Natural England Joint Publication JP026

Marine Conservation Zones

Natural England's advice to Defra on Marine Conservation Zones to be considered for consultation in 2018

Annex 1: Advice on Regional Project recommended Marine Conservation Zones

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Further information

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March 2018

Contents

About this advice document

This document, **Annex 1 of Natural England's advice to Defra on Marine Conservation Zones to be considered for consultation in 2017**, provides the site specific advice components of our pre-consultation advice on the undesignated Regional Project recommended MCZs (rMCZs) and designated (Regional Project recommended) MCZs under consideration in Tranche 3 (sections 1 - 43 below).

Our advice on smelt (*Osmerus eperlanus*) is contained in **Annex 2 - Advice on Smelt as a feature of Regional Project rMCZs.**

This document is comprised of the following information for each rMCZ and MCZ (in turn) for which Defra requested our pre-consultation Tranche 3 advice:

1. Site description: A brief introduction to the site, its geographical location and descriptions of the main species and/or habitats for which Natural England is providing advice.

2. Site images: Where possible, photographs of the site and/or features from within the site have been included to further illustrate the site descriptions.

3. Boundary maps: The term 'recommended' on the site boundary maps for the majority of the Regional Project recommended sites (rMCZs) refers to the boundary that was originally recommended by the Regional Project.

However, the boundaries for the following sites have been amended (with Defra's agreement) from the original Regional Project recommendations. Our Tranche 3 pre-consultation advice is based on the new boundary and the new boundary is that shown on the maps (boundary and feature maps) below:

Dart Estuary rMCZ
Devon Estuary rMCZ
Hythe Bay rMCZ
Medway Estuary MCZ (for smelt as an additional feature of the site)
Offshore Foreland rMCZ
Ribble Estuary rMCZ
Selsey Bill and The Hounds rMCZ
Swanscombe rMCZ (amended boundary of Thames Estuary rMCZ)
Upper Thames Estuary rMCZ (amended boundary of Thames Estuary rMCZ)
Wyre-Lune rMCZ

In addition for the following sites, full (quantitative) advice on one or two alternative boundary options are provided for consideration by Defra (as detailed in the corresponding site-specific sections below):

- Yarmouth to Cowes rMCZ – advice and maps provided for both the **original** Regional Project recommended boundary and a boundary amendment option (indicated by title '**revised**' on maps below and in our **Results tables – Annex 4**)

- Bembridge rMCZ – neither advice or maps have been provided for the Regional Project recommended boundary but rather for 2 boundary amendment options: **Version 1** and **Version 2** (indicated by titles on maps below and in our **Results tables – Annex 4**)

For three sites (Axe Estuary rMCZ, Camel Estuary rMCZ, Swanscombe rMCZ), potential boundary amendments (i.e. yet to be agreed with Defra and implemented as part of our advice, as described below) are described with supporting illustrative maps. The main boundary and feature maps provided for these three sites therefore still show the boundary that was originally recommended by the Regional Project (Axe Estuary, Camel Estuary) or was originally developed with Defra (Swanscombe - amended boundary of Thames Estuary rMCZ).

Finally, separate boundary maps are not provided for designated MCZs as the designated boundaries are publically available[1] (with the exception of Medway Estuary MCZ because of the amended boundary for smelt as an additional feature).

4. Feature maps: The site feature maps for broad-scale habitats (BSH) and Features of Conservation Importance (FOCI) show presence and extent, where known, of features for which we have provided Tranche 3 pre-consultation advice to Defra. This includes, where applicable and unless stated otherwise below, new features which have been identified since the Regional Projects made their recommendations to Defra and additional features associated with designated MCZs for which Defra requested Tranche 3 advice. Information on the features for which we have provided advice to Defra can be found in **Annex 4 – Results tables**.

Please note the following about the feature maps provided:

- The boundary status described under 'Boundary maps' above also applies to the feature maps.
- The maps do not include features where we have advised that there is no confidence in presence.
- Features for which we have no spatial geo-referenced data have not been mapped and thus do not appear in the legend.
- Features that are confidential, for example commercially sensitive species such as oysters, have not been mapped. Where this is the case a text box has been included on the map[2†].
- The species feature smelt (*Osmerus eperlanus*) has not been mapped to avoid a misleading picture of the evidence underpinning our advice on this mobile species as a feature of 8 sites[3]. For further information on how our advice on smelt has been developed and the results of those assessments, see **Annex 2 - Advice on Tranche 3 MCZs with the species feature of conservation importance smelt (*Osmerus eperlanus*).**

Where geo-referenced extent data are available, features have been mapped as polygons to show mapped extent according to data originating from surveys and mathematical models; and points show where groundtruthing sampling points, such as diver survey, grab sampling, drop down video, walk over survey or core sampling have been collected. For some sites, both polygon extent data and point data are available and in these cases both types have been mapped.

Due to the scale of the maps in printed form and the need for the maps to show the sites in their entirety, rather than split them, some features of very limited spatial extent, such as intertidal habitats, are not easily recognisable. However, their presence in the site is confirmed by the feature being listed in the legend.

It should be noted that the maps do not indicate the level of confidence in the feature data. The assessment of the confidence in the evidence for feature presence and extent is given in **Table 1 of Annex 4 – Results tables.**

5. Summary of Natural England's Advice: A table showing the summary of Natural England's advice for each feature within a site is provided. This includes the results of the confidence assessment for evidence of feature presence and extent, the advised current likely condition of the feature and the associated General Management Approach (GMA). If the feature has been advised on previously and the advised GMA has changed since then, a rationale for this change is also provided.

[1] JNCC Interactive map of Marine Protected Areas: http://jncc.defra.gov.uk/page-5201

[2] This means that no feature maps have been provided for Cromer Shoal Chalk Beds MCZ as the only feature we are providing advice on is Native oyster (Ostrea edulis), as an additional feature of the site. As noted above, there is also no boundary map included below for this designated MCZ.

[3] This means that no feature maps have been provided for the Medway Estuary MCZ, Ribble Estuary rMCZ, Solway Firth rMCZ, Upper Thames Estuary rMCZ and Wyre-Lune rMCZ as the only feature we are providing advice on for these sites is smelt.

The information included within this Annex is a summary of our full advice, which is provided in the **Annex 4: Results tables for advice on Regional Project recommended MCZs and New site options** (provided separately). For example, Annex 4 also includes details of the evidence used to inform our advice on confidence in feature presence and extent and the origin of each feature that has been advised on (e.g. whether originally recommended by the Regional Project or having been identified and advised on by Natural England since the Regional Projects made their recommendations, for example as a result of more recent evidence collection). Links to Annex 4 and instructions on using the Annex are provided beneath the summary tables for each site.

6. Additional advice: Additional advice: Contains feature level narratives which support our advice on whether there is sufficient evidence or other ecological considerations to support the designation of each feature of a site (where applicable). For some sites, qualitative advice on potential boundary amendments (Axe Estuary, Camel Estuary, Swanscombe), or a detailed description of boundary amendments that have been advised on (Bembridge, Yarmouth to Cowes) is also included within this section (see section 1.8 of the Advice Overview document for further information).

Advice on Regional Projects Recommended MCZs (rMCZs) under consideration for consultation in Tranche 3

1 Alde Ore Estuary rMCZ (NG 01c)

1.1 Site description

The Alde Ore Estuary recommended Marine Conservation Zone (rMCZ) is located on the Suffolk Coast between Snape Maltings and Shingle Street. It includes three rivers; the River Alde, the River Ore and Butley Creek. The River Alde runs south along the inner side of the Orfordness shingle spit and subsequently becomes the River Ore. Butley Creek flows directly into the Ore, shortly after Havergate Island. The rMCZ is recommended by the Regional Projects to protect subtidal and intertidal features of the estuary below the mean high water mark.

The seabed comprises sheltered muddy gravels, which is a feature included in Natural England's Tranche 3 advice, as well as mixed sediments and biogenic reef habitats. This diversity of habitat types provides a range of feeding opportunities for the wading birds that utilise the site. The presence of smelt in the estuary means they are another feature originally recommended by the Regional Project and now included in our Tranche 3 advice. It is very likely that smelt use the estuary for spawning, whilst juvenile sea fish such as sprat, herring, sole and dab use the area as a nursery ground.

The subtidal element of the Orfordness geological feature within the site is also under consideration in Tranche 3. This feature has been well documented and is generally thought of as one of the largest and most important shingle structures on the British coast (May 2007).

Natural England has provided further advice to Defra regarding the proposed feature Estuarine rocky habitats. Further information on this advice is provided in Section 1.4.

1.2 Site image

Image 1 Alde Ore Estuary © Natural England/Jen Love

1.3 Site maps

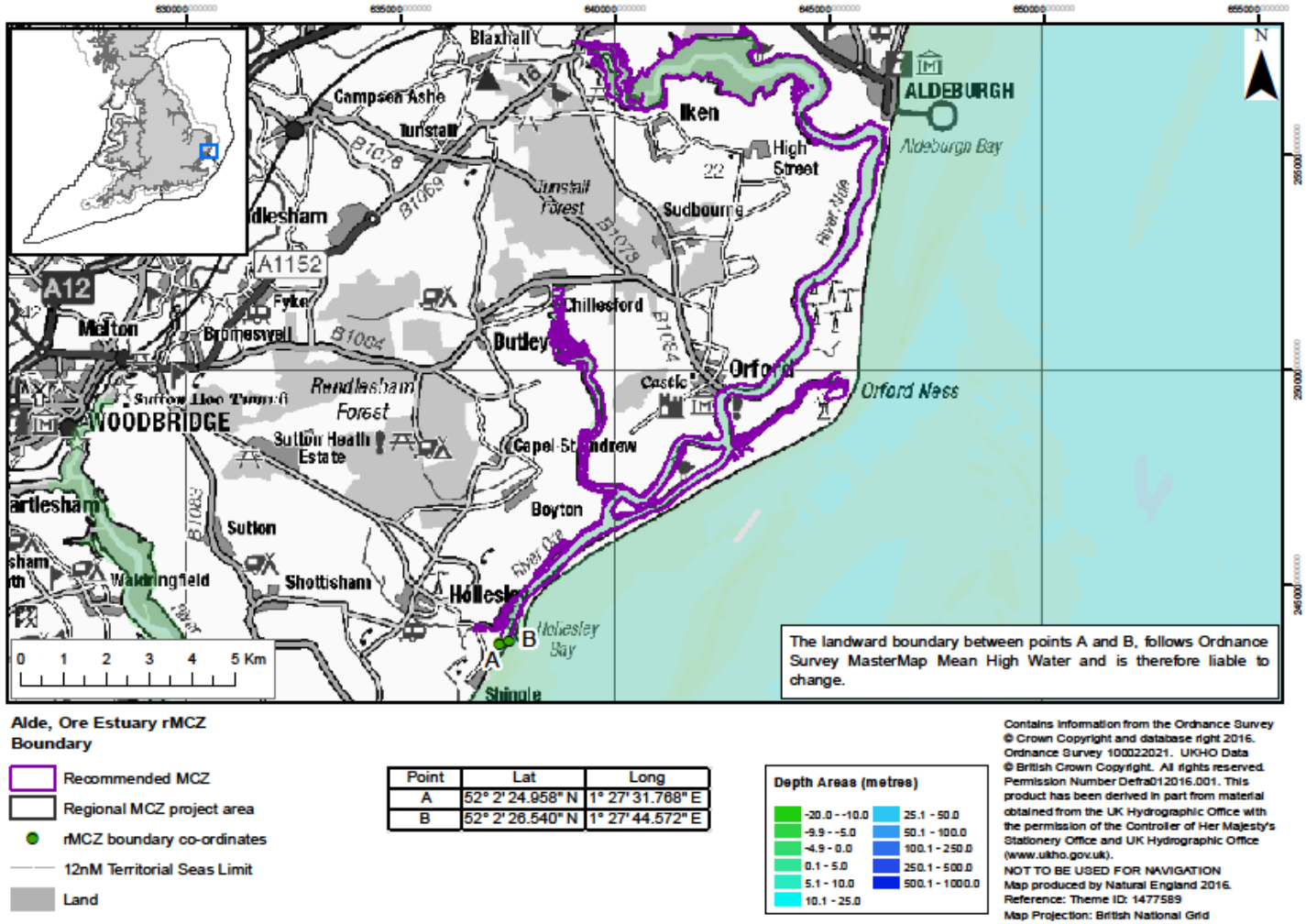


Figure 1 Alde Ore Estuary rMCZ site boundary

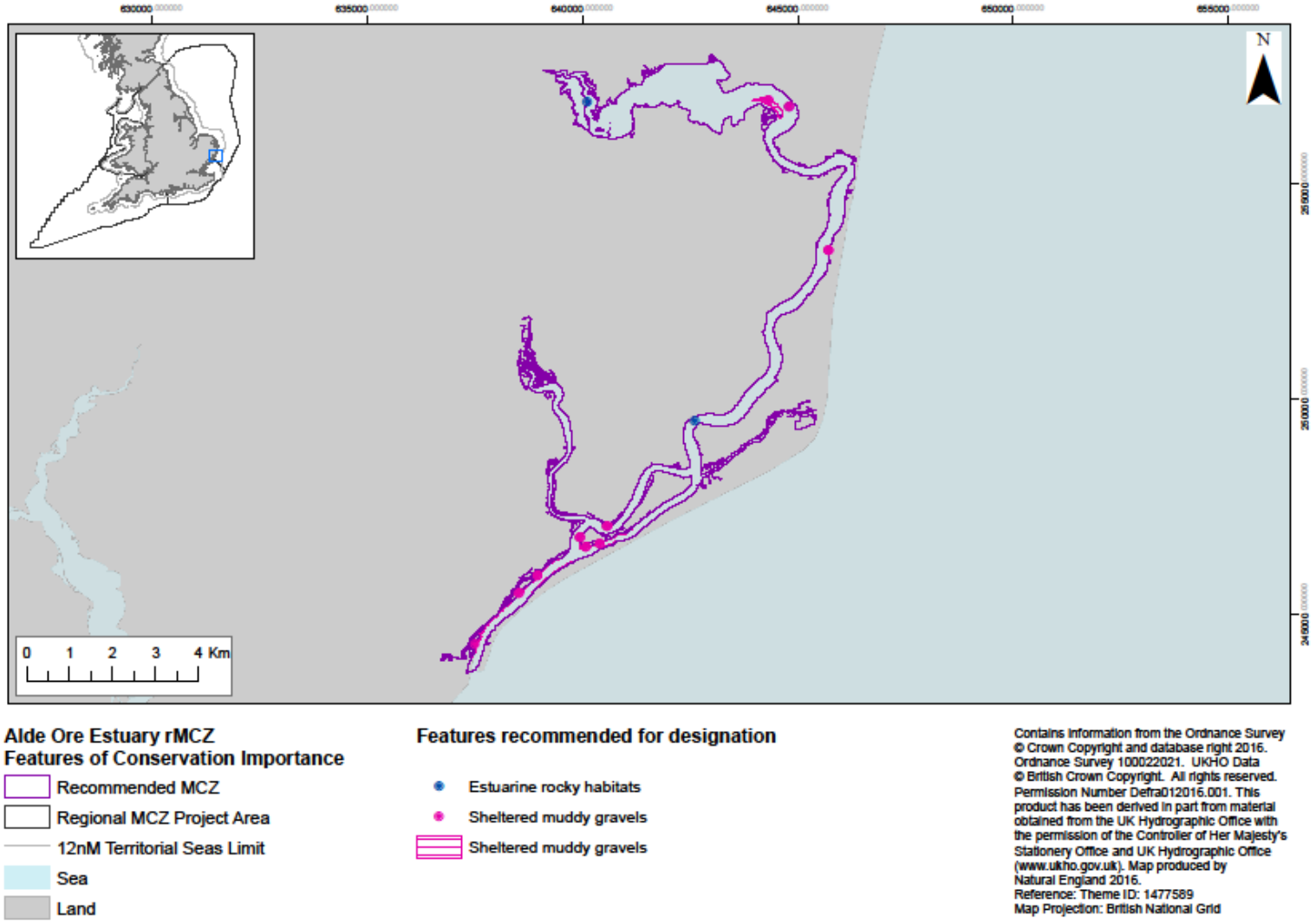


Figure 2 Location of mapped features of conservation importance in Alde Ore Estuary rMCZ

1.4 Summary of Natural England's advice

Table 1 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Alde Ore rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Estuarine rocky habitats	Moderate	Low	Favourable	Maintain	No change
Orfordness (Subtidal)	High	High	Favourable	Maintain	No change
Sheltered muddy gravels	High	High	Favourable	Maintain	No change
Smelt (*Osmerus eperlanus*)	Refer to Chapter 3 of **Annex 2** for advice on smelt				

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

Full details of Natural England's advice on smelt and the evidence that has informed this advice can be found in **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**.

1.5 Additional advice

1.5.1 Advice on specific features

1.5.1.1 Estuarine rocky habitats in the Alde Ore Estuary rMCZ

The Alde Ore Estuary rMCZ represents the only site option for Estuarine rocky habitats (HOCI_5) in the Southern North Sea region and, if designated, would contribute to filling a gap in the MPA network.

Following stakeholder feedback and a subsequent site visit at low tide, the Natural England local Area Team confirmed that the estuarine rocky habitats within the site are in fact anthropogenic in origin. Brick, mortar and stone, the remnants of an old jetty and flood defences were clearly evident and documented.

With that in mind, despite it being a significant gap filling feature in the region, we do not advise the Estuarine rocky habitats feature in the Alde Ore Estuary rMCZ is taken forward to consultation, due to its anthropogenic nature.

1.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

2 Axe Estuary rMCZ (FS 20)

2.1 Site description

The Axe Estuary rMCZ is a small estuarine site on the south coast of Devon, 34 kilometres south east of Exeter. The estuary is being considered for designation because of its saltmarsh and mudflats, which have been described as 'relatively pristine', as well as other sediment habitats and estuarine rocky habitat.

The rMCZ stretches along approximately 2.5 kilometres of the Axe estuary, surrounded mainly by marshes and farmland. The small village of Axmouth lies on the eastern shore of the estuary, and the town of Seaton to the west on the seafront. There is a small harbour at the mouth of the Estuary, sheltered by a shingle bar across the estuary mouth.

The intertidal mudflats harbour a range of fauna, providing an important source of food for a variety of bird species. The estuary is also a nursery area for fish (including bass), with supporting benthic habitats for those species. One of the reasons for the inclusion of this and other estuarine rMCZs in the network was in recognition of the added ecological importance of estuaries in terms of productivity, and their ecological function as nursery areas. The endangered European eel (*Anguilla anguilla*) has also been recorded in the estuary.

Natural England's full (quantitative) pre-consultation advice on this rMCZ is based on the original Regional Project recommended boundary. However, Natural England has provided further qualitative advice to Defra regarding a proposed minor amendment to the Axe Estuary rMCZ boundary, to include areas of saltmarsh that have been omitted from the site as they are slightly above the mean high water line. Further information on the proposed boundary revision is provided in Section 2.5.2.

2.2 Site image

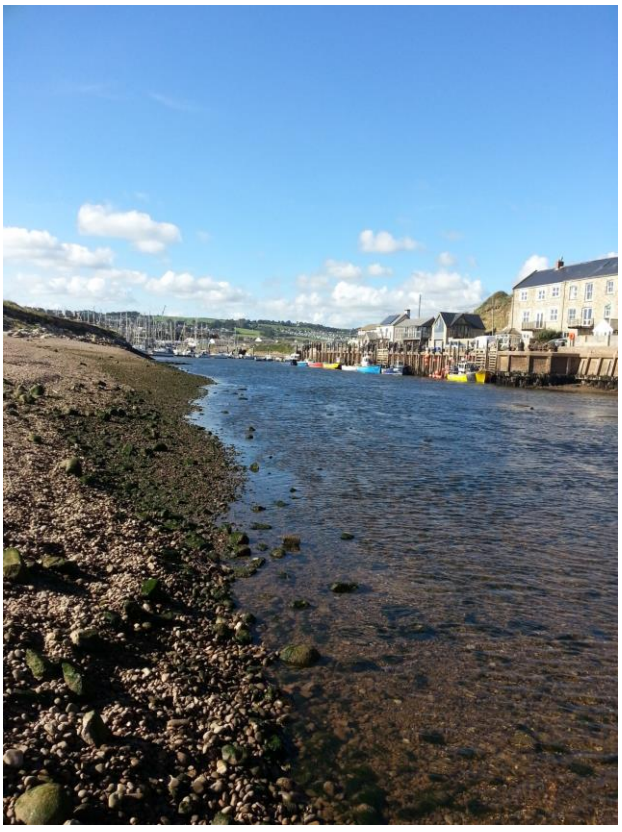


Image 2 Axe Lower Estuary © Georgina Evans

2.3 Site maps

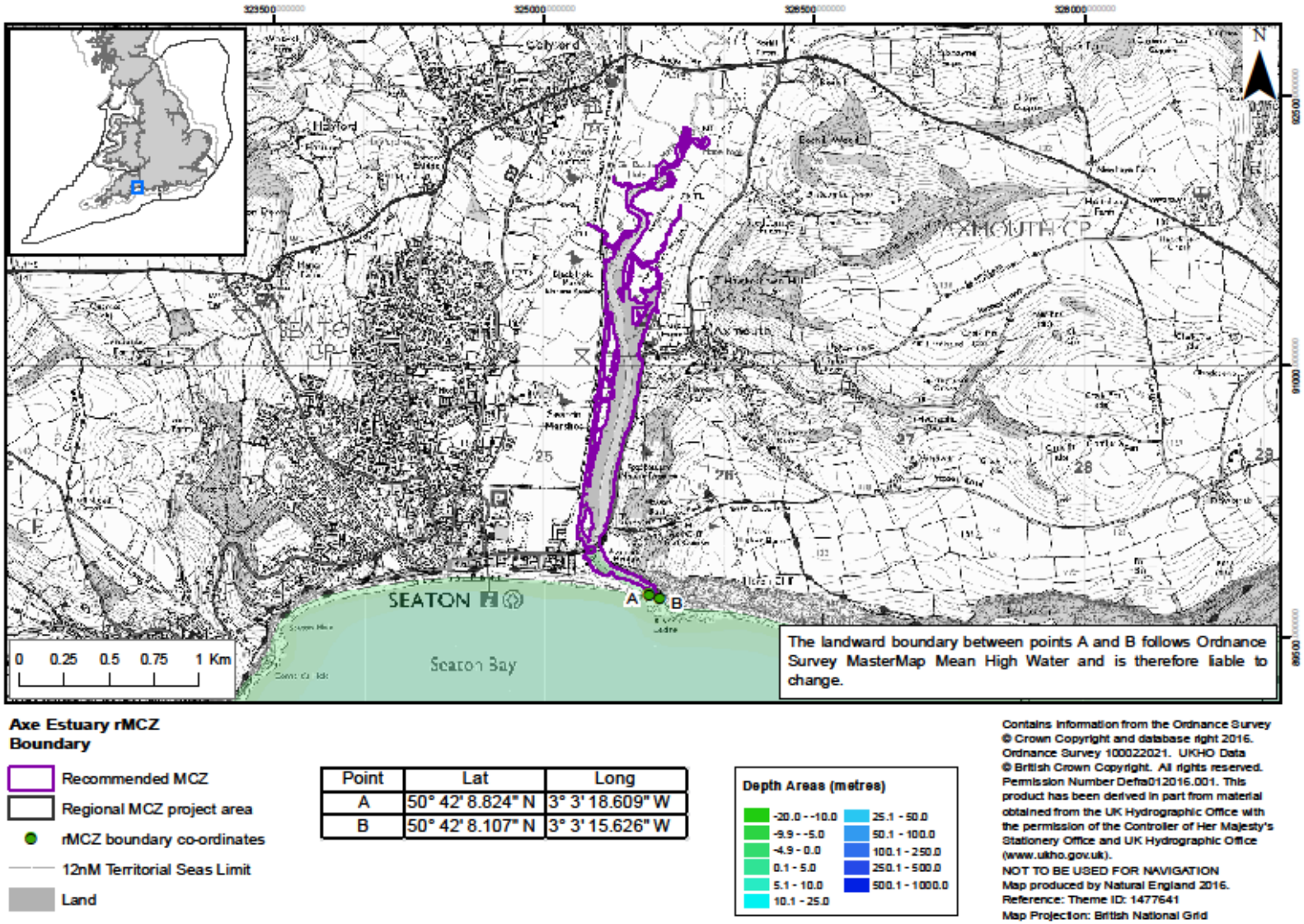


Figure 3 Axe Estuary rMCZ (original Regional Project recommended boundary)

