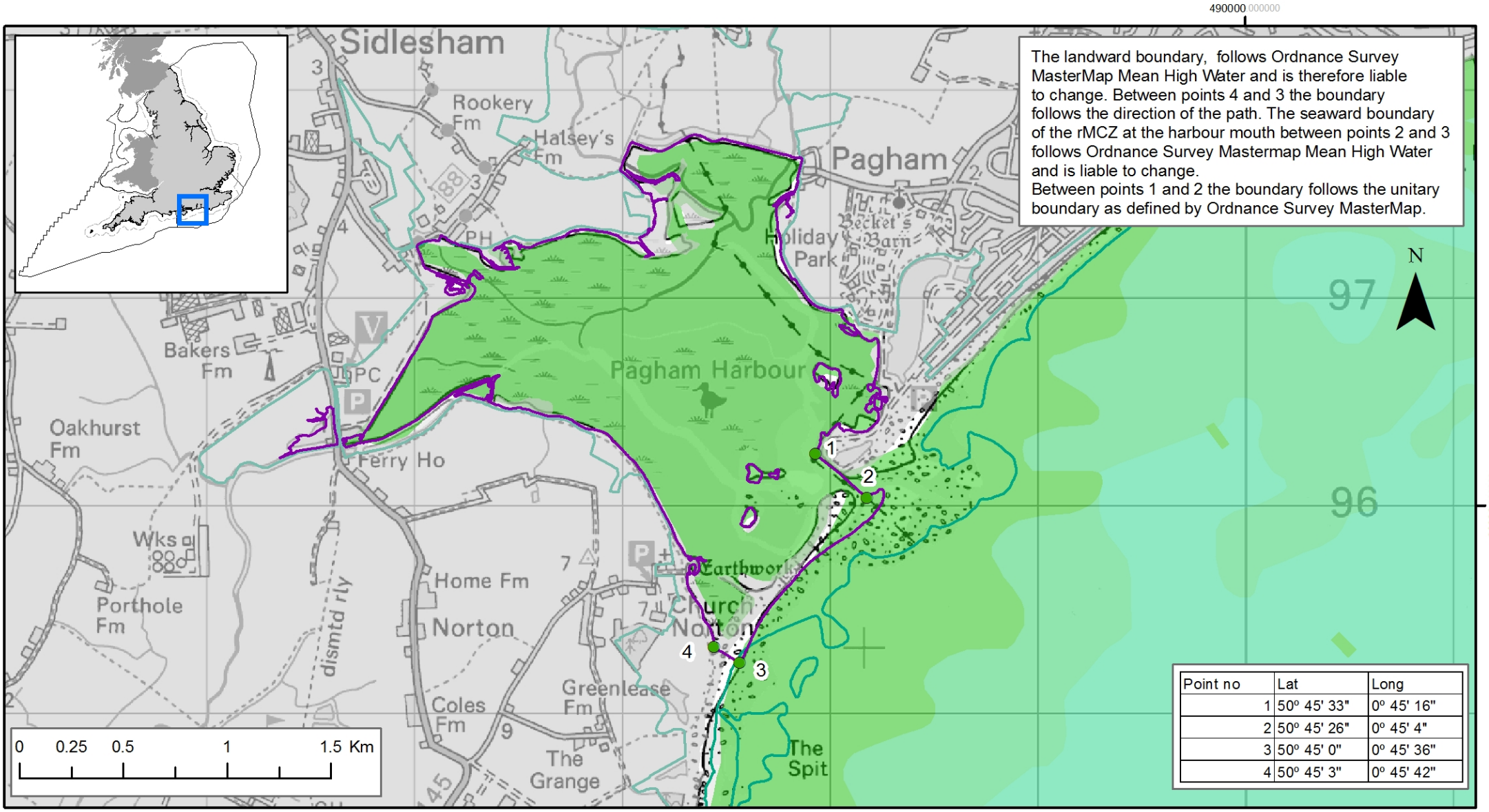
Pagham Harbour recommended MCZ has acceptable data certainty for three of its features. Within this site one feature – the European Eel *(Anguilla Anguilla)* has unacceptable data certainty and will require further work prior to its designation.

Conclusion

Therefore, as the advantages for this site justify the socio-economic costs and the data certainty is acceptable for sufficient features this site has been proposed for designation in 2013 for the features as demonstrated in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 prior to inclusion in future designations.