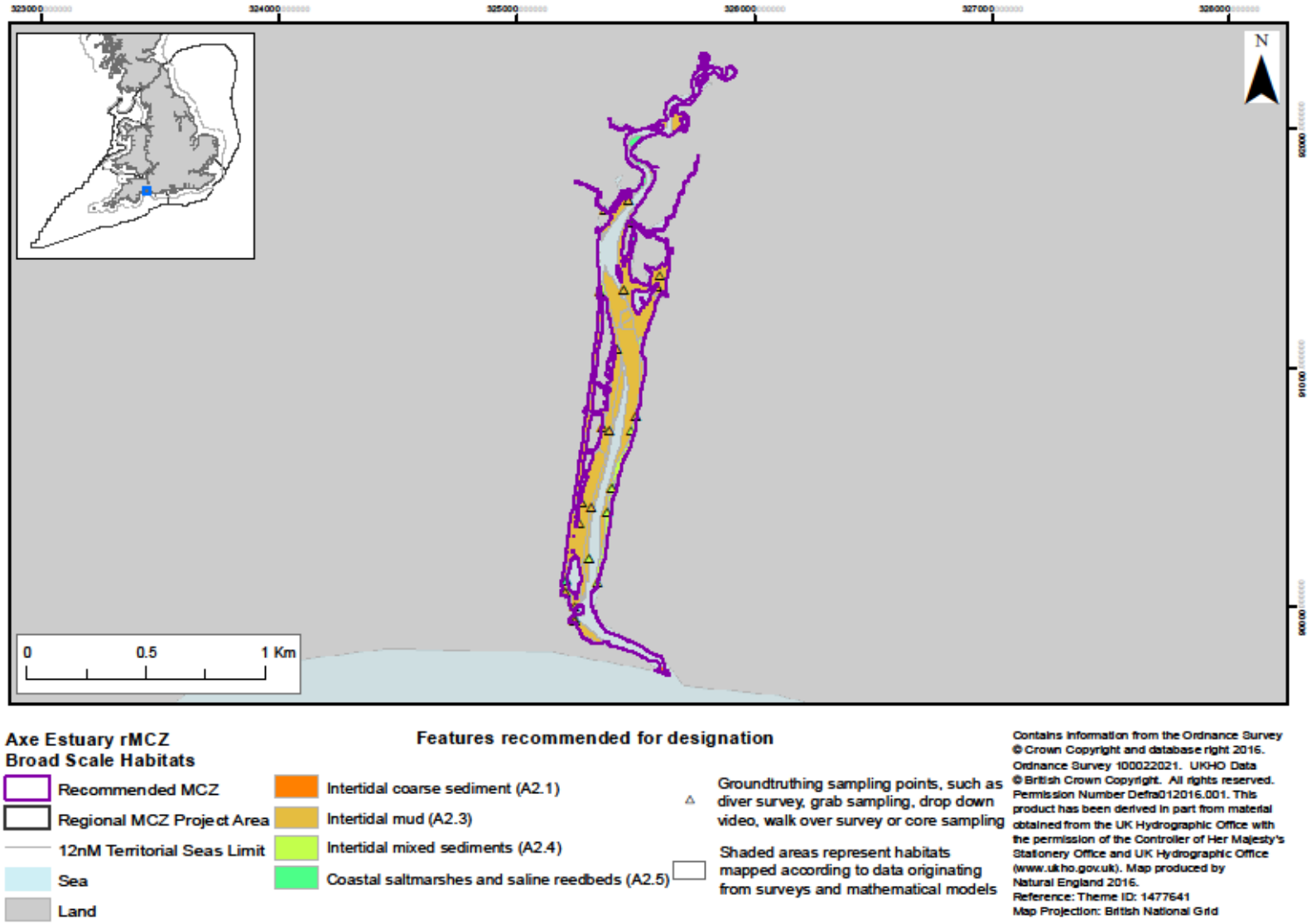


Figure 4 Location of mapped broad-scale habitats in Axe Estuary rMCZ (original Regional Project recommended boundary)

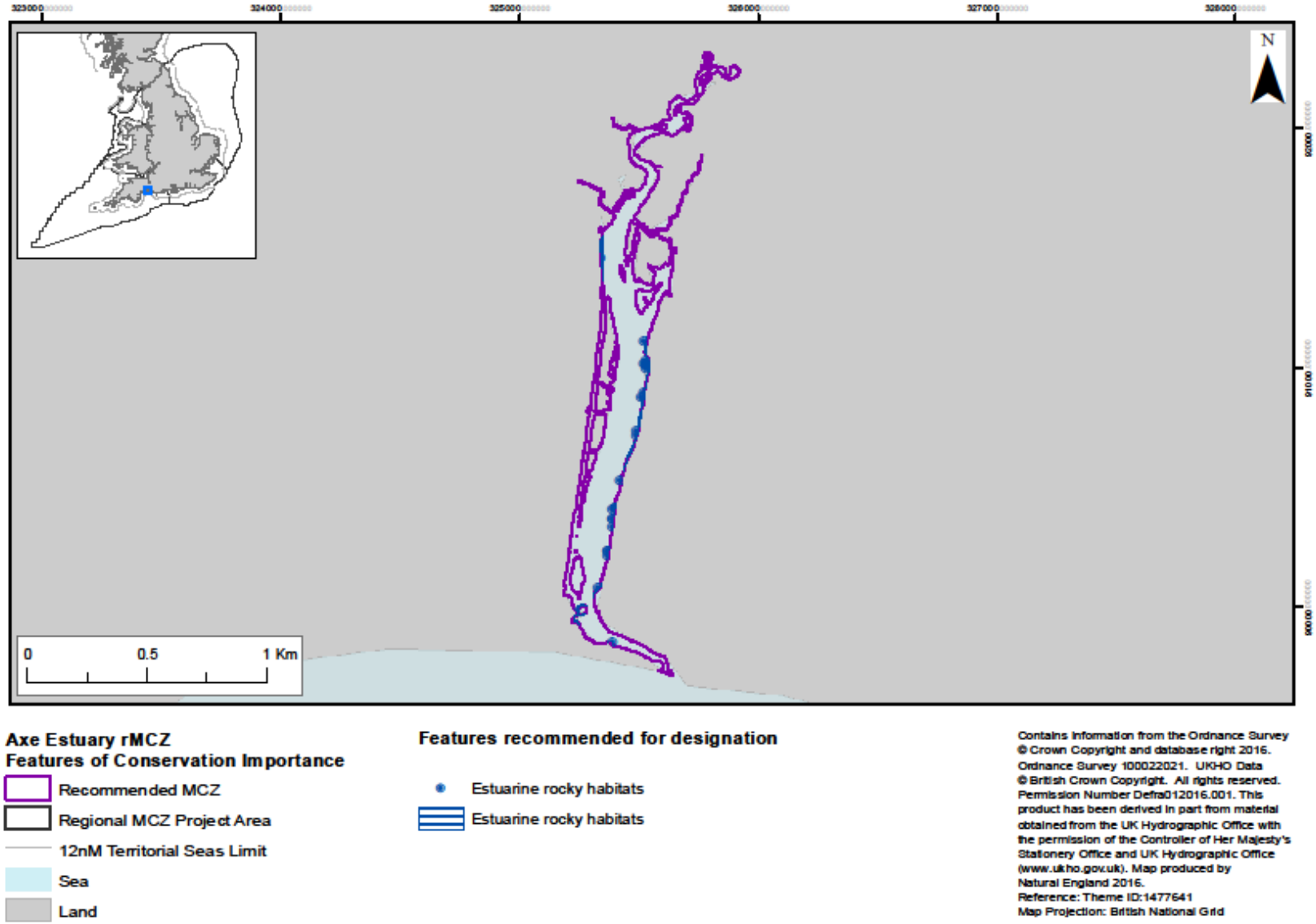


Figure 5 Location of mapped features of conservation importance in Axe Estuary rMCZ (original Regional Project recommended boundary)

2.4 Summary of Natural England's advice

Table 2 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Axe Estuary rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Coastal saltmarshes and saline reedbeds	High	High	Favourable	Maintain	No change
Estuarine rocky habitats	High	High	Favourable	Maintain	New feature
Intertidal coarse sediment	Moderate	Low	Favourable	Maintain	No change
Intertidal mixed sediments	High	High	Favourable	Maintain	No change
Intertidal mud	High	High	Favourable	Maintain	No change
Subtidal mixed sediments	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

2.5 Additional advice

2.5.1 Advice on specific features

2.5.1.1 Intertidal coarse sediment in the Axe Estuary

Intertidal coarse sediment would contribute to filling a gap in the MPA network if designated in the Axe Estuary. In this region (Eastern Channel) all site options are required to contribute to meeting Ecological Network Guidance (ENG) adequacy targets for this feature.

We currently have moderate confidence for the presence of intertidal coarse sediment in the Axe Estuary and low confidence in its extent.

Since the calculation of these confidences, the Natural England local Area Team have submitted new photographic evidence detailing the occurrence of Intertidal coarse sediment within the Axe Estuary rMCZ

boundary. This new evidence will increase our confidence in the feature in the site (Figure 6).

As such, we advise that there is/will be sufficient evidence to designate Intertidal coarse sediment in the Axe Estuary rMCZ.

As this feature in the Axe Estuary rMCZ is required to contribute to filling a gap in the MPA network and with the new evidence recently received, we advise that this feature remains a priority feature for designation.

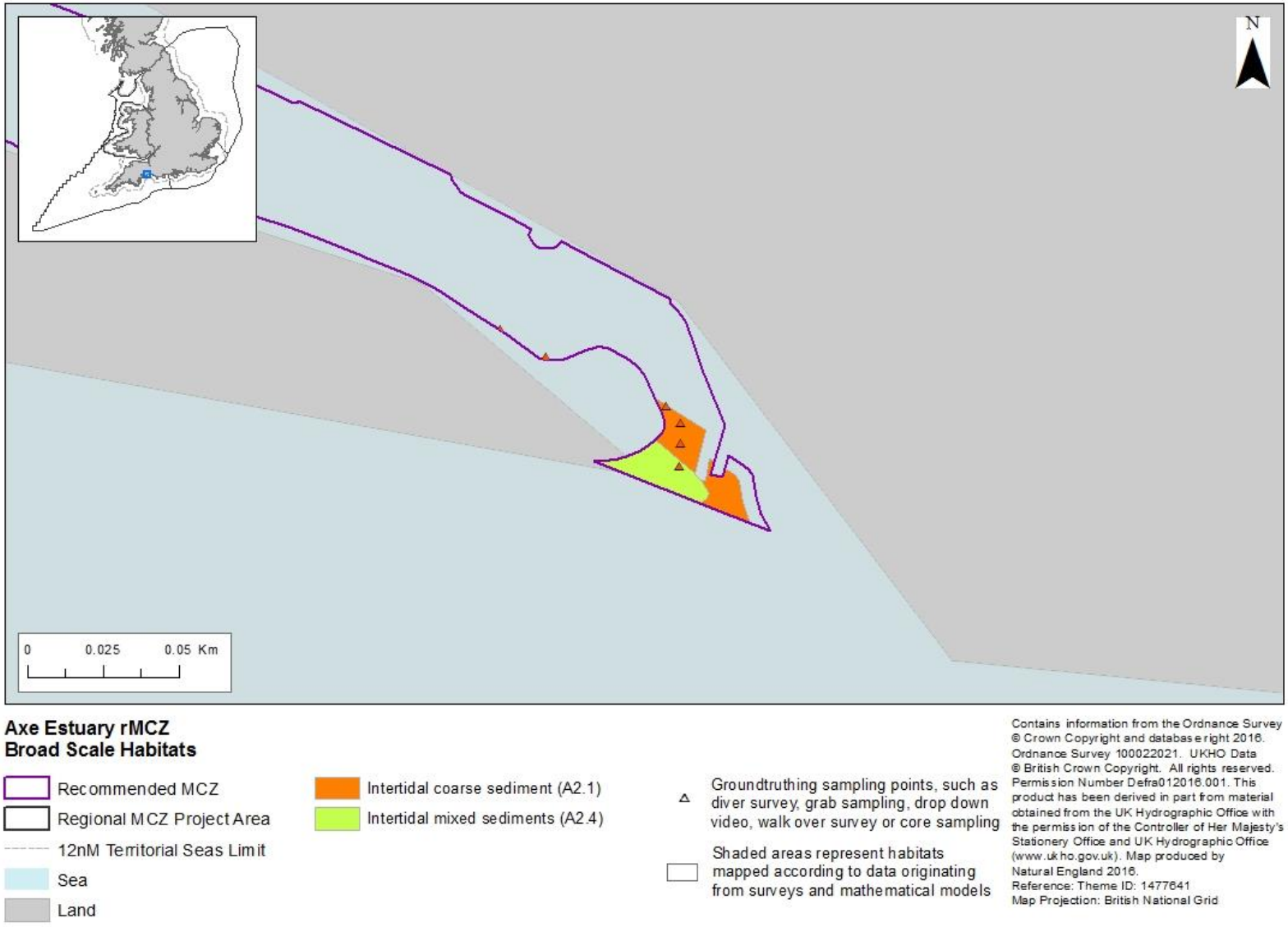


Figure 6 Location of local Area Team photographic evidence points for Intertidal coarse sediment (A2.1)

2.5.2 Advice on the site boundary

Natural England advises that the boundary for the Axe Estuary rMCZ is amended to include additional areas of coastal saltmarshes and saline reedbeds which are enclosed within the current boundary outline but are not currently considered part of the rMCZ due to their position in relation to mean high water (MHW). Figure 7 shows a map of the original boundary outline and the proposed boundary amendments. As this amendment was yet to be agreed at the time of development of Natural England's pre-consultation advice to Defra (February 2017), our full (quantitative) advice is based on the original Regional Project recommended boundary (see Figures 3–5). However, a qualitative assessment of the likely impacts of the proposed boundary amendment on our advice is provided below.

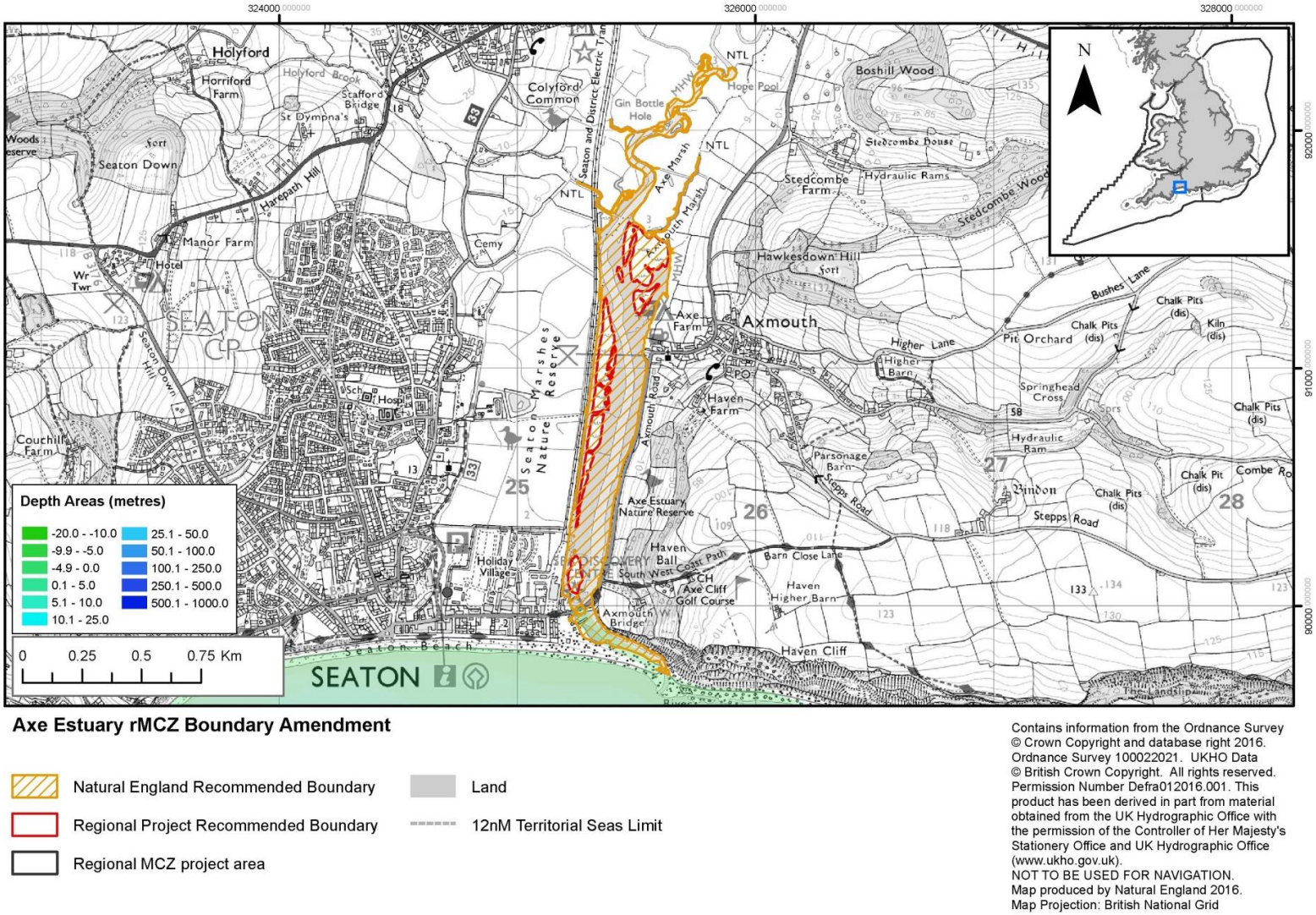


Figure 7 Axe Estuary rMCZ recommended amended boundary shown in orange. Gaps in the original site boundary that are filled by the revised boundary are shown in red.

2.5.2.1 Rationale for Natural England's advice on this boundary amendment

A large proportion of the 'Coastal saltmarshes and saline reedbeds' feature contained within the current boundary outline has been omitted from the site, due to the site's boundary following the Mean High Water (MHW) mark; much of the 'Coastal saltmarsh and saline reedbed' feature is found slightly above MHW (Figures 8-10). This omission is therefore an artefact of the MCZ mapping process, where the landward boundaries of sites were aligned with the MHW mark.

In excluding these areas of saltmarsh and reedbed above MHW, there are large gaps within the site (Figures 8-10). The site's boundary would be significantly simpler if these areas were included and would ultimately achieve what the site is intended for, i.e. to protect the full extent of saltmarshes and reedbeds. Natural England therefore advises that the boundary be amended to include all saltmarsh and reedbed habitat that is enclosed within the current rMCZ boundary.

There are also areas of saltmarsh and reedbed present immediately adjacent to the site. However, we advise that the amendments do not extend the site beyond the current boundaries and propose that only those areas of saltmarsh currently enclosed within the site are included. Saltmarsh is a mobile habitat and, at this site, there are no clear external boundaries in the areas adjacent to the site; which would then require mapping to a potentially movable habitat boundary above MHW. Therefore extending the boundary to incorporate this habitat would not be appropriate for this site.

Figure 8 Saltmarsh habitat (blue) not currently included within rMCZ boundary (orange), lower estuary.

Figure 9 Saltmarsh habitat (blue) not currently included within rMCZ boundary (orange), mid estuary.

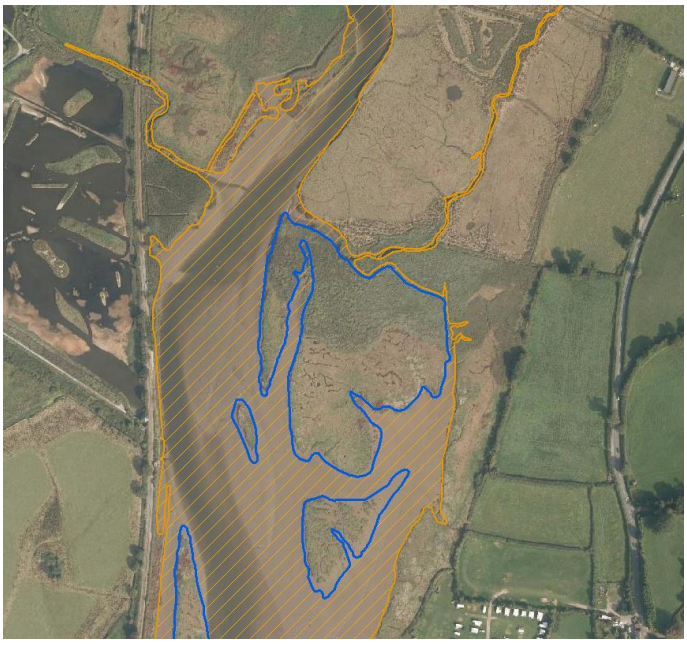


Figure 10 Saltmarsh habitat (blue) enclosed but not currently included within rMCZ boundary (orange), upper estuary

2.5.2.2 Implications for Natural England's Tranche 3 advice on the Axe Estuary rMCZ

This boundary amendment would only affect our advice on the feature 'Coastal saltmarshes and saline reedbeds'. Our pre-consultation advice on the confidence in the presence and extent of this feature is 'High-High'. Based on expert judgement of our current best available evidence, we believe this advice would be highly unlikely to change if the boundary were amended as described above. Similarly, as Natural England is not aware of any differential exposure of the additional saltmarsh to activities occurring in the site, our advice on the GMA (Maintain) for this feature is also unlikely to be subject to further change, based on expert judgement of our current best available evidence.

In light of this, Natural England's advice is that the amended boundary (shown in Figure 7) be included in any public consultation material and that, if required, further quantitative advice is provided on the site with the amended boundary as part of our post-consultation Tranche 3 advice.

3 Beachy Head East rMCZ (BS 13.1)

3.1 Site description

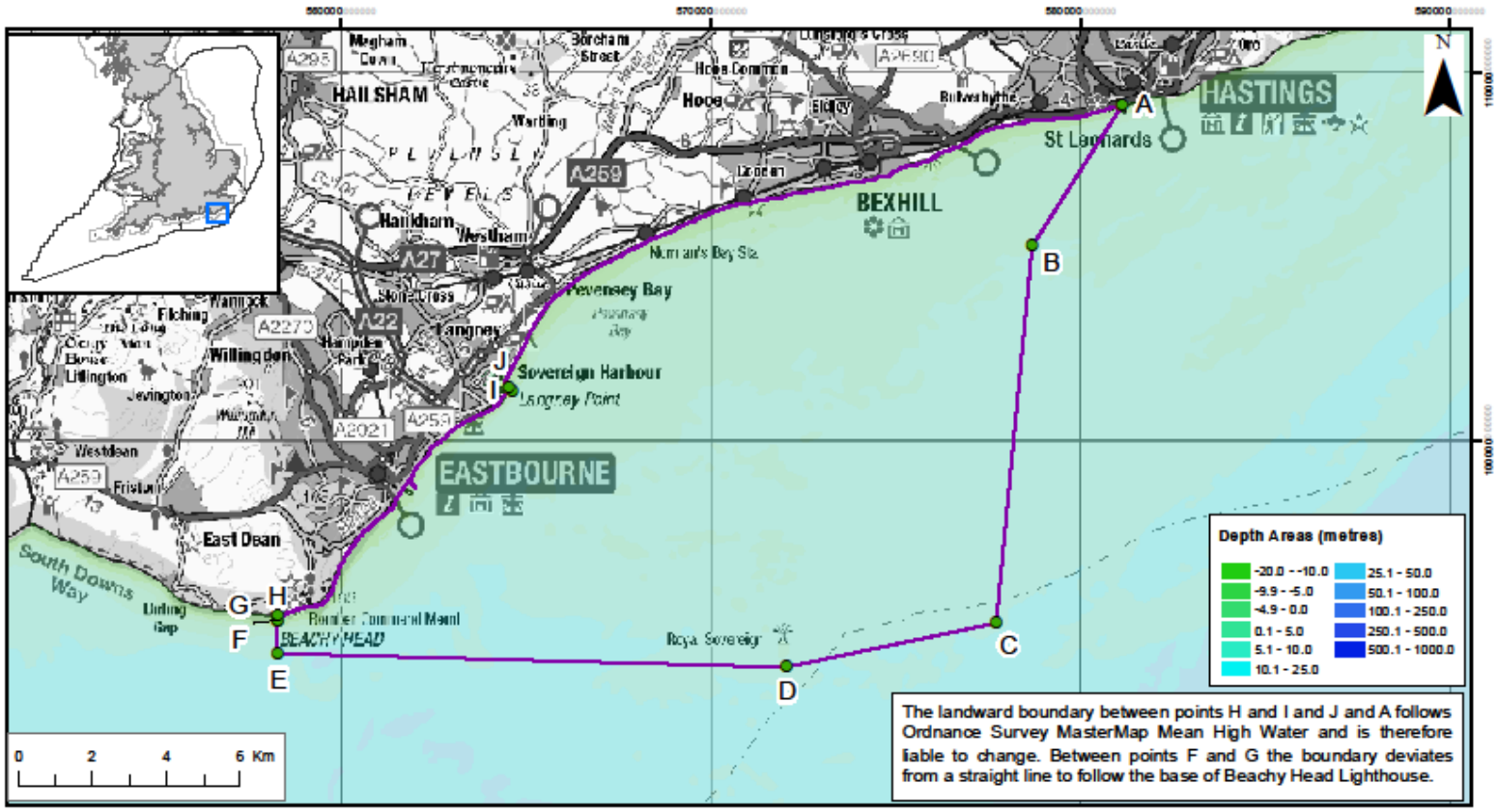
The area to the east of Beachy Head is characterised by a highly biodiverse sandstone/chalk reef system defined in this advice, on the basis of the best available survey data, as High/Moderate energy circalittoral rock. The reef system includes important subtidal chalk ledges and peat and clay exposures which can support Ross worm (*Sabellaria spinulosa*) reef, sea squirt (*Molgula*) beds and encrustations of Ross coral (*Pentapora foliacea*). This reef system interacts with areas of mobile sediment which are reflected in the inclusion of the features Subtidal coarse sediment and Subtidal sand.

The area was proposed to protect mussel beds which were suggested by stakeholders to be one of the best examples of this habitat in the region, and are thought to be more extensive than has been currently shown by spatial data from the site. The few previous records of Short snouted seahorse (*Hippocampus hippocampus*) within the site are considered to be of high importance and worthy of protection along with small populations of Native Oysters (*Ostrea edulis*). The site contains the Royal Sovereign Shoals and the Horse of Willingdon Reef, two marine Sites of Nature Conservation Importance (mSNCIs). The nearby Beachy Head West MCZ, which was designated as part of the first tranche of MCZs in 2013, was originally connected with Beachy Head East (with the original combined site proposed by the Regional Project being Beachy Head rMCZ).

3.2 Site image

Image 3 High energy circalittoral rock © JNCC (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

3.3 Site maps



Beachy Head East rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	50° 51' 10.645" N	0° 34' 18.158" E	F	50° 44' 1.258" N	0° 14' 29.234" E
B	50° 49' 9.123" N	0° 32' 6.381" E	G	50° 44' 1.858" N	0° 14' 29.264" E
C	50° 43' 39.803" N	0° 30' 58.953" E	H	50° 44' 6.380" N	0° 14' 29.480" E
D	50° 43' 8.049" N	0° 26' 8.951" E	I	50° 47' 17.954" N	0° 20' 2.182" E
E	50° 43' 33.688" N	0° 14' 27.920" E	J	50° 47' 20.598" N	0° 19' 57.886" E

Figure 11 Beachy Head East rMCZ site boundary

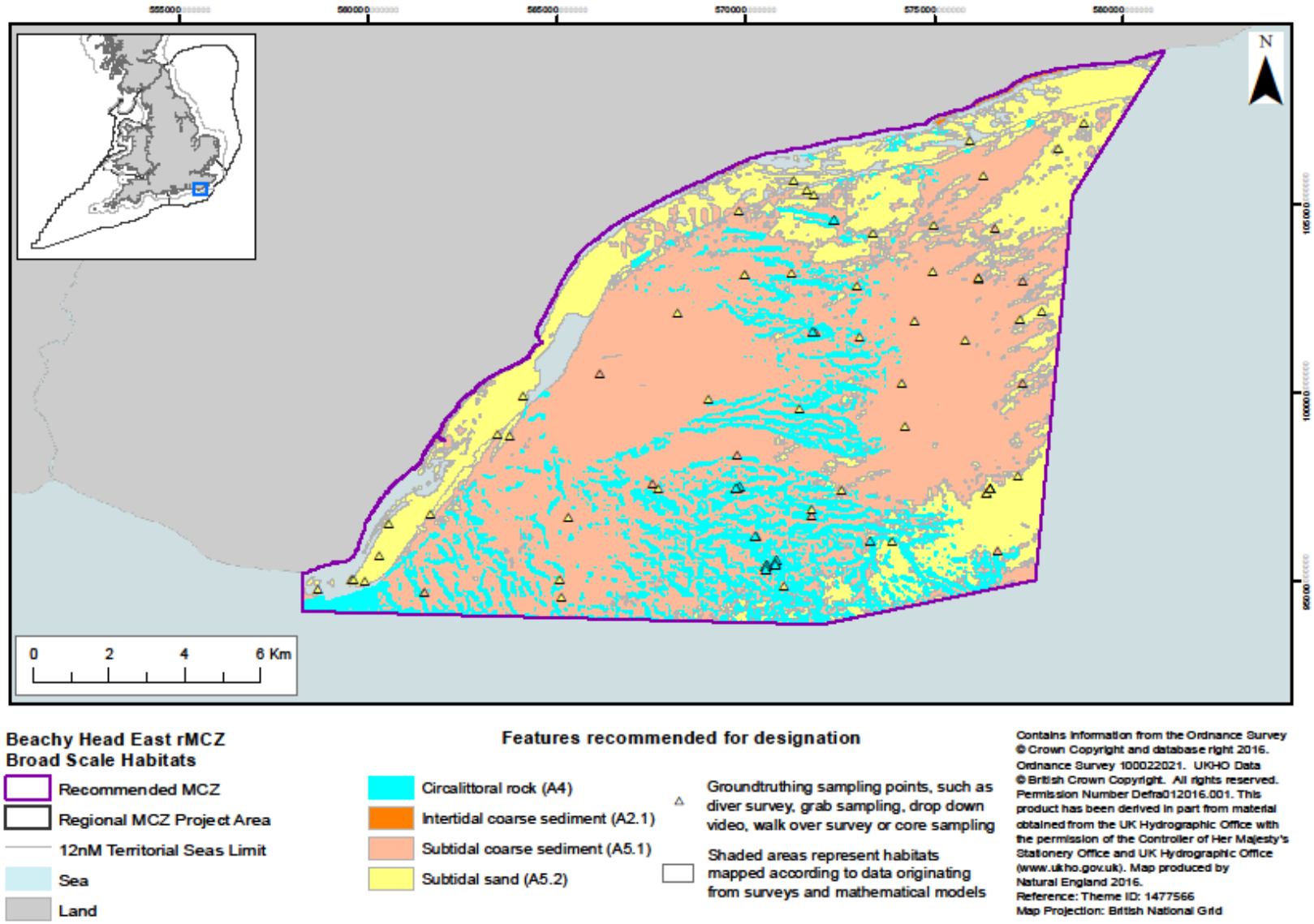


Figure 12 Location of mapped broad-scale habitats in Beachy Head East rMCZ

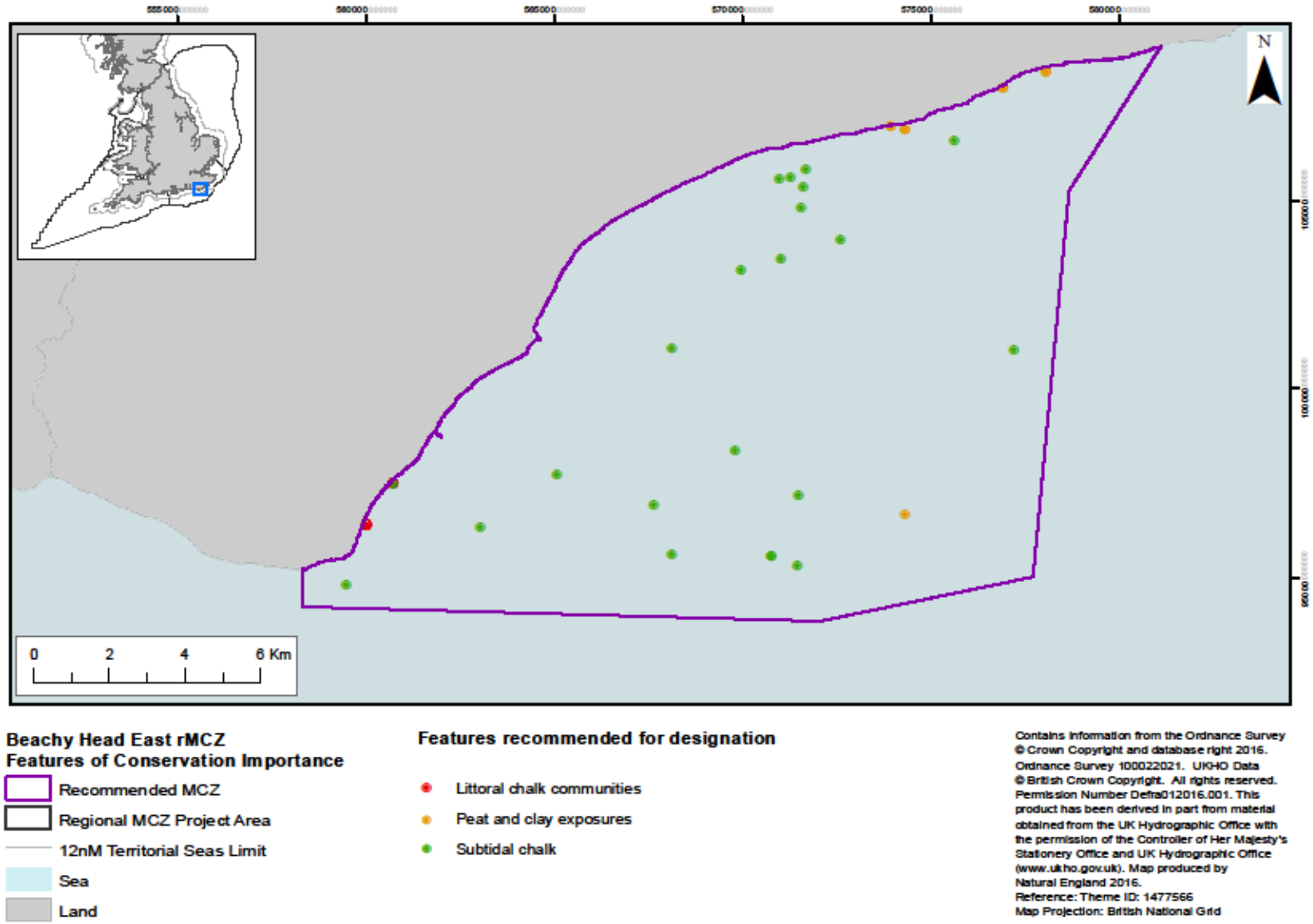


Figure 13 Location of mapped features of conservation importance in Beachy Head East rMCZ

3.4 Summary of Natural England's advice

Table 3 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Beachy Head East rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Blue Mussel Beds	Low	Low	Favourable	Maintain	This GMA has changed from recover to maintain as the activity which triggered the original recover (shellfish harvesting /bottom towed dredges) occurs at very low levels. There have only been between one and three sighted vessels operating in this area by the local Inshore Fisheries and Conservation Authority (IFCA). The sensitivity of blue mussel beds to bottom towed gear is moderate. Therefore the combination of low exposure and moderate sensitivity changes the 2016 GMA to maintain.
Circalittoral rock and thin mixed sediment	No confidence	No confidence	Not assessed	Not assessed	Realigned to EUNIS level 3 BSH feature (circalittoral rock, subtidal sand and subtidal coarse sediment). Non-ENG feature as described here will not be advised on further. Please refer to section 3.4.1.7 below for further information.
High/Moderate energy circalittoral rock	High	Moderate	Unfavourable	Recover	New feature
Infralittoral rock and thin mixed sediment	Moderate	Moderate	Not assessed	Not assessed	Realigned to EUNIS level 3 BSH feature (Subtidal sand, and Low and Moderate energy infralittoral rock). Non-ENG feature as described here will not be advised on further. Please refer to section 3.4.1.7 below for further information.
Subtidal coarse sediment	High	High	Favourable	Maintain	New feature
Infralittoral rock and thin sandy sediment	Moderate	Moderate	Not assessed	Not assessed	Realigned to EUNIS level 3 BSH feature (Low and Moderate energy infralittoral rock). Non-ENG feature as described here will not be advised on further. Please refer to section 3.4.1.7 below for further information.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Subtidal sand	High	High	Favourable	Maintain	New feature
High energy intertidal rock	Low	Low	Favourable	Maintain	No change
Intertidal coarse sediment	High	High	Favourable	Maintain	Natural England advises not to consult on or designate this feature. Please refer to section 3.4.1.5 below for further information.
Intertidal mixed sediments	Low	Low	Favourable	Maintain	No change
Littoral chalk communities	High	Moderate	Favourable	Maintain	No change
Native oyster (*Ostrea edulis*)	Low	Low	Favourable	Maintain	The GMA has changed from recover to maintain due to our improved understanding of the original triggering activities within the site, namely dredges and demersal trawling. After further assessment of the evidence it is unlikely that the feature will be exposed to the low levels of activity within the site given their relative locations. In addition, site management measures through the Sussex IFCA byelaw prohibits the fishing of oysters within the site. We therefore advise a GMA of maintain based on lack of exposure of the feature to benthic fishing activity
Peat and clay exposures	Moderate	Moderate	Unfavourable	Recover	IFCA sighting data indicates a low level of dredging and trawling activity occurring over the site which could potentially overlap with the feature. Due to the feature's moderate-high sensitivity to the pressures associated with these activities Natural England advises a recover GMA.
Ross worm reefs (*Sabellaria spinulosa*)	Low	Low	Unfavourable	Recover	No change
Short snouted seahorse (*Hippocampus hippocampus*)	Low	Low	Favourable	Maintain	No change
Subtidal chalk	Moderate	Moderate	Unfavourable	Recover	IFCA sighting data indicates a low level of dredging and trawling

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					activity occurring over the site which could potentially overlap with the feature. Due to the feature's moderate-high sensitivity to the pressures associated with these activities Natural England advises a recover GMA.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

3.5 Additional advice

3.5.1 Advice on specific features

3.5.1.1 Ross worm reefs in Beachy Head East rMCZ

We currently have low confidence in both the presence and extent of Ross worm reefs (*Sabellaria spinulosa*; HOCI_16) within Beachy Head East rMCZ. These low confidence calculations are based on limited data of 1 point, with no underlying polygon data.

Based on the potential for this feature to occur within the site and that our best available evidence on exposure and sensitivity suggests the feature has moderate/high vulnerability to fishing activity (demersal trawling and dredging), for which there are no known future management plans, we advise the feature should be further considered for designation at this site.

3.5.1.2 Native oyster in Beachy Head East rMCZ

We currently have low confidence in both the presence and extent of Native oysters (*Ostrea edulis*; SOCI_22) within Beachy Head East rMCZ. These low confidence calculations are based on 11 points, all of which are over 12 years old.

This Priority Species is a former UK BAP species and in addition is listed as threatened and / or declining under OSPAR. The data available indicate this feature has been established within this site, if protected this species could over time potentially be found at sufficient density to form Native oyster beds (*Ostrea edulis*). Within this region, Native oyster Beds were not proposed due to insufficient evidence of oysters at a high enough density. Due to the wider conservation status of this species and clear ecological link between Native oyster, and the formation of Native oyster beds, we advise the feature should be further considered for designation at this site.

3.5.1.3 Blue Mussel Beds in Beachy Head East rMCZ

We currently have low confidence in both the presence and extent of blue mussel beds (*Mytilus edulis*; HOCI_1) within Beachy Head East rMCZ. These low confidence assessment results are based on 11 data points, all of which are over 12 years old, and low confidence polygonal habitat mapping data.

Although the feature is low confidence and has not been identified as being at high risk, we would like to highlight the conservation importance of this feature and our support for it being considered for designation at this site, despite it not currently meeting the data sufficiency criteria for designation. Local knowledge supports the potential for the feature to occur within the site, and it may represent an important gap filling feature; at least two of the three potential Tranche 3 site options, of which this is one, are required to avoid replication gaps in the network.

3.5.1.4 Short snouted seahorse in Beachy Head East rMCZ

We currently have low confidence in both the presence and extent of short snouted seahorse (*Hippocampus hippocampus*; SOCI_16) within Beachy Head East rMCZ. These low confidence calculations are based on limited data of 1 point. Although the feature is low confidence and has not been identified as being at high risk, we would like to highlight the conservation importance of this feature and our support for it being considered for designation at this site, despite it not currently meeting the data sufficiency criteria for designation. Local knowledge supports the potential for the feature to occur within the site, and it may represent an important gap filling feature; three of the four potential Tranche 3 site options, of which this is one, are required to avoid representation and replication gaps in the network.

3.5.1.5 Intertidal coarse sediment in Beachy Head East rMCZ

We advise that Intertidal coarse sediment (A2.1) within Beachy Head East rMCZ is not taken forward to consultation or designation. This advice is based on the non-natural state of this habitat as a result of its current and future management, and the presence of this feature in other Eastern Channel site options

which contribute to the 20% ENG adequacy targets (10% minimum target already met).

The intertidal coarse sediment in Beachy Head East rMCZ forms part of the local Shoreline Management Plan[4] for coastal defence. In order to ensure its effectiveness as a coastal defence mechanism, for the next 100 years (at least), the intertidal coarse sediment in Beachy Head East rMCZ will be actively managed through a "hold the line" approach involving various methods including the recharge of shingle beaches. We currently have high-high confidence for the presence and extent of intertidal coarse sediment in Beachy Head East rMCZ. However, due to the current and future management of this feature for the purposes of coastal defence, our advice and expert judgement is that it cannot be considered a true natural representation of an intertidal coarse sediment habitat feature and should therefore not be taken forward to consultation or designation.

3.5.1.6 Re-alignment of non-ENG features in Beachy Head East rMCZ

Infralittoral rock and thin sandy sediment (non_ENG_20), Infralittoral rock and thin mixed sediment (non_ENG_21) and Circalittoral rock and thin mixed sediment (non_ENG_22) were features proposed by stakeholders in the Balanced Seas Regional project to describe rock features with a thin veneer of sediment. These features do not align with Ecological Network Guidance (ENG) features and are, therefore, referred to as 'non-ENG' features. As such, these features are not considered 'Network features' for the purposes of JNCC's 2016 MPA network analysis (JNCC 2016).

Below Natural England advise the re-alignment of these 'non-ENG' habitats to ENG features, based on more recent and higher confidence survey data. We consider these ENG features to be a better reflection of the habitats described by the Regional Project stakeholders in Beachy Head East rMCZ, that these features contribute to the ecological network and can be mapped, monitored and managed more effectively in the future.

Non_ENG features

Infralittoral rock and thin sandy sediment (non_ENG_20)

A verification survey conducted in 2012 and the resulting habitat map produced in 2014[5] did not present any evidence of infralittoral rock in Beachy Head East rMCZ. This data is of a higher quality than that available during the regional project recommendations, which inspires greater confidence. As a result, we now have limited evidence remaining to support Infralittoral rock and thin sandy sediment in Beachy Head East rMCZ. While the feature achieved a confidence score of moderate for both presence and extent and is therefore data sufficient, we advise that Infralittoral rock and thin sandy sediment (non_ENG_20) should not be considered for designation at this site. Instead we suggest this habitat be re-aligned to the ENG feature – Subtidal sand (A5.2) (see Section 3.4.1.8 below).

Infralittoral rock and thin mixed sediment (non_ENG_21)

The verification survey conducted in 2012 and the resulting habitat map produced in 2014[6] did not present any evidence of Infralittoral rock or mixed sediment. This data is of a higher quality than that available during the regional project recommendations which inspires greater confidence. As a result, we now have limited evidence remaining to support Infralittoral rock and thin mixed sediment within Beachy Head East rMCZ. While the feature achieved a confidence score of moderate for both presence and extent and is therefore data sufficient, we advise that Infralittoral rock and thin mixed sediment (non_ENG_21) should not be considered for designation at this site. Instead we suggest this habitat be re-aligned to the ENG feature Subtidal coarse sediment (A5.1) (see Section 3.4.1.8 below).