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	**Features requiring improvement in data certainty prior to designation**
Seagrass beds	European eel (*Anguilla Anguilla)*
Defolin's Lagoon Snail (*Caecum armoricum*)	
Lagoon sand shrimp (*Gammarus insensibilis*)	



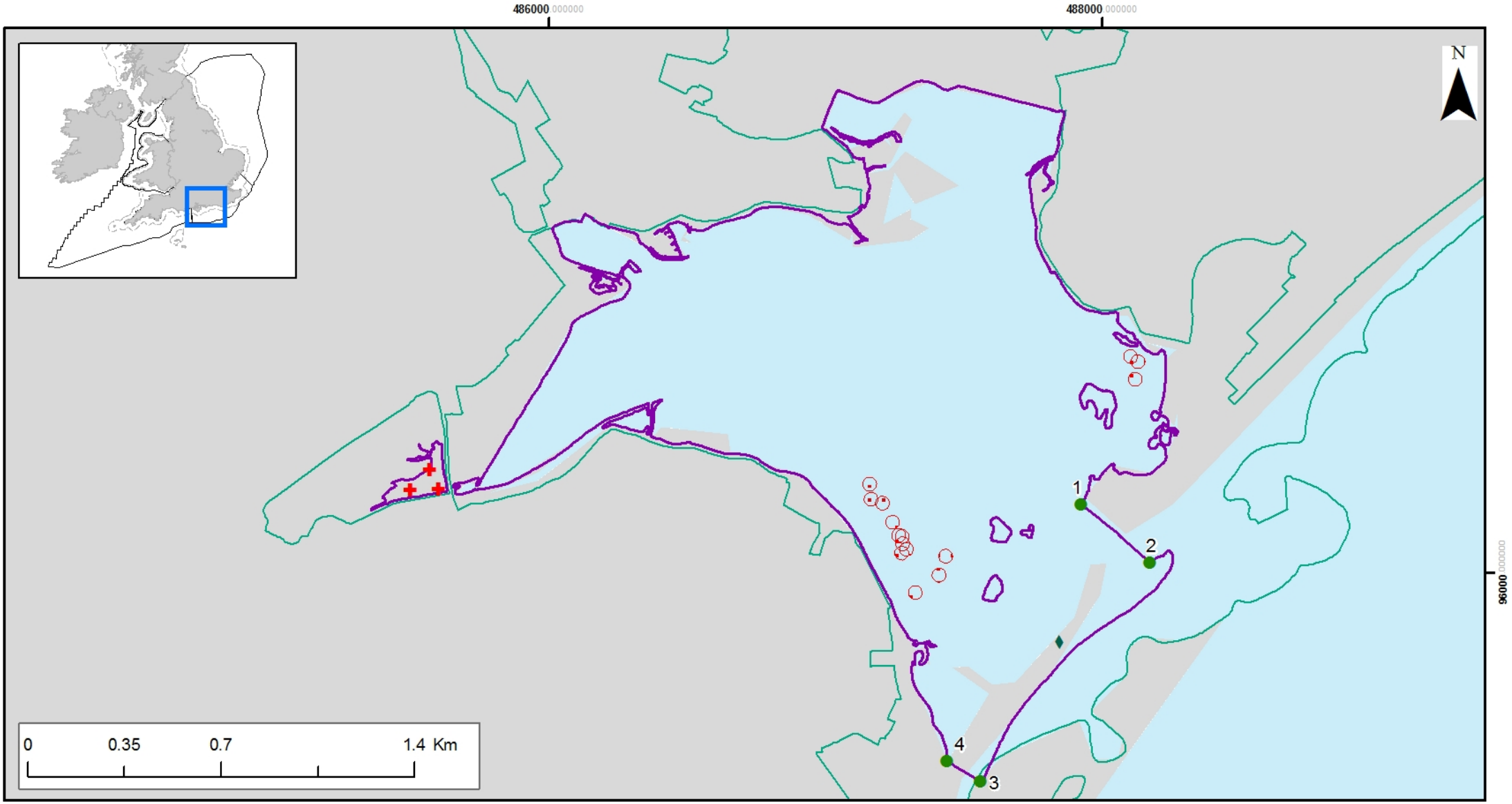
Pagham Harbour rMCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- Regional MCZ project area
- 12nM Territorial Seas Limit
- Land
- SPAs with Marine Components

Depth Areas (metres)

- -20.0 - -10.0
- -9.9 - -5.0
- -4.9 - 0.0
- 0.1 - 5.0
- 5.1 - 10.0
- 10.1 - 25.0
- 25.1 - 50.0
- 50.1 - 100.0
- 100.1 - 250.0
- 250.1 - 500.0
- 500.1 - 1000.0

Reference: Theme ID: 1477575
Map Projection: British National Grid



Pagham Harbour

Recommended MCZ

- Recommended MCZ
- rMCZ boundary co-ordinates
- MCZ Regional Projects boundaries
- England 12nM Territorial Seas Limit
- Land
- SPA with Marine Components

Features proposed for 2013 designation

- Defolin`s lagoon snail (Caecum armoricum)
- Lagoon sand shrimp (Gammarus insensibilis)
- Seagrass beds

Reference: Theme ID 1477575,
Map Projection:British National Grid