[4] South Foreland to Beachy Head SMP: http://www.se-coastalgroup.org.uk/wp-content/uploads/2012/02/SF2BH-SMP_Main-Doc.pdf
[5] http://randd.defra.gov.uk/Document.aspx?Document=12821_BeachyHeadEastrMCZ_SummarySiteReport_V12.pdf
[6] http://randd.defra.gov.uk/Document.aspx?Document=12821_BeachyHeadEastrMCZ_SummarySiteReport_V12.pdf

Circalittoral rock and thin mixed sediment (non_ENG_22)

The verification survey conducted in 2012 and the resulting habitat map produced in 2014[4] did not present any evidence of mixed sediment, although did present evidence of the ENG feature High/Moderate energy circalittoral rock (A4.1/A4.2). This data is of a higher quality than that available during the regional project recommendations which provides greater confidence. As a result, we no longer have evidence to support the presence or extent of Circalittoral rock and thin mixed sediment (non_ENG_22) within Beachy Head East rMCZ and We advise that this non_ENG feature should not be considered for designation. However, in light of the recent verification survey data, we suggest the habitat be re-aligned to the ENG feature – High/Moderate energy circalittoral rock (A4.1/A4.2) (see section 3.4.1.8 below). We consider this ENG feature to be a better reflection of the habitat described by the Regional Project stakeholders.

ENG features

The more widely recognised ENG EUNIS features detailed below are our suggested re-alignments of the rock and sediment areas previously put forward by the Regional Seas Project for Beachy Head East rMCZ - Circalittoral rock and thin mixed sediment (non_ENG_22), Infralittoral rock and thin mixed sediment (non_ENG_21) and Infralittoral rock and thin sandy sediment (non_ENG_21).

Sixteen sources of evidence have contributed to the assessment of high confidence in both the presence and extent of **Subtidal sand** in Beachy Head East rMCZ. Subtidal sand is also a significant 'gap' within the MPA network for the Eastern Channel region, and all options for designating this feature should be considered.

Nine sources of evidence have contributed to the assessment of high confidence in both the presence and extent of **Subtidal coarse sediment** in Beachy Head East rMCZ. Subtidal coarse sediment is also a significant 'gap' within the MPA network for the Eastern Channel region, and all options for designating this feature should be considered.

Two sources of evidence have contributed to the assessment of high confidence in presence and moderate confidence in extent of **Moderate / High energy circalittoral rock in Beachy Head East rMCZ.** Circalittoral rock is also a potential 'gap' within the MPA network for the Eastern Channel region.

3.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

4 Bembridge rMCZ (BS 22)

4.1 Site description

Bembridge rMCZ lies adjacent to the east coast of the Isle of Wight and extends seaward towards the Nab shipping channel. While three-quarters of the site overlaps geographically with South Wight Maritime SAC, it is included in Natural England's Tranche 3 advice for the exceptionally diverse habitats and species that are not afforded protection by the SAC. These include the short-snouted seahorse (*Hippocampus hippocampus*), native oyster (O*strea edulis*) and seagrass beds. The ledges to the south of Bembridge Harbour are home to large 'fields' of the brown alga peacock's tail (*Padina pavonica*), which acts as the seeding population for other areas of peacock's tail around the Isle of Wight. Recent Natural England survey work has also identified the only location of maerl (*Phymatolithon calcareum*) beds in the Balanced Seas project area in the slightly deeper waters around Culver Spit, where subtidal macrophyte-dominated sediments provide additional habitat for a variety of creatures. Other, earlier surveys recorded one of only two occurrences of the kaleidoscope jellyfish (*Haliclystus auricula*)[7] in the project area, in waters further from the shore, where the seabed becomes predominantly subtidal mixed sediments, sands and gravels. The stalked jellyfish (*Calvadosia campanulata*[8]) is also found within the site near Bembridge Ledges. In the northern part of the site, where there is no overlap with the South Wight Maritime Special Area of Conservation (SAC), subtidal mixed sediments and a large area of subtidal mud support a wide variety of benthic habitats and species.

Although there is no conservation or evidence based driver, upon Defra's request, Natural England are providing advice on two boundary amendments of this rMCZ. The amendments attempt to alleviate stakeholder objection to the rMCZ and reduce socio-economic impacts of the designation. For more information regarding the boundary amendments see section 4.5.2 below.

Natural England has provided full pre-consultation advice on both boundary options, **Bembridge V1** and **Bembridge V2** and boundary maps for both options are provided in this document (Figures 14 and 15).

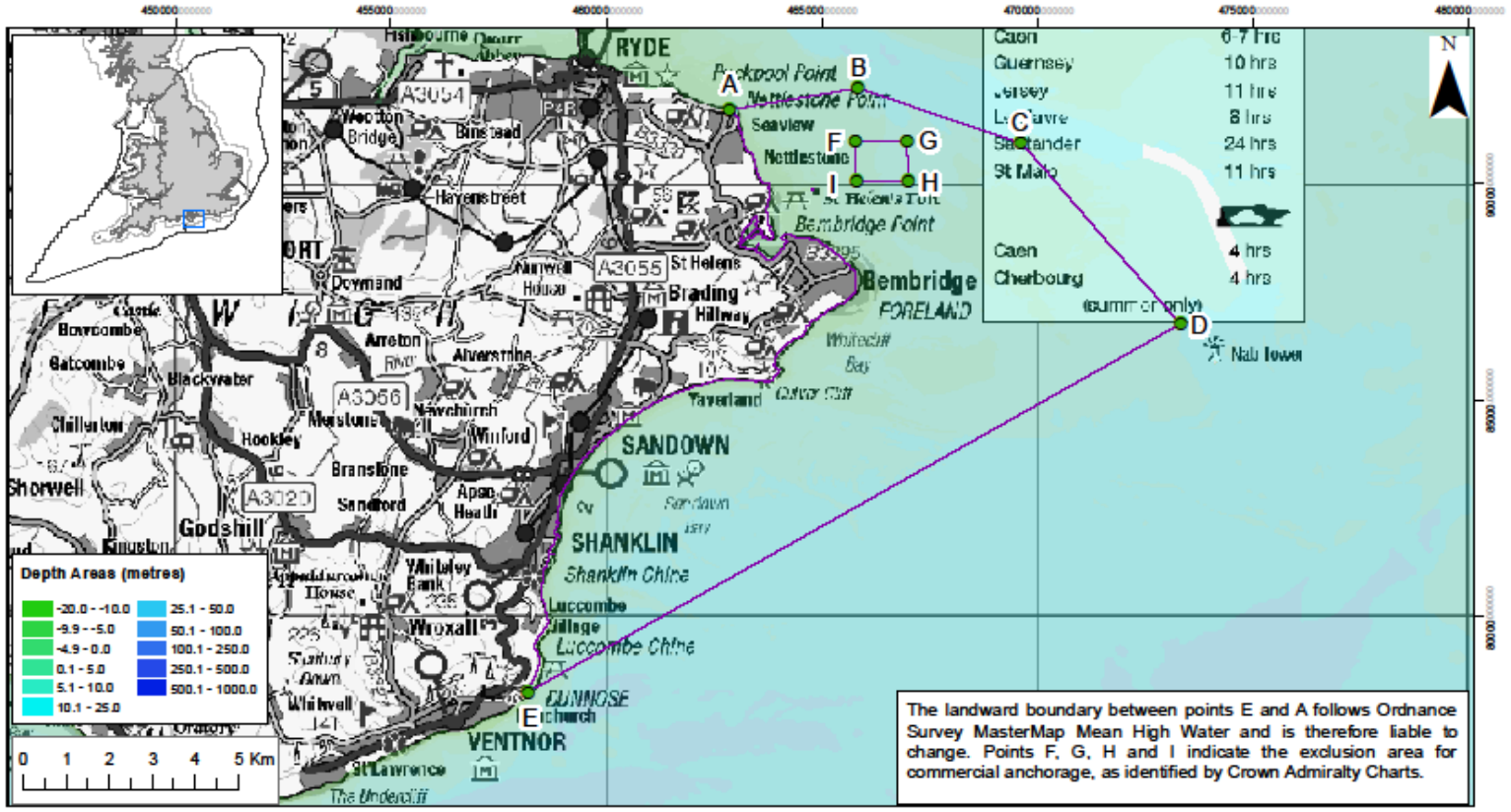
4.2 Site image

Image 4 Stalked jellyfish (*Calvadosia campanulata*) July 2014 © Gavin Black, Natural England

[7] Referred to in advice as *Haliclystus spp.*

[8] Previously classified as *Lucernariopsis campanulata*

4.3 Site maps

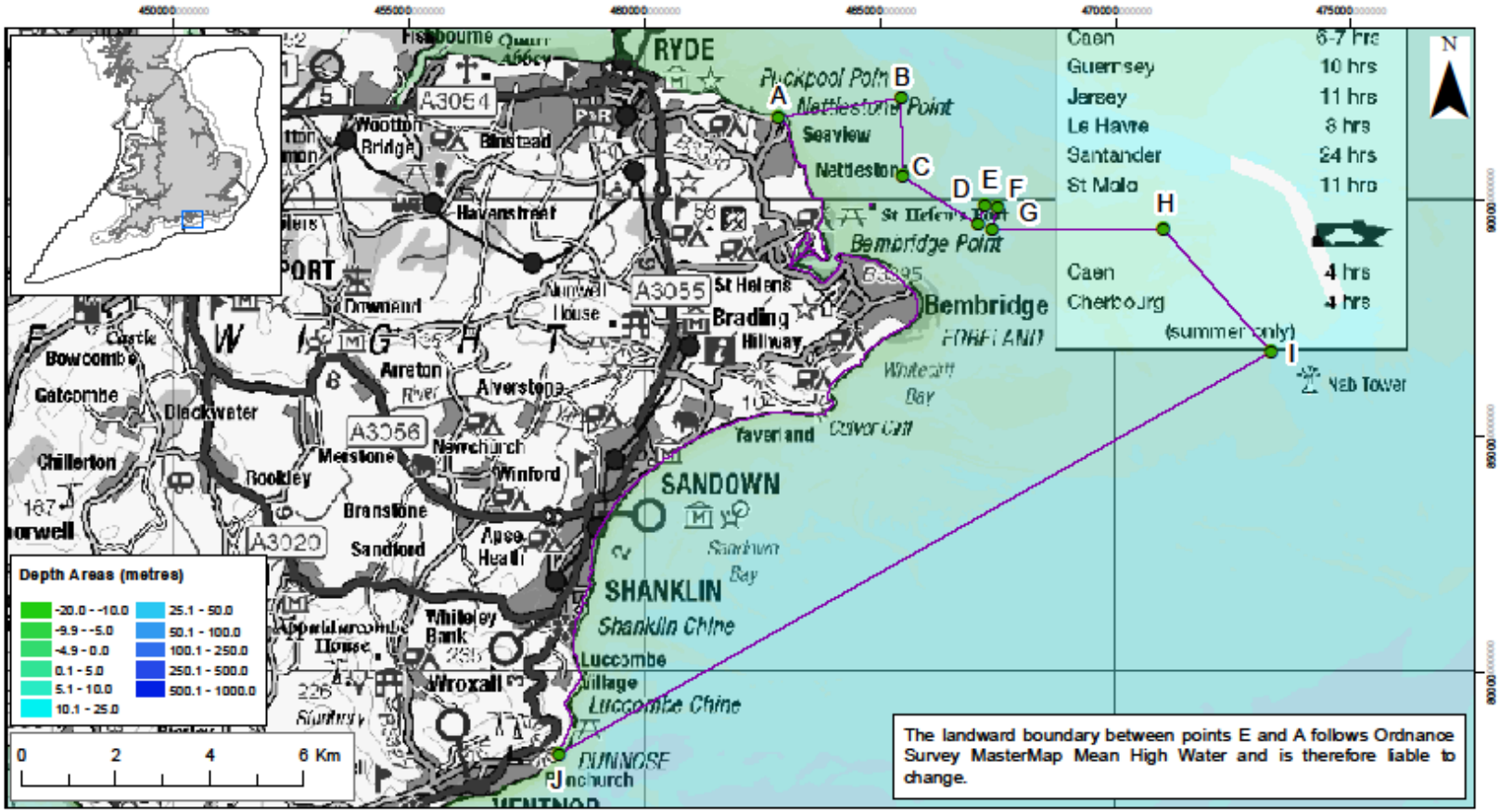


Bembridge rMCZ Version 1 Boundary

- Recommended MCZ Version 1
- Regional MCZ project area
- rMCZ boundary co-ordinates
- 12nM Territorial Seas Limit
- Land

Point	Lat	Long	Point	Lat	Long
A	50° 43' 18.961" N	1° 6' 41.049" W	F	50° 42' 53.262" N	1° 4' 11.227" W
B	50° 43' 33.389" N	1° 4' 8.290" W	G	50° 42' 53.224" N	1° 3' 9.812" W
C	50° 42' 50.604" N	1° 0' 55.059" W	H	50° 42' 23.688" N	1° 3' 9.748" W
D	50° 40' 33.307" N	0° 57' 48.871" W	I	50° 42' 23.945" N	1° 4' 11.167" W
E	50° 36' 3.142" N	1° 10' 45.619" W			

Figure 14 Bembridge rMCZ site boundary (V1)



Bembridge rMCZ Version 2 Boundary

- Recommended MCZ Version 2
- Regional MCZ project area
- rMCZ boundary co-ordinates
- 12nM Territorial Seas Limit
- Land

Point	Lat	Long	Point	Lat	Long
A	50° 43'18.961" N	1° 6'41.049" W	F	50° 42'15.920" N	1° 2'43.904" W
B	50° 43'31.737" N	1° 4'26.414" W	G	50° 42'0.054" N	1° 2'49.824" W
C	50° 42'37.267" N	1° 4'26.875" W	H	50° 41'59.658" N	0° 59'45.652" W
D	50° 42'3.816" N	1° 3'5.116" W	I	50° 40'33.307" N	0° 57'48.871" W
E	50° 42'17.100" N	1° 2'57.651" W	J	50° 36'3.142" N	1° 10'45.619" W

Figure 15 Bembridge rMCZ site boundary (V2)

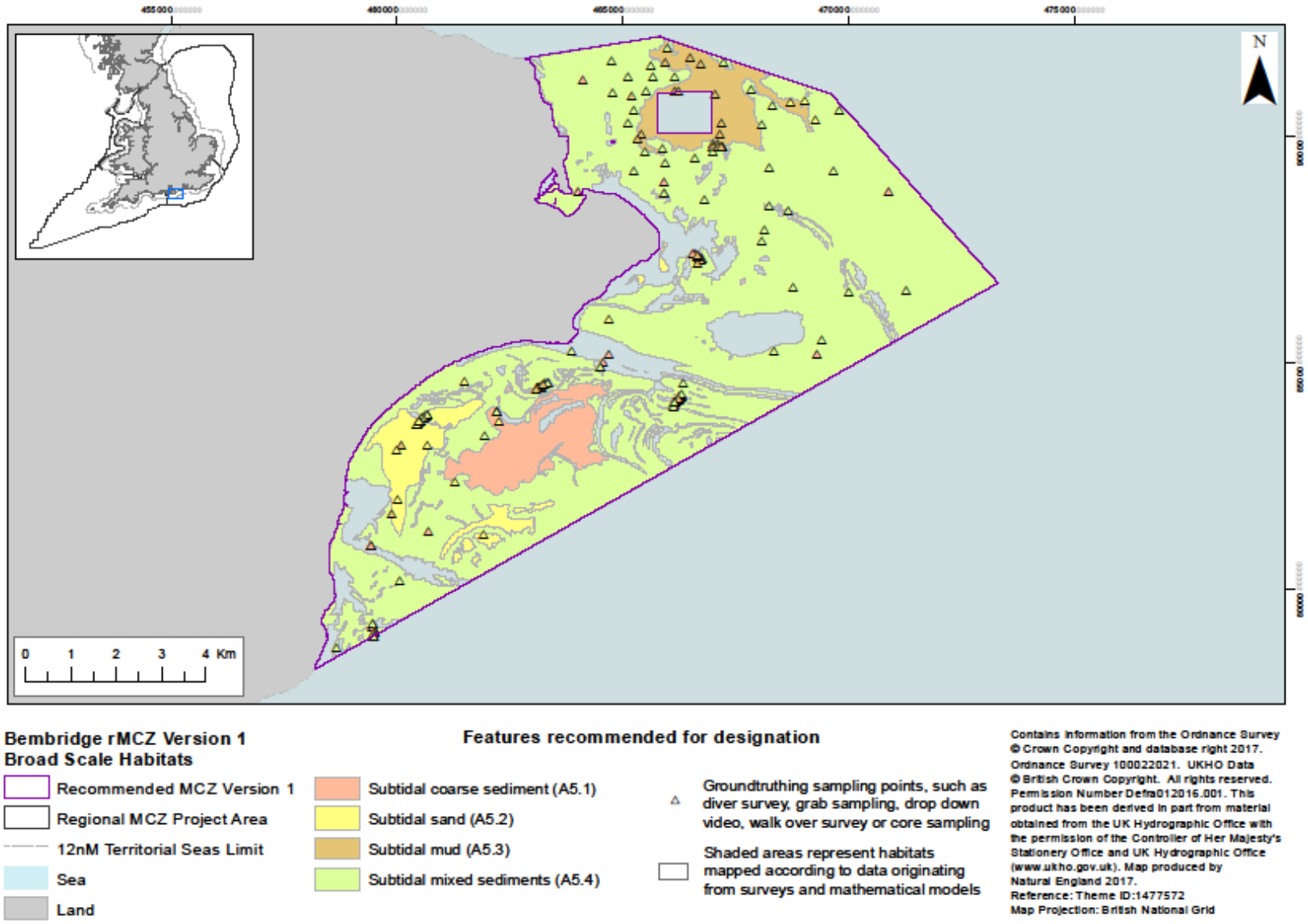


Figure 16 Location of mapped broad-scale habitats in Bembridge rMCZ (V1)

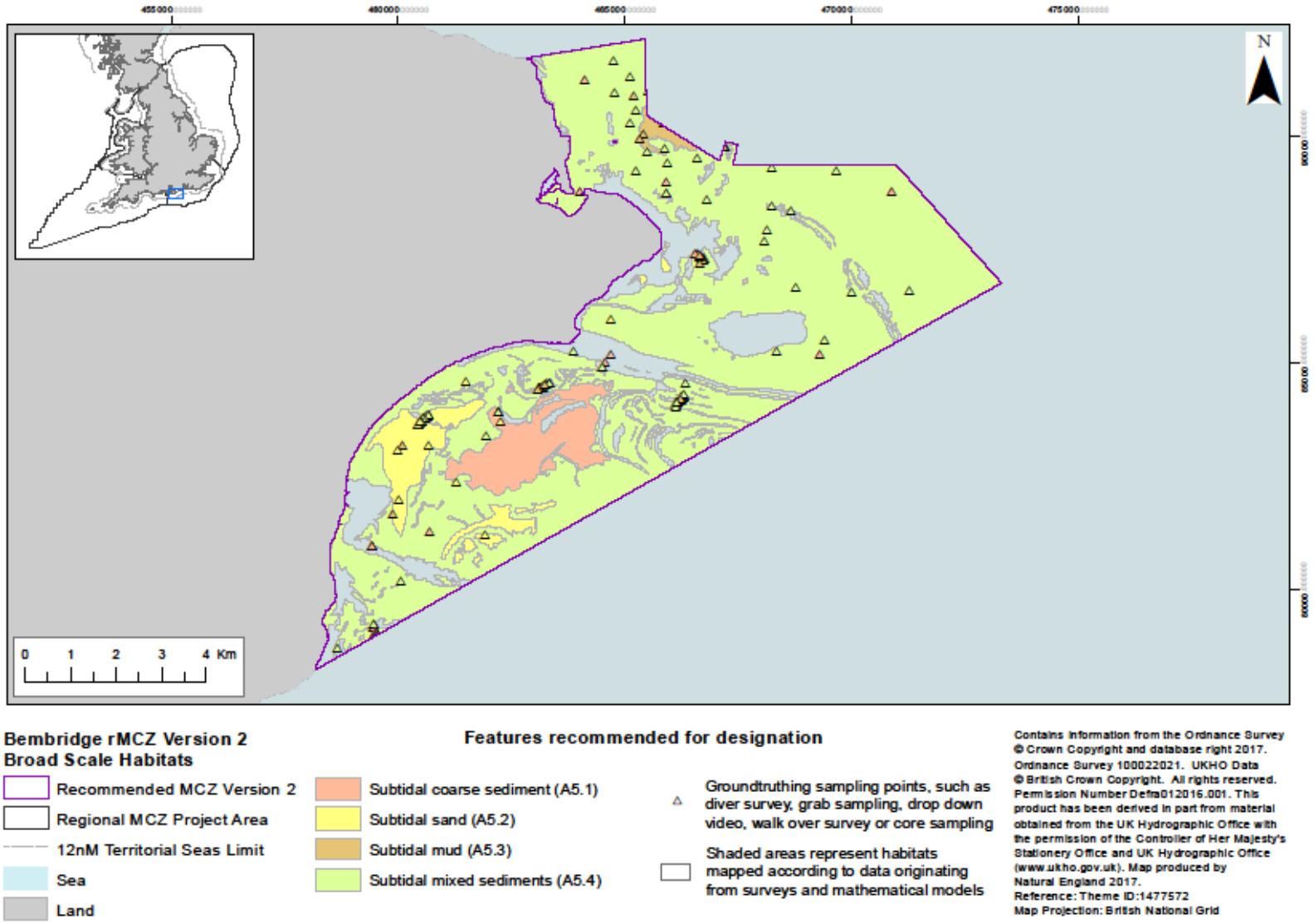


Figure 17 Location of mapped broad-scale habitats in Bembridge rMCZ (V2)

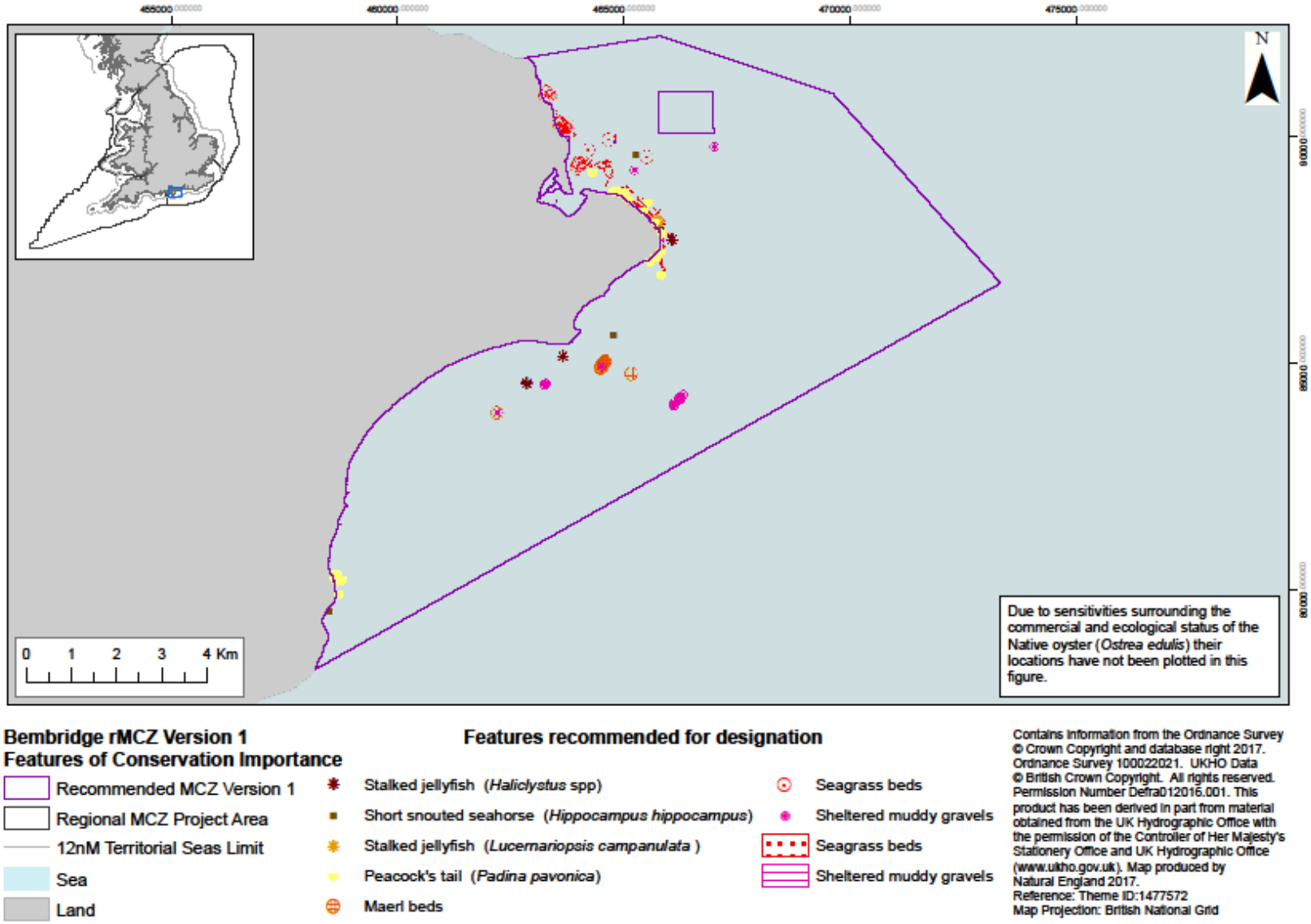


Figure 18 Location of mapped features of conservation importance in Bembridge rMCZ (V1)

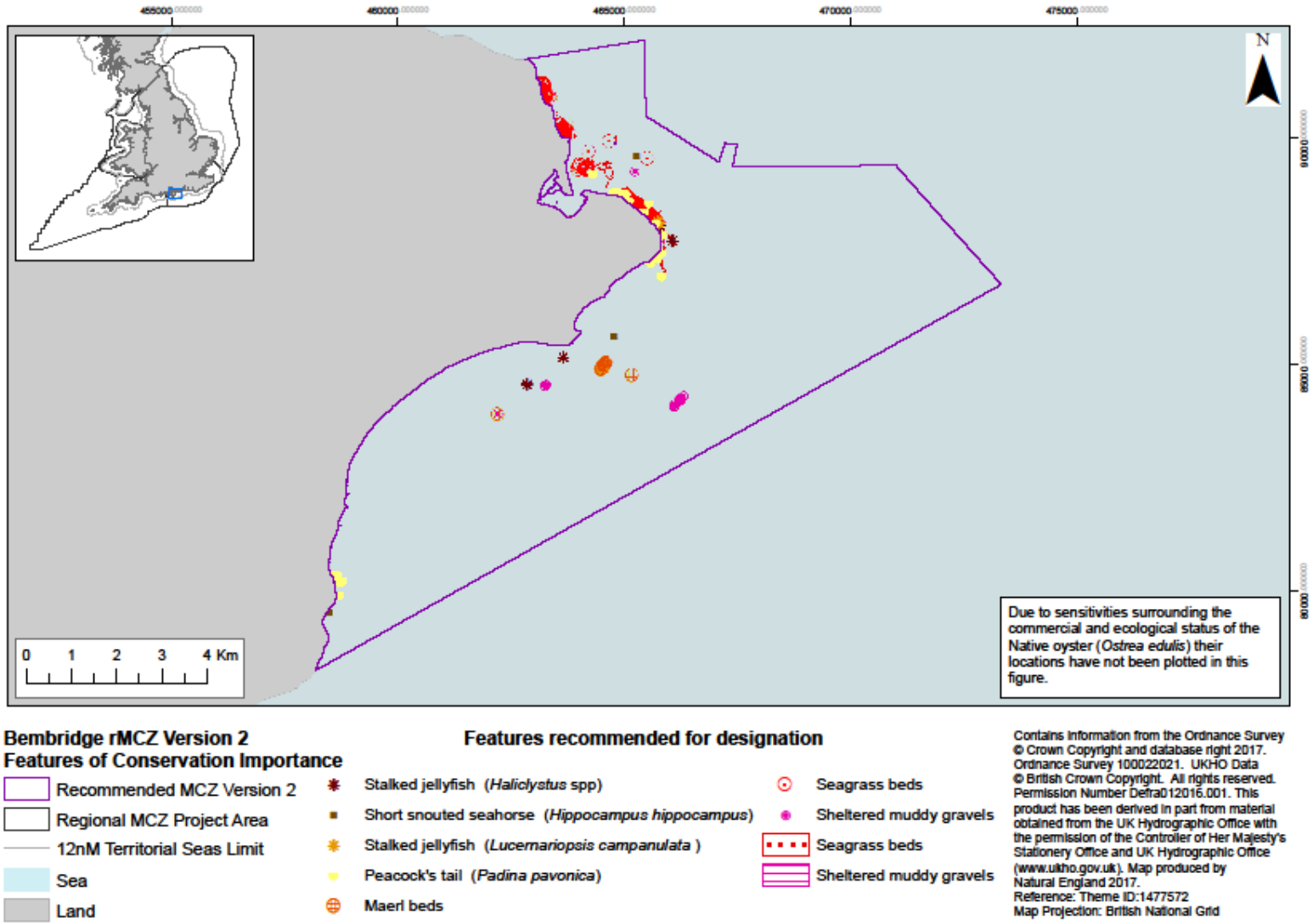


Figure 19 Location of mapped features of conservation importance in Bembridge rMCZ (V2)

4.4 Summary of Natural England's advice

Table 4 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Bembridge rMCZ (V1).

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Common maerl (*Phymatolithon calcareum*)	Low	Low	Unfavourable	Recover	Recover GMA triggered due to moderate/high vulnerability to fishing (anchored nets/lines and traps). (Triggering activities Anchored nets/line; Traps)
Lagoon sand shrimp (*Gammarus insensibilis*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Long snouted seahorse (*Hippocampus guttulatus*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Maerl beds	High	Moderate	Unfavourable	Recover	No change
Native oyster (*Ostrea edulis*)	Moderate	Moderate	Unfavourable	Recover	No change
Native oyster beds (*Ostrea edulis*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Peacock's tail (*Padina pavonica*)	High	High	Unfavourable	Recover	No change
Ross worm reefs (*Sabellaria spinulosa*)	Low	Low	Unfavourable	Recover	No change
Sea pens and burrowing	Low	Low	Unfavourable	Recover	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
megafauna					
Seagrass beds	High	High	Unfavourable	Recover	No change
Sheltered muddy gravels	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to recreational boating and military activities causing abrasion and disturbance of the seabed. However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. The MoD has also provided additional information about the military activities that take place within or close to the Bembridge rMCZ. The activities that occur in these general practice areas are not likely to have a significant impact on the seabed in this site. Furthermore, the introduction of the Marine Environment and Sustainability Assessment Tool (MESAT) and the Environmental Protection Guidelines (Maritime) (EPG(M)), signed off by the SNCBs in 2013, introduces guidelines to minimise the environmental impacts of Royal Navy Maritime operations, either by air or on or under the sea. Therefore, the vulnerability of this feature to recreational boating and military activities has been changed to low, resulting in a Maintain GMA.
Short snouted seahorse (*Hippocampus hippocampus*)	Moderate	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to recreational boating activities, ports and harbours (berths, moorings and anchorages) and commercial shipping causing abrasion and disturbance of the supporting habitat. However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. Furthermore, this feature is not located within any port or harbour, approach channel or any commercial anchoring area and there will be no interaction with commercial shipping. Therefore, the vulnerability of this feature to ports and harbours, commercial shipping and recreational boating has been changed to low, resulting in a Maintain GMA.
Stalked jellyfish (*Haliclystus* species)	Moderate	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to recreational boating activities and the risk of spread of Invasive Non-native Species (INNS). However, the RYA has provided more up to date information on the anchoring and mooring areas within the

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					site and, in practice, there is no overlap with this feature. Furthermore, there is a low risk of spread of INNS resulting from this activity as management to promote best practice biosecurity and awareness around INNS is already in place. Therefore, the vulnerability of this feature to recreational boating has been changed to low, resulting in a Maintain GMA.
Stalked jellyfish (*Calvadosia campanulata*[9])	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to ports and harbours (berths, moorings and anchorages) and recreational boating causing abrasion and disturbance of the supporting habitat. However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. Furthermore, this feature is not located within any port or harbour, approach channel or anchoring area. Therefore, the vulnerability of this feature to ports / harbours and recreational boating has been changed to low, resulting in a Maintain GMA.
Starlet sea anemone (*Nematostella vectensis*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Subtidal coarse sediment	High	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to commercial shipping (anchorages), coastal infrastructure, military activities and bottom towed fishing causing abrasion and disturbance of the seabed. The majority of this feature is not located within the St Helen's Road anchorage; therefore interactions between commercial anchoring and this feature are limited. Similarly, the majority of this feature is protected by the Southern IFCA bottom towed gear byelaw and therefore interactions between fishing and this feature are limited. There are no existing slipways or outfall/intakes that directly overlap with this feature and construction of coastal infrastructure is regulated and well managed through marine licensing / planning consents. The MoD has provided additional information about the military activities that take place within or close to the Bembridge rMCZ. The activities that occur in these

[9] Previously classified as *Lucernariopsis campanulata*

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					general practice areas are not likely to have a significant impact on the seabed in this site. Furthermore, the introduction of the Marine Environment and Sustainability Assessment Tool (MESAT) and the Environmental Protection Guidelines (Maritime) (EPG(M)), signed off by the SNCBs in 2013, introduces guidelines to minimise the environmental impacts of Royal Navy Maritime operations, either by air or on or under the sea. Therefore, the vulnerability of this feature to commercial anchoring, coastal infrastructure, military activities and fishing has been changed to low, resulting in a Maintain GMA.
Subtidal mixed sediments	high	High	Unfavourable	Recover	Recover GMA triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls outside of the SIFCA byelaw area) and commercial shipping (vessel anchorages).(Triggering activities: Dredges; Demersal trawl; Vessel anchorages)
Subtidal mud	High	High	Unfavourable	Recover	No change
Subtidal sand	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to military activities causing abrasion and disturbance of the seabed. However, the MoD has provided additional information about the military activities that take place within or close to the Bembridge rMCZ. The activities that occur in these general practice areas are not likely to have a significant impact on the seabed in this site. Furthermore, the introduction of the Marine Environment and Sustainability Assessment Tool (MESAT) and the Environmental Protection Guidelines (Maritime) (EPG(M)), signed off by the SNCBs in 2013, introduces guidelines to minimise the environmental impacts of Royal Navy Maritime operations, either by air or on or under the sea. Therefore, the vulnerability of subtidal sediment features to military activities has been changed to low, resulting in a Maintain GMA for this feature.
Tentacled lagoon-worm (*Alkmaria romijni*)	Low	Low	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

Table 5 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Bembridge rMCZ (V2).

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rational where the advised GMA has changed since the last advice provided for the feature
Common maerl (*Phymatolithon calcareum*)	Low	Low	Unfavourable	Recover	Recover GMA triggered due to moderate/high vulnerability to fishing (anchored nets/lines and traps). (Triggering activities: 10.1 Anchored nets/line; Z10.2 Traps)
Lagoon sand shrimp (*Gammarus insensibilis*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Long snouted seahorse (*Hippocampus guttulatus*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Maerl beds	High	Moderate	Unfavourable	Recover	No change
Native oyster (*Ostrea edulis*)	Moderate	Moderate	Unfavourable	Recover	No change
Native oyster beds (*Ostrea edulis*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Peacock's tail (*Padina pavonica*)	High	High	Unfavourable	Recover	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rational where the advised GMA has changed since the last advice provided for the feature
Ross worm reefs (*Sabellaria spinulosa*)	Low	Low	Unfavourable	Recover	No change
Sea pens and burrowing megafauna	Low	Low	Unfavourable	Recover	No change
Seagrass beds	High	High	Unfavourable	Recover	No change
Sheltered muddy gravels	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to recreational boating and military activities causing abrasion and disturbance of the seabed. However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. The MoD has also provided additional information about the military activities that take place within or close to the Bembridge rMCZ. The activities that occur in these general practice areas are not likely to have a significant impact on the seabed in this site. Furthermore, the introduction of the Marine Environment and Sustainability Assessment Tool (MESAT) and the Environmental Protection Guidelines (Maritime) (EPG(M)), signed off by the SNCBs in 2013, introduces guidelines to minimise the environmental impacts of Royal Navy Maritime operations, either by air or on or under the sea. Therefore, the vulnerability of this feature to recreational boating and military activities has been changed to low, resulting in a Maintain GMA.
Short snouted seahorse (*Hippocampus hippocampus*)	Moderate	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to recreational boating activities, ports and harbours (berths, moorings and anchorages) and commercial shipping causing abrasion and disturbance of the supporting habitat. However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. Furthermore, this feature is not located within any port or harbour, approach channel or any commercial anchoring area and there will be no interaction with commercial shipping. Therefore, the vulnerability of this feature to ports and harbours, commercial shipping and recreational boating has been changed to low, resulting in a

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rational where the advised GMA has changed since the last advice provided for the feature
					Maintain GMA.
Stalked jellyfish (*Haliclystus* species)	Moderate	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to recreational boating activities and the risk of spread of Invasive Non-native Species (INNS). However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. Furthermore, there is a low risk of spread of INNS resulting from this activity as management to promote best practice biosecurity and awareness around INNS is already in place. Therefore, the vulnerability of this feature to recreational boating has been changed to low, resulting in a Maintain GMA.
Stalked jellyfish (*Calvadosia campanulata*[10])	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to ports and harbours (berths, moorings and anchorages) and recreational boating causing abrasion and disturbance of the supporting habitat. However, the RYA has provided more up to date information on the anchoring and mooring areas within the site and, in practice, there is no overlap with this feature. Furthermore, this feature is not located within any port or harbour, approach channel or anchoring area. Therefore, the vulnerability of this feature to ports / harbours and recreational boating has been changed to low, resulting in a Maintain GMA.
Starlet sea anemone (*Nematostella vectensis*)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature

[10] Previously classified as *Lucernariopsis campanulata*

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rational where the advised GMA has changed since the last advice provided for the feature
Subtidal coarse sediment	High	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to commercial shipping (anchorages), coastal infrastructure, military activities and bottom towed fishing causing abrasion and disturbance of the seabed. The majority of this feature is not located within the St Helen's Road anchorage; therefore interactions between commercial anchoring and this feature are limited. Similarly, the majority of this feature is protected by the Southern IFCA bottom towed gear byelaw and therefore interactions between fishing and this feature are limited. There are no existing slipways or outfall/intakes that directly overlap with this feature and construction of coastal infrastructure is regulated and well managed through marine licensing / planning consents. The MoD has provided additional information about the military activities that take place within or close to the Bembridge rMCZ. The activities that occur in these general practice areas are not likely to have a significant impact on the seabed in this site. Furthermore, the introduction of the Marine Environment and Sustainability Assessment Tool (MESAT) and the Environmental Protection Guidelines (Maritime) (EPG(M)), signed off by the SNCBs in 2013, introduces guidelines to minimise the environmental impacts of Royal Navy Maritime operations, either by air or on or under the sea. Therefore, the vulnerability of this feature to commercial anchoring, coastal infrastructure, military activities and fishing has been changed to low, resulting in a Maintain GMA.
Subtidal mixed sediments	High	High	Unfavourable	Recover	Recover GMA triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls outside of the SIFCA byelaw area) and commercial shipping (vessel anchorages).(Triggering activities: Dredges; Demersal trawl; Vessel anchorages)
Subtidal mud	High	High	Unfavourable	Recover	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rational where the advised GMA has changed since the last advice provided for the feature
Subtidal sand	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to military activities causing abrasion and disturbance of the seabed. However, the MoD has provided additional information about the military activities that take place within or close to the Bembridge rMCZ. The activities that occur in these general practice areas are not likely to have a significant impact on the seabed in this site. Furthermore, the introduction of the Marine Environment and Sustainability Assessment Tool (MESAT) and the Environmental Protection Guidelines (Maritime) (EPG(M)), signed off by the SNCBs in 2013, introduces guidelines to minimise the environmental impacts of Royal Navy Maritime operations, either by air or on or under the sea. Therefore, the vulnerability of subtidal sediment features to military activities has been changed to low, resulting in a Maintain GMA for this feature.
Tentacled lagoon-worm (*Alkmaria romijni*)	Low	Low	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

4.5 Additional advice

4.5.1 Advice on specific features

4.5.1.1 Ross worm reefs *Sabellaria spinulosa* in Bembridge rMCZ V1 and V2

In the Eastern Channel region, Bembridge is one of six site options for the feature Ross worm reefs (*Sabellaria spinulosa*) (HOCI_16). This feature is considered a network gap for replication within the region as it is not currently designated in a sufficient number of sites within the region.

Based on the data we have analysed to date, we have low confidence in both the presence and extent of this feature in this site. This is based on two points for the HOCI biotope, from a 1997 MNCR South Isle of Wight sublittoral survey. These survey data are now almost twenty years old, and survey details describe the *Sabellaria* as encrusting on rocks and of low density.

As a result, we are not able to consider these data as credible evidence to demonstrate the presence or extent of viable *Sabellaria spinulosa* reef due to the small number of data points, the age of the data and survey sample descriptions. Consequently, we advise that feature is not taken forward for designation at this site.

4.5.1.2 Common maerl *Phymatolithon calcareum* in Bembridge rMCZ V1 and V2

In the Eastern Channel region, Bembridge is the only site option for the feature Common maerl (*Phymatolithon calcareum*) (SOCI_26). If designated using boundary V1 or V2, this site would have contributed to filling the gap previously identified for this feature in the existing MPA network. However, Natural England recently completed an additional review of the maerl SOCI features and concluded that an earlier version of the network analysis was not based on accurate species distribution. As such, the latest version of the network analysis (JNCC 2016) does not identify a gap for this feature in the network.

Based on the data we have analysed to date, we have low confidence in both the presence and extent of this feature in the site. This confidence assessment was based solely on drop-down video footage data; subsequent discussions with national maerl experts and a review of available scientific literature confirmed that accurate, species level identification using this method is not possible (Carro *et al*. 2014 and Pardo *et al*. 2014). As a result, we are not able to consider these data as a credible source for determining the presence and extent of this species, but we do recognise its value in evidencing these attributes for the feature 'Maerl Beds (HOCI 12)'. Consequently, we advise that protection of *P. calcareum* and other maerl species are pursued through the designation of the habitat feature 'Maerl Beds (HOCI 12)' and that this species-specific feature is not taken forward to designation in Bembridge rMCZ.

4.5.1.3 Sea pens and burrowing megafauna in Bembridge rMCZ V1 and V2

In the Eastern Channel region, Bembridge is the only site option for the feature Sea pens and burrowing megafauna (HOCI_18). If designated using boundary V1 or V2, this site would contribute to protecting this feature, however the feature was not identified as a FOCI gap within this region by the MPA network assessment (JNCC 2016).

Based on the data we have analysed to date, we have low confidence in both the presence and extent of this feature in this site. This confidence assessment was based on one single data point, and the age of the data from 1997 affects the confidence score. The 1997 MNCR South Isle of Wight sublittoral survey by JNCC recorded the biotope SS.SMu.CFiMu.MegMax (Burrowing megafauna and *Maxmuelleria lankesteri* in circalittoral mud). This biotope supports a relatively high diversity of burrowing animals and has only been recorded at a small number of locations in English waters (JNCC 2015). In addition, further recent data for this feature may be received from local marine survey projects.

The feature Sea pens and burrowing megafauna' (HOCI_18) has been assessed as sensitive with a moderate/high vulnerability score in relation to fishing activities within the site.

As a result, we advise that despite the confidence assessment of Low / Low, this feature is further considered for designation due to the sensitive nature of the feature and the current levels of risk due to fishing activities.

4.5.2 Advice on the site boundary

This additional advice describes two potential boundary amendments to the Bembridge rMCZ. To aid decision making over which boundary option to take forward, Natural England has provided full pre-consultation advice on both boundary options, **Bembridge V1** and **Bembridge V2**. Boundary maps for both options are provided in this document (Figures 14 and 15).

There is no driver on conservation or evidence grounds to amend the boundary of this rMCZ. Natural England is providing this advice in response to past and recent stakeholder engagement and at the request of Defra. Defra may choose to amend the boundary if they wish to alleviate stakeholder objection to this rMCZ and reduce socio-economic impacts of the designation. In this regard, based on discussions Natural England has had with key stakeholders, boundary option V2 would be the most appropriate.

4.5.2.1 Rationale for Natural England's advice on the rMCZ boundary amendment options

Bembridge MCZ (rMCZ) was subject to discussions during Tranche 1 and 2 of the MCZ process, but was not taken forward for designation due to the complex issues surrounding the establishment of an MCZ across the St Helen's Road commercial anchorage. As part of the Tranche 3 pre-consultation advice, Natural England was asked by Defra to propose a revised boundary for Bembridge rMCZ with the aim of excluding the main anchorage.

St Helen's Road anchorage is located off the north-east coast of the Isle of Wight and is heavily used by international vessels approaching the Port of Southampton, Fawley Oil Refinery and Portsmouth Harbour. The anchorage falls within the Queen's Harbour Master (QHM) Portsmouth area of jurisdiction, yet it is within the discretion of the master of the ship to decide where it is safe to anchor. This decision may be based on water depth, substrate, wind direction and the presence of other vessels in the area. Furthermore, while Associated British Ports (ABP) Southampton is not the harbour authority for the anchorage, it does advise commercial vessels which areas within the anchorage are available and will take actions to prevent them anchoring in either the main shipping channel or pilot boarding area. However, the master of the ship is ultimately responsible for their vessel.

4.5.2.2 Development of boundary amendment options

Natural England drafted an initial revised boundary (**Bembridge V1**) using the location of the commercial anchorage as marked on the Admiralty Standard Nautical Chart. During a subsequent meeting with ABP Southampton and QHM Portsmouth in July 2016, it became apparent that this boundary option does not reflect the full extent of anchoring activity at the site.

Natural England subsequently sourced two datasets to examine usage of the area. Firstly, Automatic Identification System (AIS) data was collected daily throughout July 2016, noting the co-ordinates of each vessel anchored. Secondly, ABP Southampton provided Natural England with a dataset of anchored vessel co-ordinates recorded during the previous three years (2013-2016). These data were used to develop a practical boundary option (**Bembridge V2**) which excludes the majority of anchoring while retaining the greatest proportion of proposed MCZ features as possible. Boundary option V2 was identified as the preferred choice by both ABP Southampton and QHM Portsmouth. It should be noted however that whilst the preferred choice of these key stakeholders, any revision to the rMCZ boundary could still lead to instances where vessels need to anchor within the site – particularly for reasons of safety. On this basis, ABP Southampton and QHM Portsmouth advise that they would be unable to prevent vessels from anchoring within the Bembridge rMCZ.

Boundary options V1 and V2 are presented in Figure 20 for comparison, together with the anchorage

activity data collated by ABP and Natural England.

Consultation with the Southern Inshore Fisheries and Conservation Authority (SIFCA) was also undertaken to determine the location of boundary options with respect to SIFCA's Prohibition of Bottom Towed Fishing Gear Byelaw. This byelaw was introduced in January 2014 to protect the designated reef feature of the South Wight Maritime Special Area of Conservation (SAC), which overlaps with Bembridge rMCZ at St Helen's Road anchorage. As a result, boundary option V2 has been geographically aligned with SIFCA's byelaw to avoid discrepancies between management approaches.

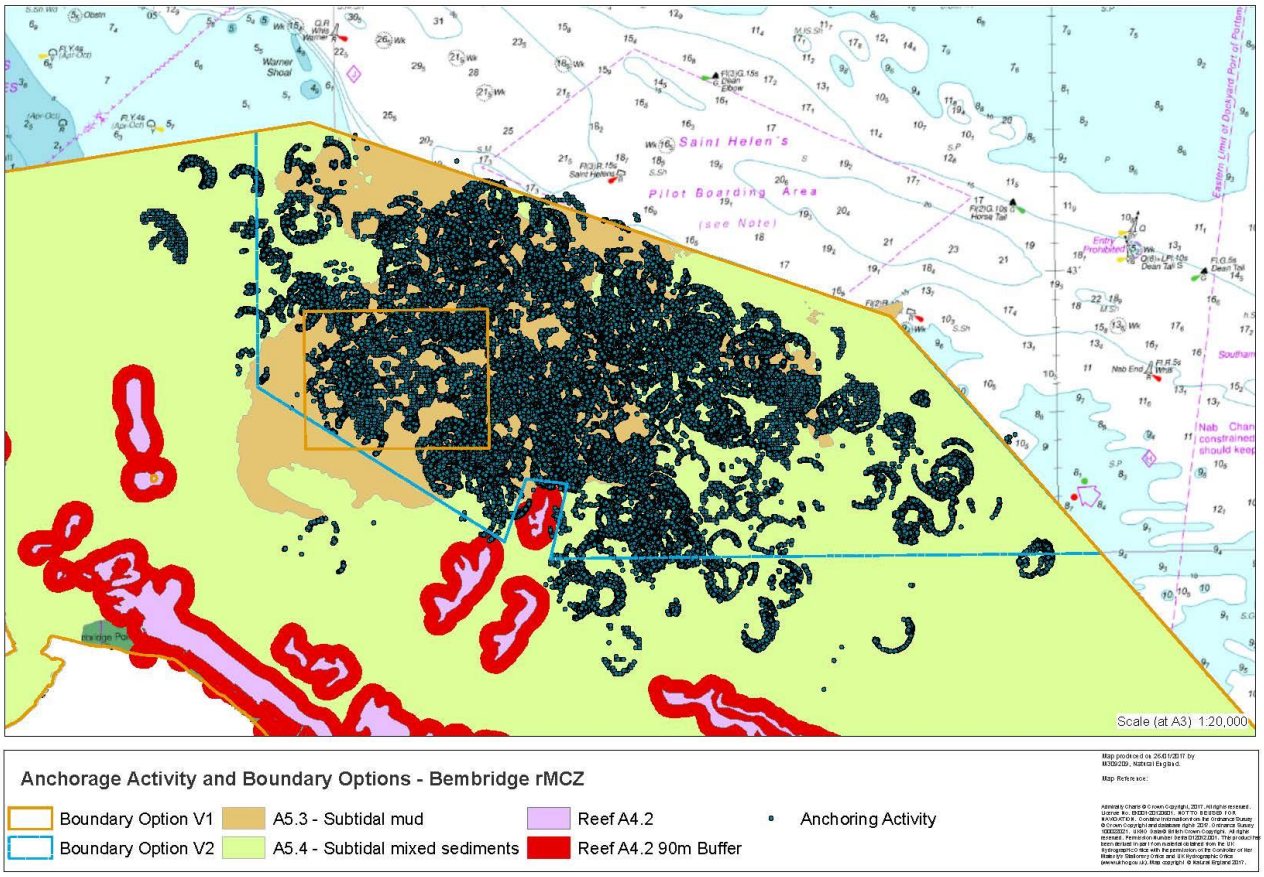


Figure 20 Comparison of boundary options V1 and V2 with anchorage activity shown

4.5.2.3 Implications for rMCZ features

For each of the boundary options, we have estimated the proportion of anchoring events covered and the approximate area of subtidal mud and subtidal mixed sediments that would be excluded from the site, along with the resulting proportional loss of each feature in relation to the original rMCZ boundary and the total regional resource (known extent of each feature in the Eastern Channel region) (Table 6).

In order to evaluate the potential effect of each boundary option on the MPA network and the existing shortfalls for subtidal mud and subtidal mixed sediments in the Eastern Channel region, the area estimates in Table 6 are best compared to those provided in the 'Overview of the contribution to the MPA network of inshore and offshore site options being considered as potential MCZs in 2017' (Appendix 1 of **Annex 3 – Advice on New site options**; see Tables 4 and 6 of that Appendix).

Table 6 Comparison of boundary options and implications for subtidal mud and mixed sediment features

Boundary option	Coverage of anchorage events (%)	Effect of exclusion of subtidal mud feature from site (% rMCZ) [% regional resource]	Effect of exclusion of subtidal mixed sediments feature from site (% rMCZ) [% regional resource]
Option V1	19%	~1 km^2 (~20%) [~0.002%]	0 km^2 (0%)
Option V2	91%	~4.5 km^2 (~90%) [~0.008%]	~5 km^2 (~8%) [~0.001%]

5 Camel Estuary rMCZ (FS 39)

5.1 Site description

The Camel estuary is the largest and most sheltered marine inlet on the north Cornwall coast. It is predominantly shallow and sandy, deepening at the mouth, with a narrow channel at low water that meanders from one side of the estuary to the other. One of the reasons for the inclusion of this and other estuarine rMCZs in the network was in recognition of the added ecological importance of estuaries in terms of productivity, and their ecological function as nursery areas. The Camel estuary is specifically identified as a bass nursery area.

The Camel Estuary rMCZ is located in the upper section of the estuary, with the seaward boundary approximately 2.5 kilometres upstream of the port of Padstow. The site stretches to the very upper tidal reaches at Sladebridge and Polbrock.

Small cliffs and sheltered blue-black slate reefs are found along the edges of the site as well as broad, sandy embayments. When the tide is out, large expanses of sand flats and mudflats can be seen, with small meandering channels. Sediments within the outer estuary are sandy and fairly mobile, while sediments further upstream tend to be muddier. Extensive areas of saltmarsh can be found in the upper estuary.

The intertidal sediments within the site support rich populations of polychaete worms such as ragworms, and bivalve molluscs such as cockles. These provide an important food source for birds, particularly in winter months. The intertidal rocky reefs are dominated by egg wrack, a brown seaweed. Spiral wrack and serrated wrack are also present and a nationally scarce species of red seaweed *Microcladia glandulosa* has been recorded here. The intertidal rock habitat also supports a range of bedrock and boulder communities which are rarely found within inlets in north Cornwall and north Devon.

Natural England's full (quantitative) pre-consultation advice on this rMCZ is based on the original Regional Project recommended boundary. However, Natural England has provided further qualitative advice to Defra regarding a proposed minor amendment to the Camel Estuary rMCZ boundary, to include areas of saltmarsh that have been omitted from the site as they are slightly above the mean high water line. Further information on the proposed boundary revision is provided in Section 5.5.2.

5.2 Site image

Image 5 Camel Estuary © Liz Bailey

5.3 Site maps

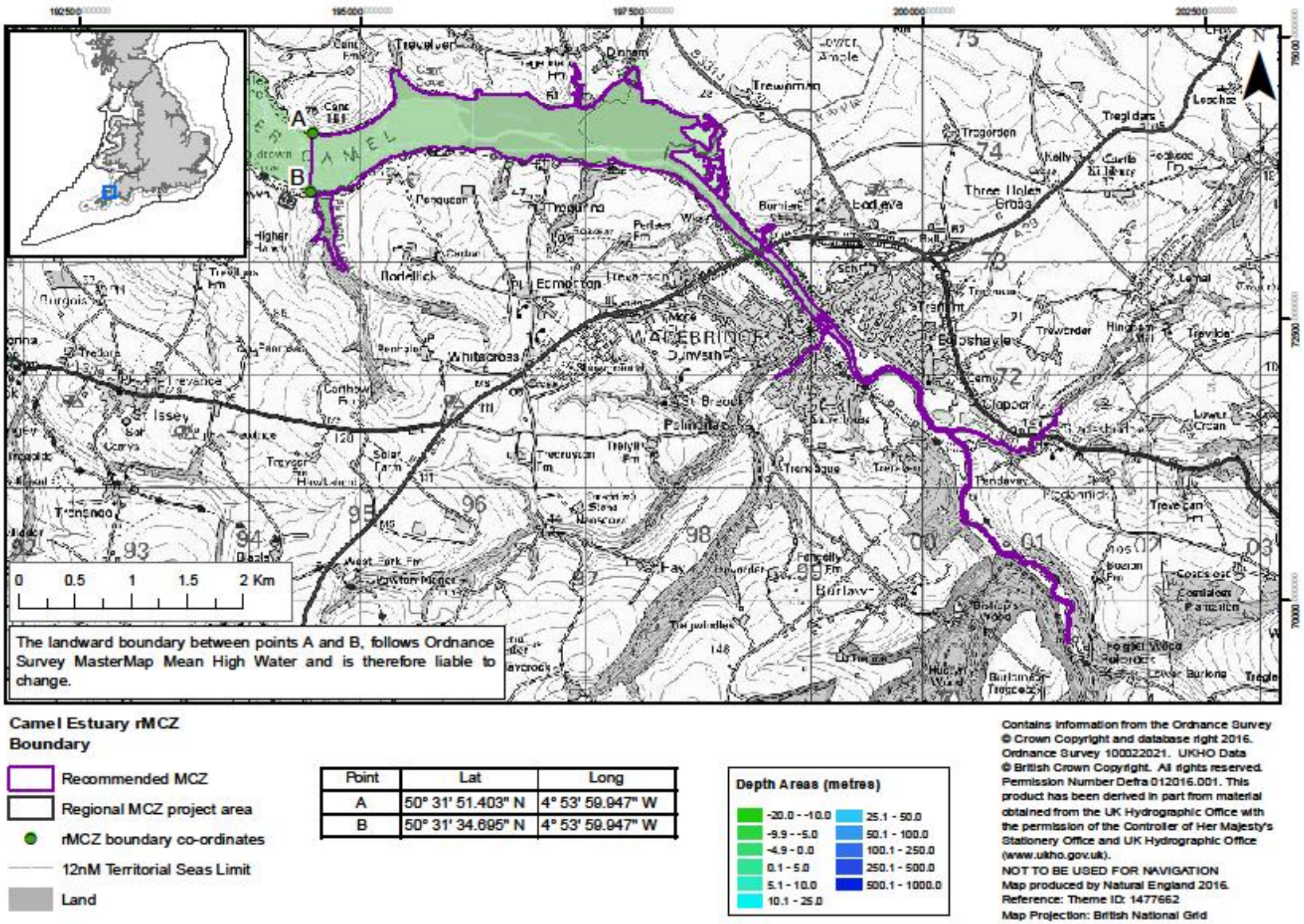


Figure 21 Camel Estuary rMCZ site boundary (original Regional Project recommended boundary)

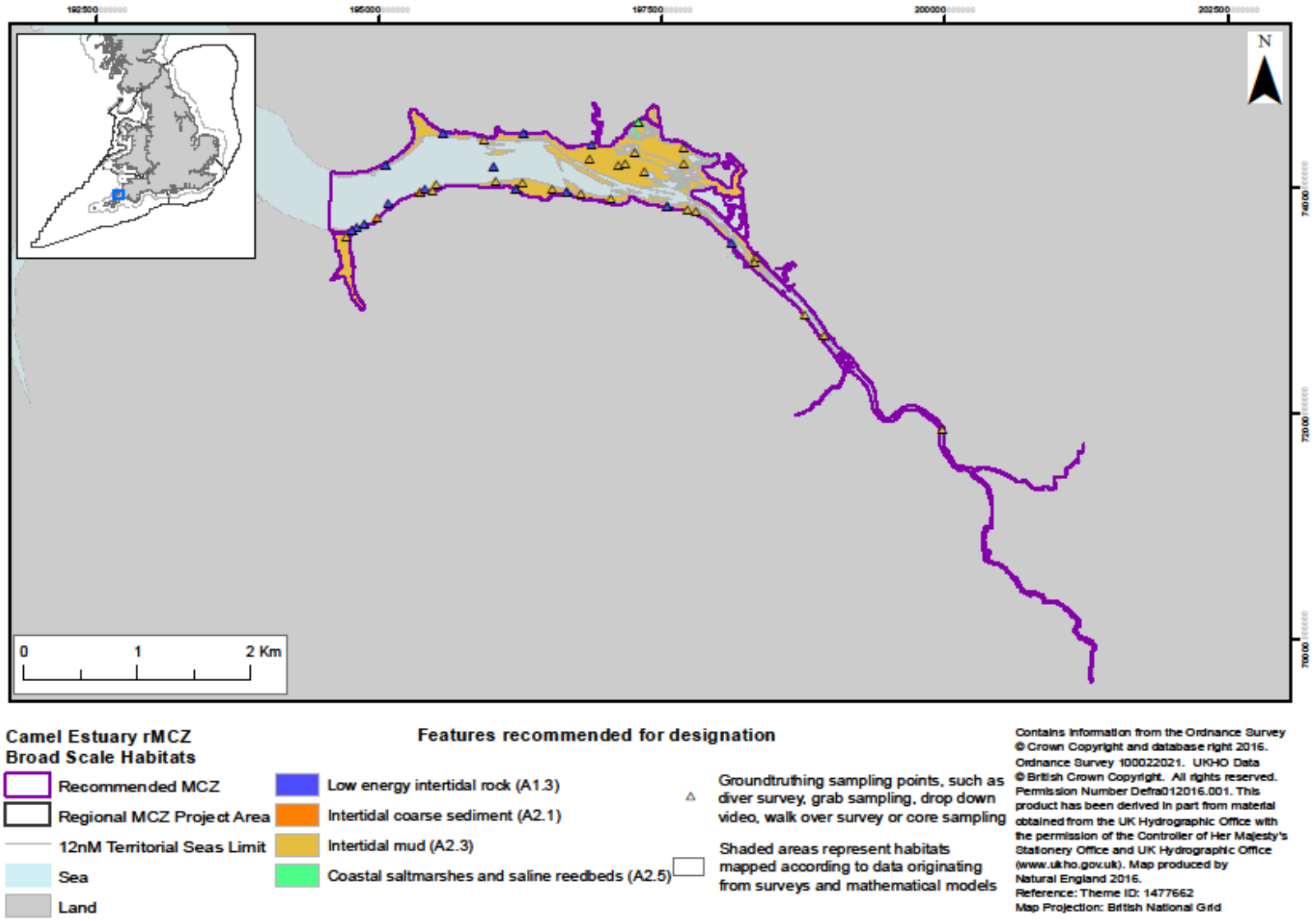


Figure 22 Location of mapped broad-scale habitats in Camel Estuary rMCZ (original Regional Project recommended boundary)

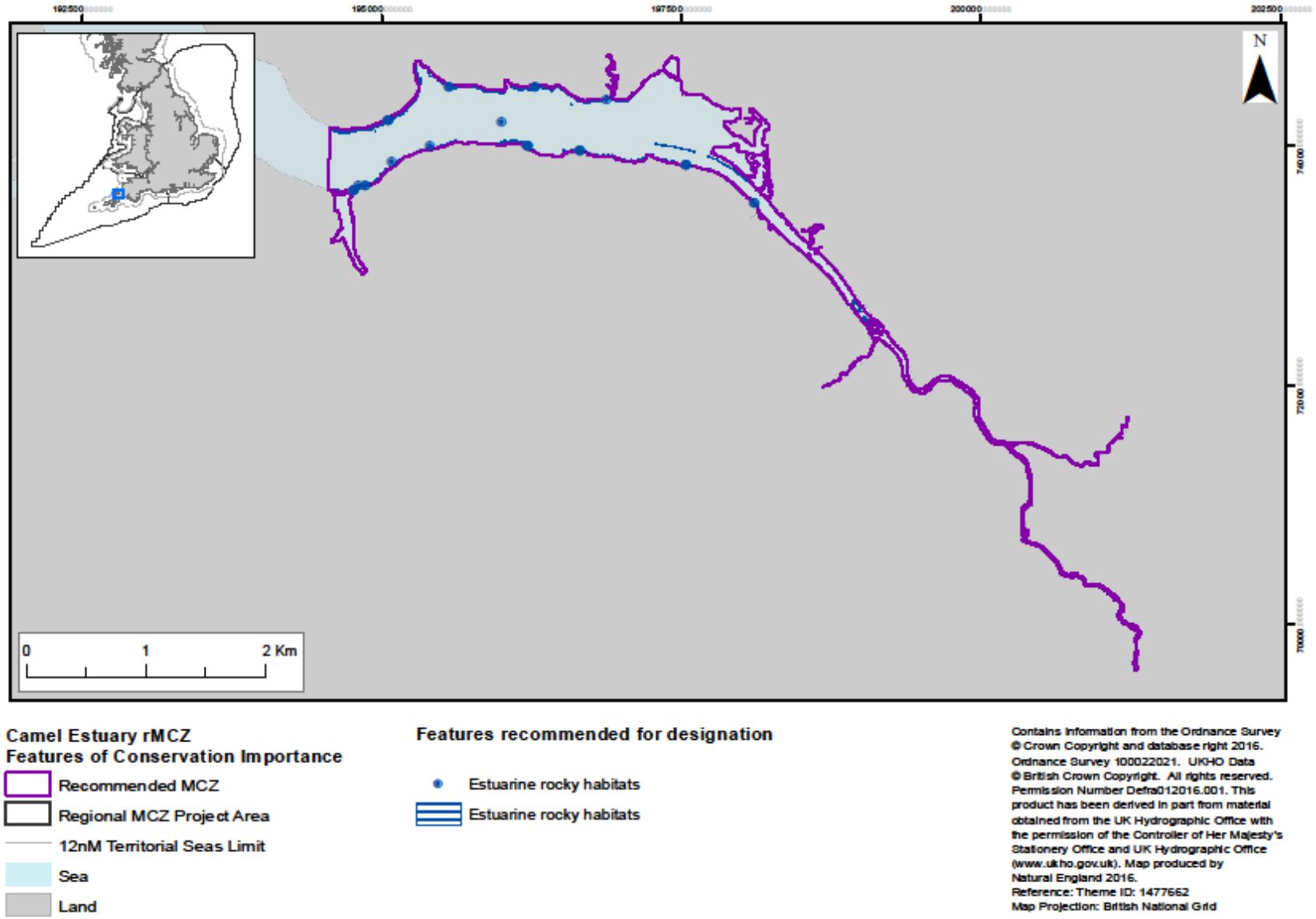


Figure 23 Location of mapped features of conservation importance in Camel Estuary rMCZ (original Regional Project recommended boundary)

5.4 Summary of Natural England's advice

Table 7 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Camel Estuary rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed (since the last advice provided for the feature)
Coastal saltmarshes and saline reedbeds	High	High	Favourable	Maintain	No change
Estuarine rocky habitats	High	High	Favourable	Maintain	No change
Intertidal coarse sediment	Moderate	Moderate	Favourable	Maintain	No change
Intertidal mud	High	High	Favourable	Maintain	No change
Low energy intertidal rock	High	High	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

5.5 Additional advice

5.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

5.5.2 Advice on the site boundary

Natural England has provided advice on a revised boundary for the Camel Estuary rMCZ to include additional areas of coastal saltmarshes and saline reedbeds which are both enclosed within the current boundary outline and immediately adjacent to it, but are not currently considered part of the rMCZ due to their position in relation to mean high water (MHW). The site boundary follows MHW but much of the saltmarsh feature can be found slightly above MHW. Figures 24 and 25 show maps of the original boundary outline and the proposed boundary amendments

5.5.2.1 Rationale for Natural England's advice on this boundary amendment

A large proportion of the 'Coastal saltmarshes and saline reedbeds' feature contained within the current boundary outline has been omitted from the site due to the site's boundary following the MHW mark. Much of this feature is found just above the MHW mark. There are also areas of saltmarsh and reedbed immediately adjacent to the site's boundaries that are a continuation of those habitats within the boundary.

These extend slightly above MHW. This omission is an artefact of the MCZ mapping process, where the landward boundaries of sites were aligned with the MHW mark.

In excluding these areas of saltmarsh and reedbed there are large gaps within the site. The site's boundary would be significantly simpler if these areas were included (see Figures 24 and 25).

By doing so, the site's boundary would ultimately achieve what the site was intended for, i.e. to protect the full extent of saltmarshes and reedbeds. Natural England therefore suggests the boundary be amended to include all saltmarsh and reedbed habitat that is enclosed within the current rMCZ boundary and that which lies immediately adjacent to it.

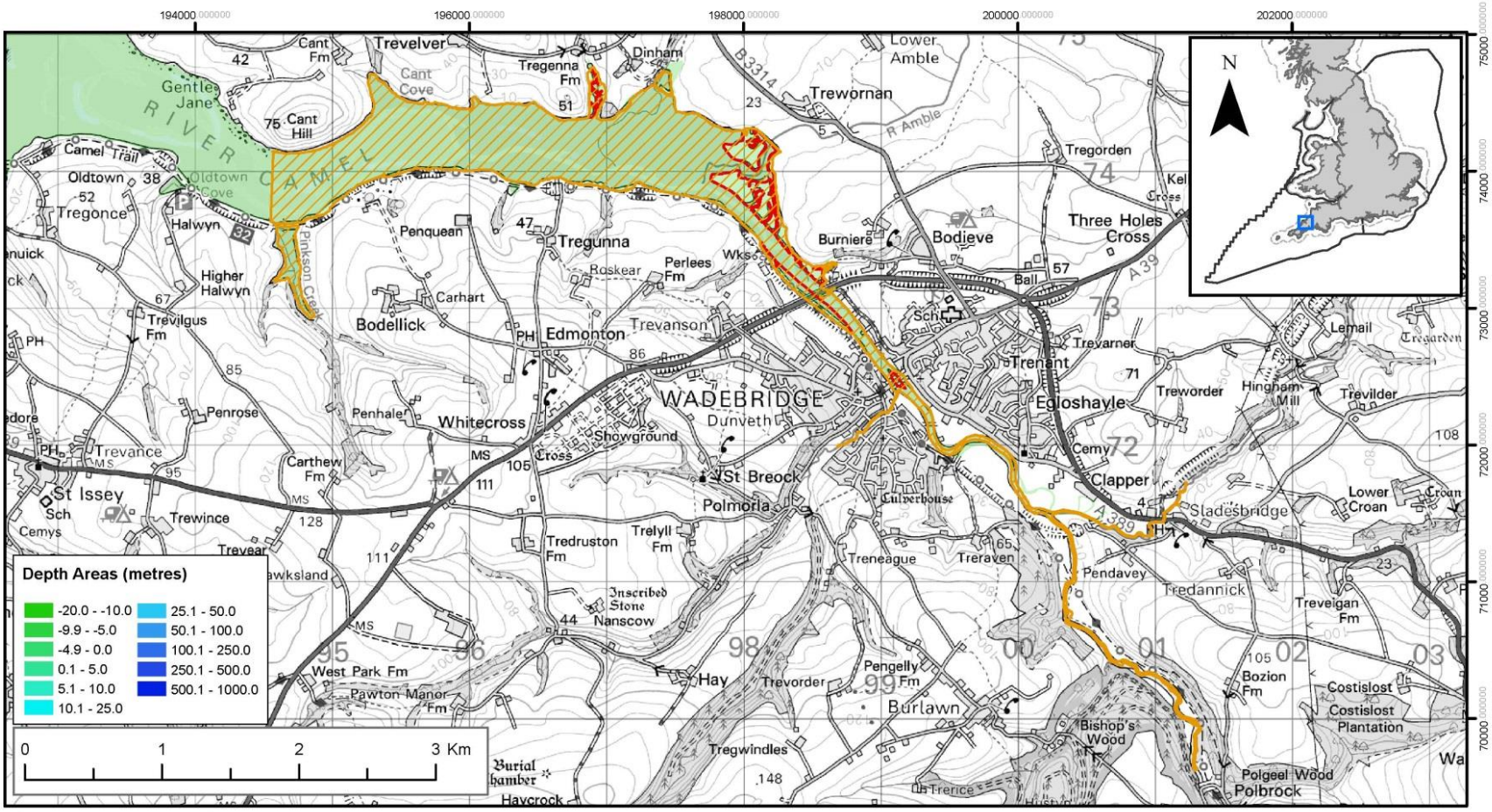


Figure 24 Camel Estuary rMCZ recommended amended boundary shown in orange. Original boundary shown in red. Full site.

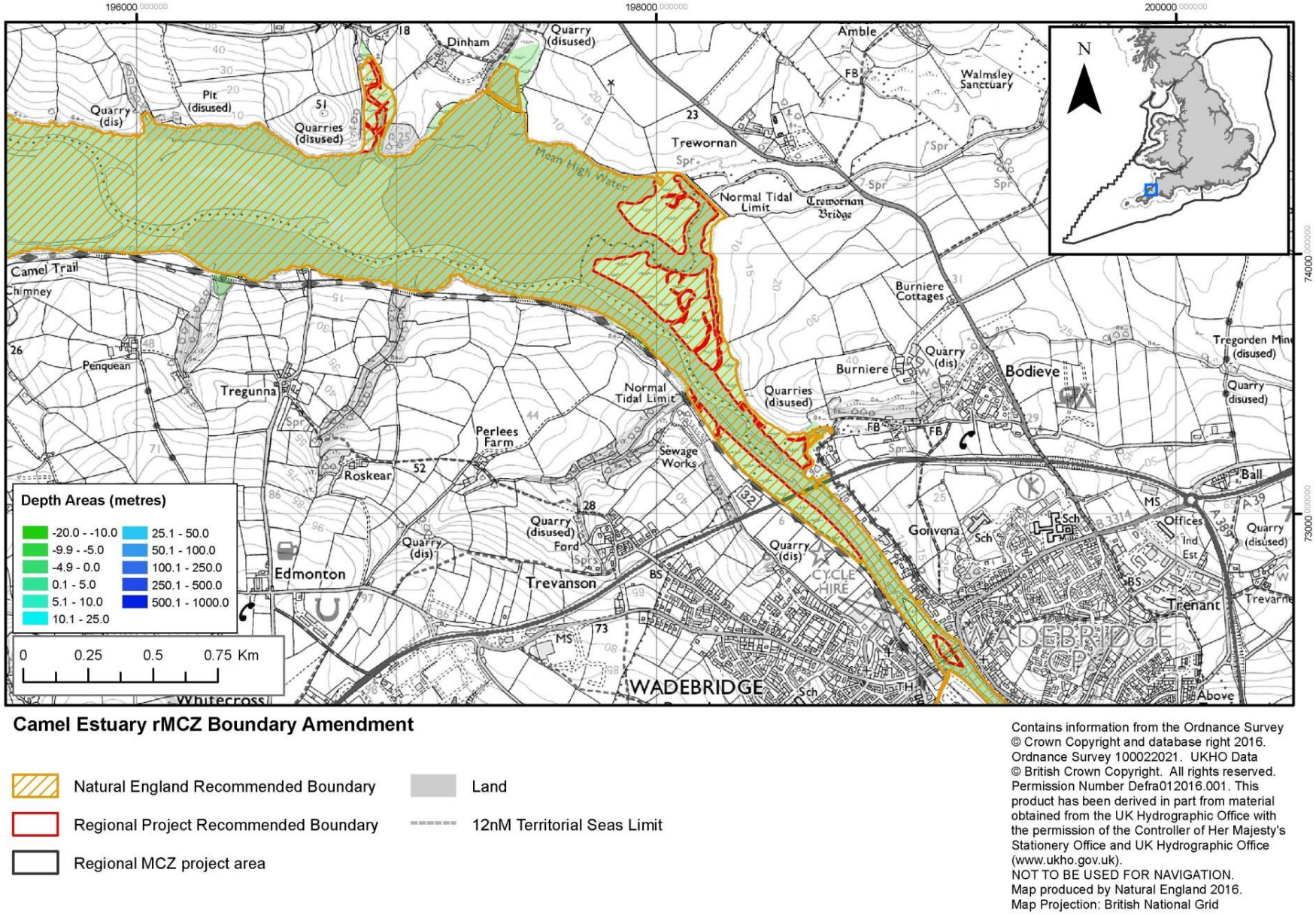


Figure 25 Camel Estuary rMCZ recommended amended boundary shown in orange. Original boundary shown in red

Figure A Saltmarsh habitat (red) not currently included within the rMCZ boundary (purple)

Figure B Aerial image of saltmarsh not currently included within rMCZ boundary

Figure C Saltmarsh area not currently included within rMCZ boundary

There are also four areas of saltmarsh and reedbed immediately adjacent to the site (Figures D-I) and we advise that these also be included within the boundary of the site. Natural England therefore suggests the boundary be amended to include all saltmarsh and reedbed habitat that is enclosed within the current rMCZ boundary (Figures A-C) and that which lies adjacent to it (Figures D – I).

Further advice on the suggested boundary amendment to include *adjacent* saltmarsh and reedbed habitat can be found in **Section 5.5.2.2** of this chapter.

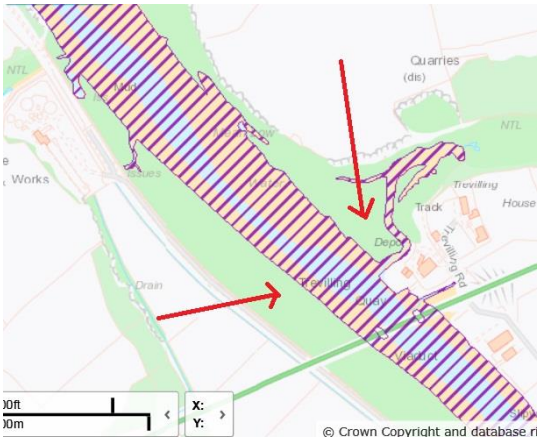


Figure D Saltmarsh areas not currently included within rMCZ boundary (to north and south of A39)

Figure E Aerial image of saltmarsh areas adjacent to rMCZ boundary (to north and south of A39 bridge)

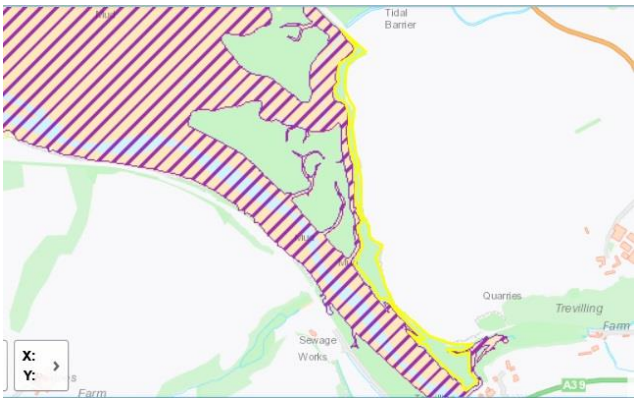


Figure F Saltmarsh area adjacent to rMCZ boundary south of Amble tidal barrier

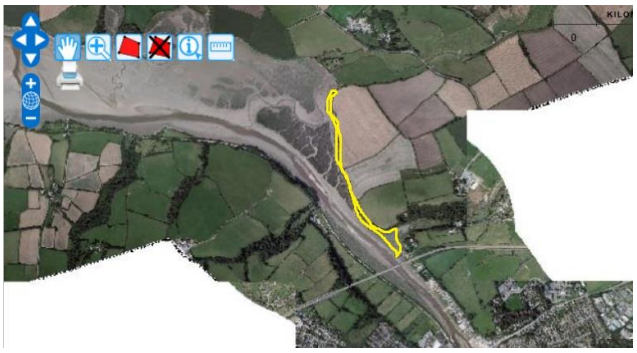


Figure G Aerial image of saltmarsh south of Amble tidal barrier

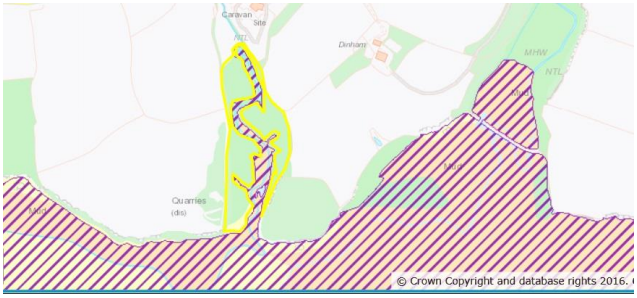


Figure H Saltmarsh area adjacent to rMCZ boundary to the North of the site (near Little Dinham)

Figure I Saltmarsh near Little Dinham (aerial image)

5.5.2.2 Implications for Natural England's Tranche 3 advice on the Camel Estuary rMCZ

This boundary amendment would only affect our advice on the feature 'Coastal saltmarshes and saline reedbeds'. Our pre-consultation confidence in the presence and extent of this feature is 'High-High'. This confidence would be highly unlikely to change if the boundary was amended and our advice resubmitted on this amended boundary, based on expert judgement of our current best available evidence. Similarly, as Natural England is not aware of any differential exposure of the additional saltmarsh to activities occurring in the site, our pre-consultation advice on the GMA (Maintain) for this feature is also unlikely to be subject to further change, based on our best available evidence.

In light of this, Natural England's advice is that the amended boundary be included in any public consultation material and that, if required, further advice is provided on the site with the new boundary as part of our post-consultation Tranche 3 advice.

5.5.2.3 Further information: location of boundary to include areas of saltmarsh and reedbed adjacent to the current MCZ boundary

The EUNIS habitat description for the feature 'coastal saltmarshes and saline reedbeds' states that this habitat occurs 'on the extreme upper shore of sheltered coasts' and that it is 'periodically covered by high tides' (see http://eunis.eea.europa.eu/habitats/20).

The Ecological Network Guidance[11] provides guidelines on MCZ boundaries and includes the following guidance that relates to this feature:

> Boundaries should incorporate a margin (where appropriate) to ensure protection of features. Where a feature is present in a number of separate but nearby locations, effort should be made to include all discrete occurrences within site boundaries.

[11] Natural England and JNCC (2010). *Marine Conservation Zone Project - Ecological Network Guidance*. Available at: http://jncc.defra.gov.uk/pdf/100705_ENG_v10.pdf

> For spatially dynamic habitats, boundaries should, where possible, encompass predicted changes in feature distribution to ensure ongoing protection within MCZs.

The guidance also states that 'MCZ boundaries can be delineated from the Mean High Water Spring (MHWS) tidemark out to the limits of the UK Marine Area' and that in some circumstances MCZs may extend landwards of MHWS, for example to:

> *include a whole intertidal biological community, including the splash zone*
> *Incorporate features that are dynamic or ephemeral*

There are raised banks that run alongside the Camel Estuary (i.e. the 'Camel Trail' cycle route on the western shore and the footpath and hedge along the eastern shore) that form a permanent restriction to further expansion of the saltmarsh and reedbed feature. Although this feature does currently extend up to these banks (Figure J) it is contained seawards of the MHWS tidemark (Figure K) and therefore adding a margin for any future change would not be necessary. Natural England advises that the boundary should be amended to follow the edge of the wall and raised bank (MHWS) in areas where saltmarshes and reedbeds extend above the current boundary.

Figure J Saltmarshes and reedbeds on west side of the Camel Estuary rMCZ near A39 bridge (see Figures D-E) at high water, adjacent to the Camel Trail wall and raised bank.

Figure K Admiralty chart showing area below MHWS (green)

6 Cape Bank rMCZ (FS 36)

6.1 Site description

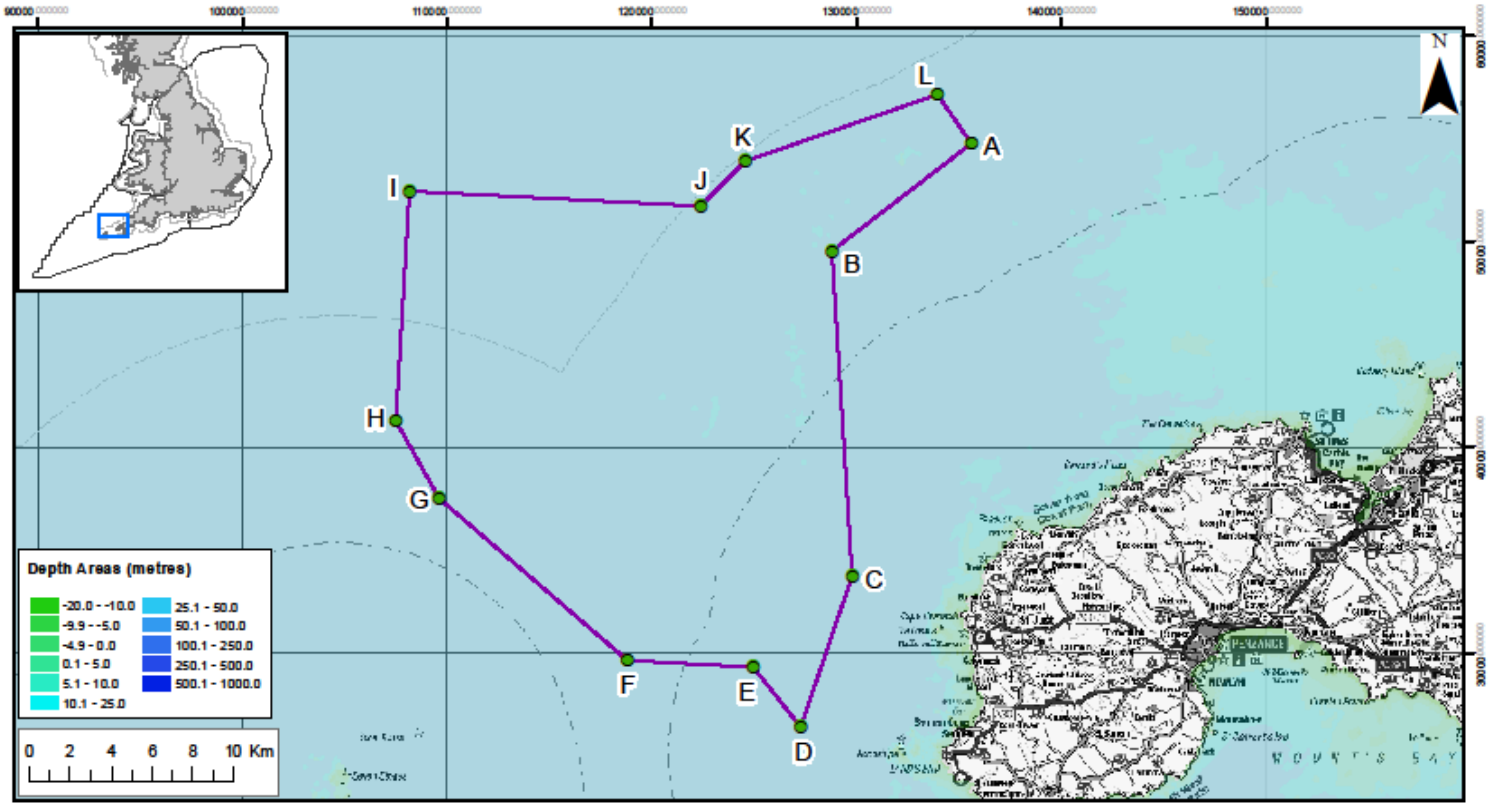
The Cape Bank site lies to the west of the Land's End peninsula and extends to almost 25 kilometres from the coast. The reefs are fully submarine, upstanding features which are almost entirely composed of granite. The site has an offshore upstanding reef which extends in a broad, arching crescent roughly aligned with the coastline. The crescent shaped system of offshore upstanding rocky reefs forms the major feature of conservation interest at the site. The site occupies a depth range of 30 – 75 metres.

The reef is characterised by high biodiversity tide-swept communities such as sponges, faunal and algal turfs and crustose communities. The rMCZ encompasses Cape Bank itself, as well as an area of subtidal coarse sediment to the west of it.

6.2 Site image

Image 6 Cape Bank circalittoral reef © Natural England

6.3 Site maps



Point	Lat	Long	Point	Lat	Long
A	50° 19' 59.975" N	5° 42' 59.962" W	G	50° 9' 59.100" N	6° 4' 2.400" W
B	50° 16' 59.976" N	5° 48' 29.960" W	H	50° 11' 57.300" N	6° 5' 59.760" W
C	50° 8' 29.978" N	5° 46' 59.961" W	I	50° 18' 0.000" N	6° 6' 0.000" W
D	50° 4' 29.977" N	5° 48' 44.962" W	J	50° 18' 0.000" N	5° 53' 58.020" W
E	50° 5' 59.572" N	5° 50' 49.410" W	K	50° 19' 14.976" N	5° 52' 14.960" W
F	50° 5' 59.760" N	5° 55' 58.800" W	L	50° 21' 14.978" N	5° 44' 29.962" W

Figure 26 Cape Bank rMCZ site boundary

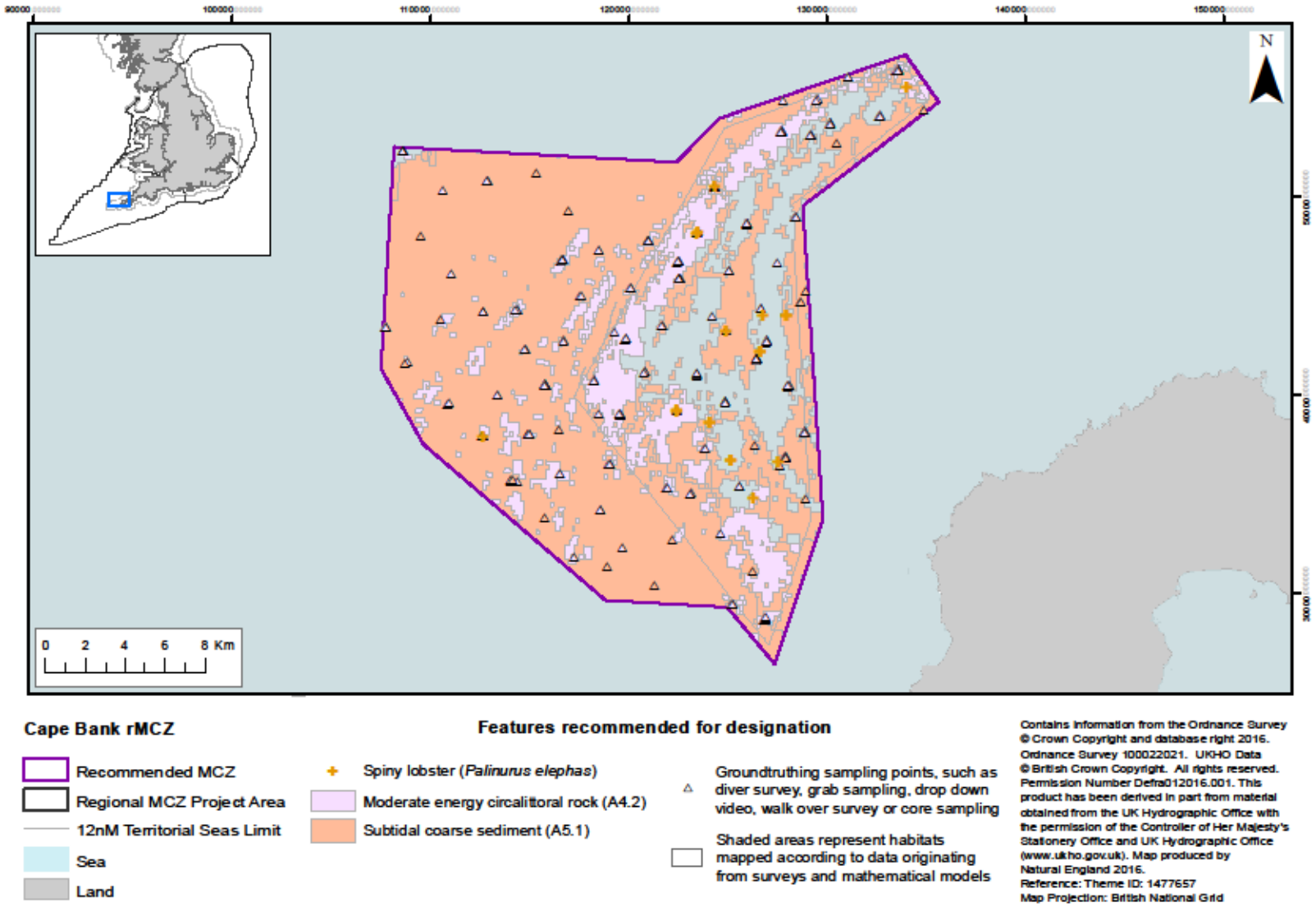


Figure 27 Location of mapped broad-scale habitats and features of conservation importance in Cape Bank rMCZ

6.4 Summary of Natural England's advice

Table 8 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Cape Bank rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	No change
Spiny lobster (*Palinurus elephas*)	High	High	Unfavourable	Recover	No change
Subtidal coarse sediment	High	High	Unfavourable	Recover	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

6.5 Additional advice

6.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

6.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

7 Dart Estuary rMCZ (FS 23)

7.1 Site description

The Dart Estuary is a ria on the south coast of Devon, with steep rocky shores near the mouth of the estuary and stretches of meandering mudflats further upstream. The rMCZ boundary encompasses the mid to upper estuary, stretching from Dittisham to Littlehempston. The upper estuary is surrounded mainly by farmland, with small patches of woodland. The intertidal and subtidal habitats in the middle and upper estuary are predominantly mud, with occasional rock outcrops (Lieberknecht *et al.* 2011). Intertidal mud is an important habitat that provides food for wading birds. This site has the second largest quantity of Intertidal mud habitat in the region (Wildlife Trusts 2016). The site supports a variety of other important habitats and species such as, Coastal saltmarsh and saline reedbeds in the upper estuary that offer shelter to birds and juvenile fish and the rare tentacled lagoon-worm *Alkmaria romijini* is present in the sediment of brackish waters of the estuary.

The importance of this site is recognition of the added ecological importance of estuaries in terms of productivity, and their ecological function as nursery areas.

7.2 Site image

Image 7 Dart Estuary low energy intertidal rock. Ecospan verification survey October 2013 © Natural England

7.3 Site maps

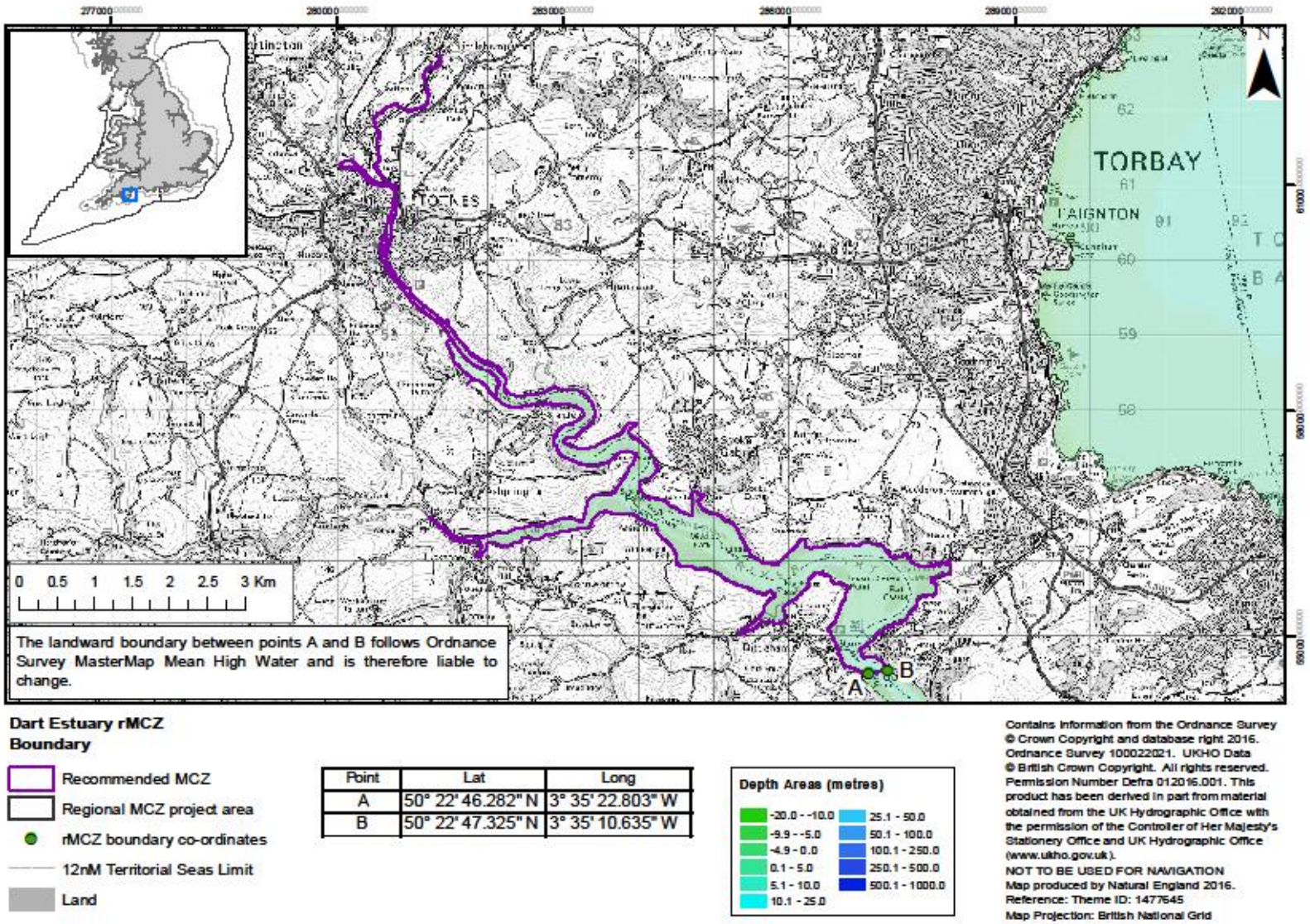


Figure 28 Dart Estuary rMCZ site boundary

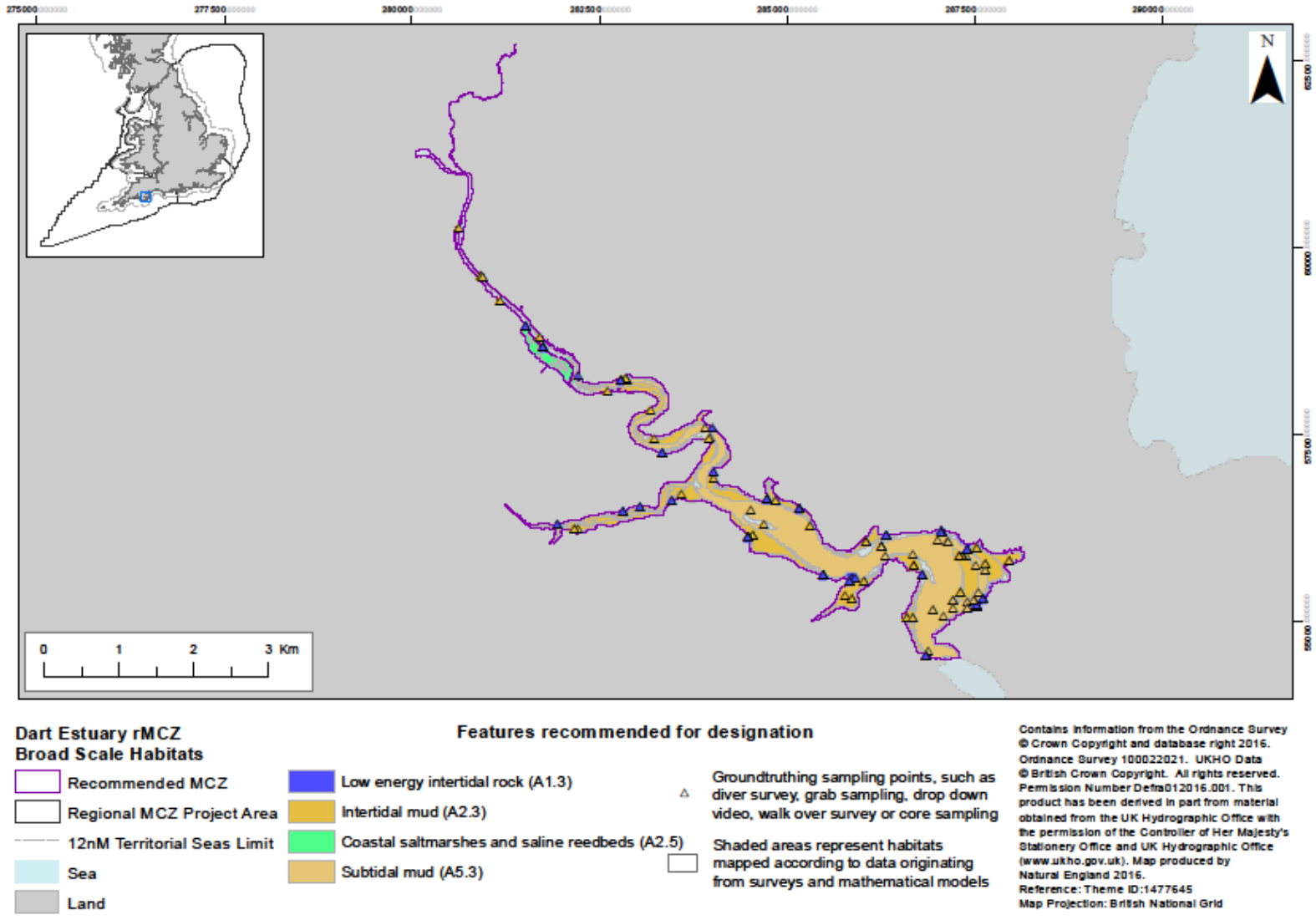


Figure 29 Location of mapped broad-scale habitats in Dart Estuary rMCZ

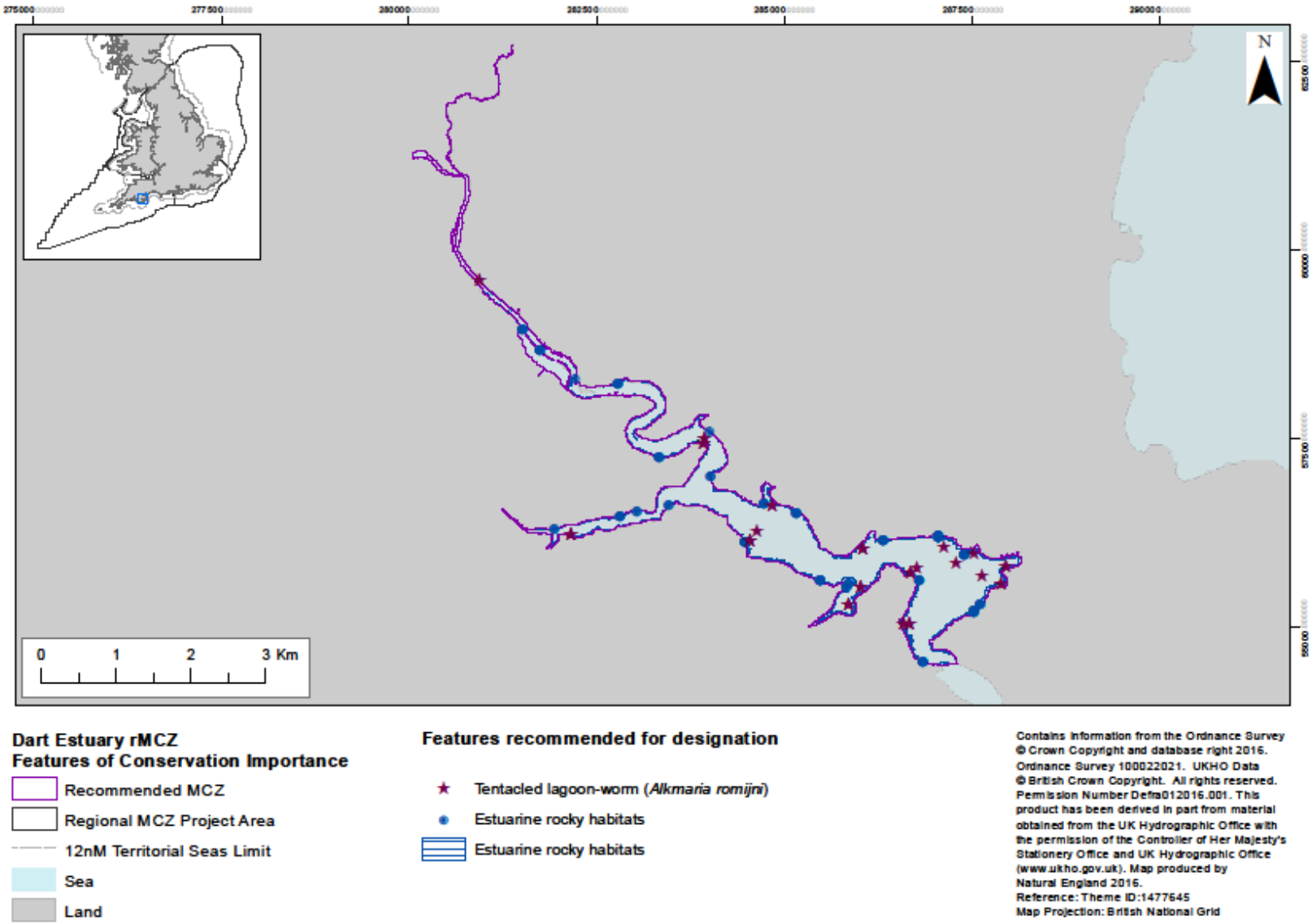


Figure 30 Location of mapped features of conservation importance in Dart Estuary rMCZ

7.4 Summary of Natural England's advice

Table 9 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Dart Estuary rMCZ.

Feature name	Confidence in feature Presence	Confidence if feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Coastal saltmarshes and saline reedbeds	High	High	Favourable	Maintain	No change
Estuarine rocky habitats	High	High	Unfavourable	Recover	Recover GMA triggered due to moderate/high vulnerability to shellfish aquaculture: trestle culture. Pacific Oysters (*Crassostrea gigas*) are grown on the foreshore and the riverbed within the MCZ boundary. Estuarine rocky habitats comprise a large area of the foreshore habitat and the pacific oyster farming operation provides a significant pathway for the introduction of one or more invasive non-indigenous species. Following a site visit in October 2016, areas of the estuarine rocky habitat had pacific oysters present.
Intertidal mud	High	High	Unfavourable	Recover	The latest Infaunal Quality Index (IQI) data for this feature have a classification of 'moderate' under the Water Framework Directive (WFD), therefore direct condition evidence indicates that the feature is not in "good" ecological condition. The low IQI score cannot currently be attributed to a single activity and is likely to be the result of multiple activities occurring within or adjacent to the site. Based on the current condition evidence a revised GMA of Recover is advised for this feature.
Intertidal under boulder communities	Low	Low	Favourable	Maintain	No change
Low energy intertidal rock	High	High	Unfavourable	Recover	Recover GMA triggered due to moderate/high vulnerability to shellfish aquaculture: trestle culture. Pacific Oysters (*Crassostrea gigas*) are grown on the foreshore and the riverbed within the MCZ boundary. Low energy intertidal rock comprise a large area of the foreshore habitat and the pacific oyster farming operation provides a significant pathway for the introduction of one or more invasive non-indigenous species. Following a site visit in October 2016, areas of the low energy intertidal rock habitat had pacific

Feature name	Confidence in feature Presence	Confidence if feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					oysters present.
Subtidal mud	High	High	Favourable	Maintain	No change
Tentacled lagoon-worm (*Alkmaria romijni*)	High	High	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

7.5 Additional advice

7.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

7.5.2 Advice on the site boundary

The original (Regional Project recommended) site boundary was amended to simplify the boundary along the edge of the river corridor, and include small areas of saltmarsh that extend from the intertidal above mean high water. These amendments were agreed with Defra and implemented and the advice provided for the Dart Estuary is based on this amended boundary.

8 Devon Avon Estuary rMCZ (FS 25)

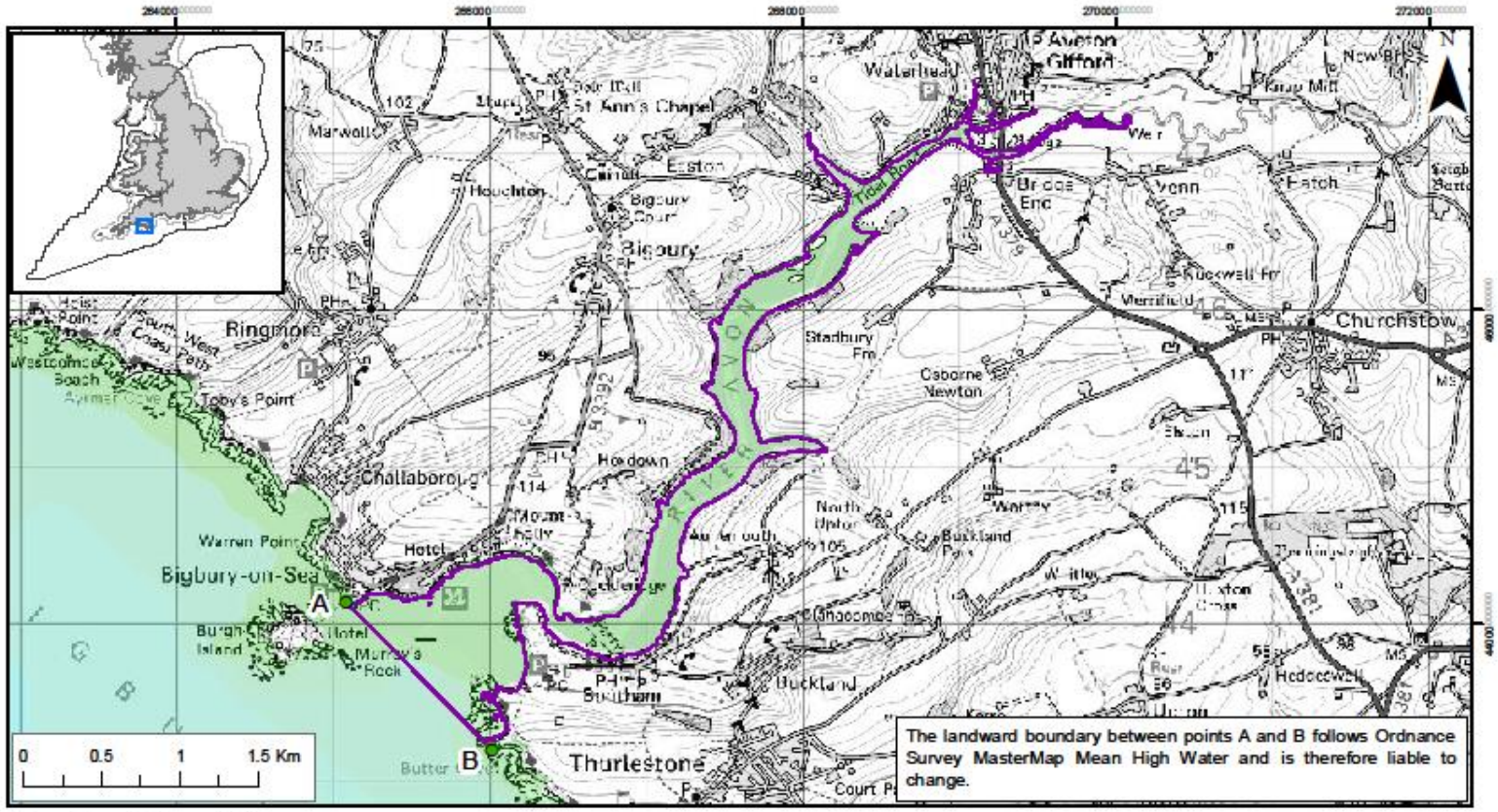
8.1 Site description

The Devon Avon Estuary is a small ria-type (drowned valley) estuary in South Devon which is predominantly sandy in its lower reaches. The estuary is a narrow sheltered inlet with steep-sided margins cut into relatively weak Devonian slates and grits (Masselink *et al.* 2009), and the channels are narrow and shallow at low water as the estuary has been in-filled by an accumulation of sediment (Davies 1998). The main river channel meanders for 7 kilometres from Aveton Gifford to the sands at the mouth of the estuary at Bigbury-on-Sea and Bantham. Five main depositional environments are found in the estuary: beach and dune deposits at Bantham Ham and Cockleridge, an extensive ebb-tidal delta forming part of the tombolo behind Burgh Island, a flood tidal delta with several intertidal shoals in the outer estuary, a main tidal channel that meanders along the entire estuary with a tidal weir at Aveton Gifford and salt marshes in the upper estuary. The tentacled lagoon-worm *Alkmaria romijni* can be found in the brackish waters of the estuary living in sediment along the fringes of the channels. Semi-exposed rock platforms with rich rockpool, underboulder and overhang communities are found on the lower shore at the mouth of the estuary (Lieberknecht *et al.* 2011).

8.2 Site image

Image 8 Devon Avon Estuary rMCZ intertidal sand and muddy sand © Christine Singfield, Natural England

8.3 Site maps



Devon Avon Estuary rMCZ Boundary

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

Point	Lat	Long
A	50° 16' 54.410" N	3° 53' 42.226" W
B	50° 16' 24.493" N	3° 52' 53.862" W

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	

Map produced by Natural England 2016.
Reference: Theme ID: 1477647
Map Projection: British National Grid

Figure 31 Devon Avon Estuary rMCZ site boundary

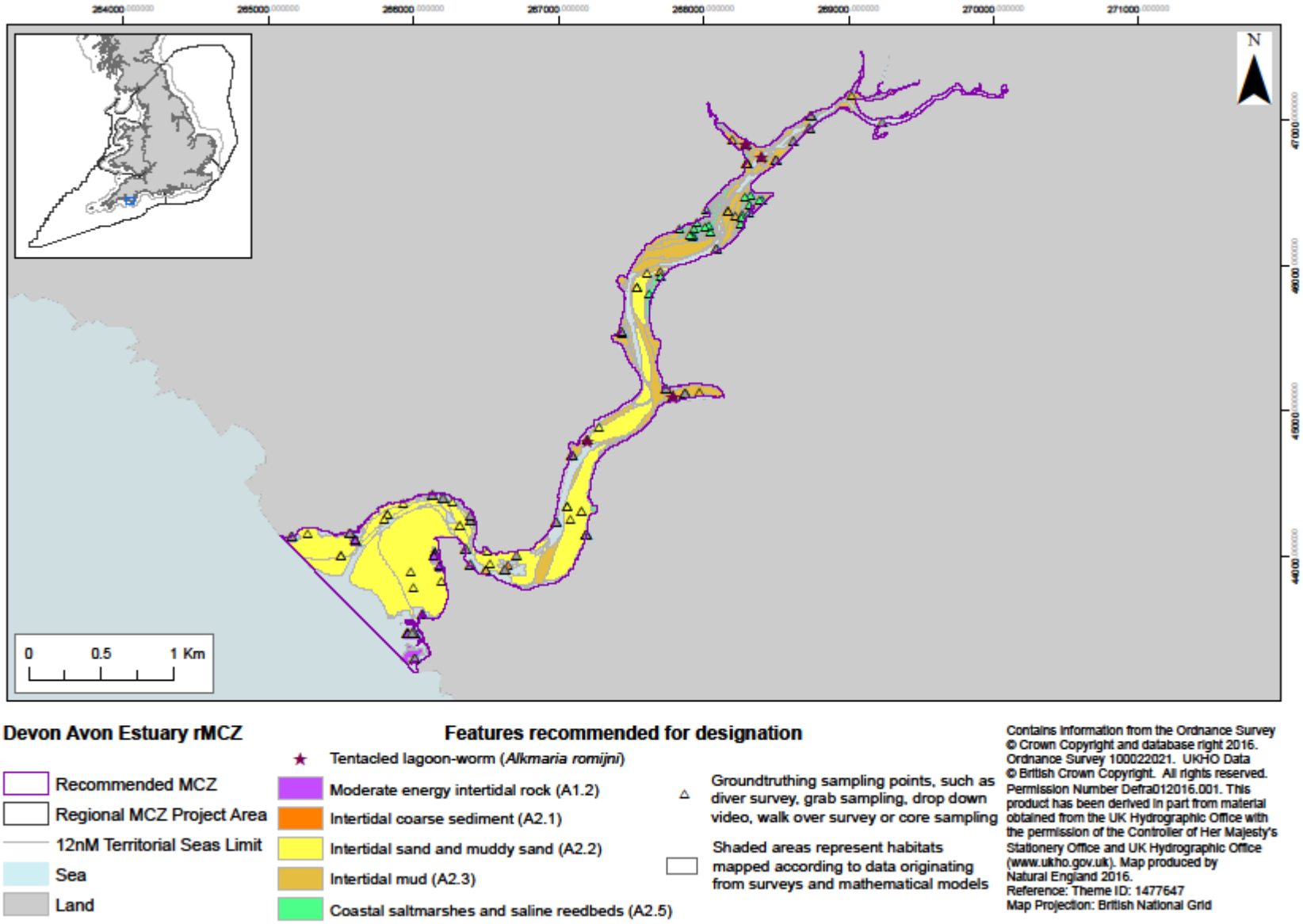


Figure 32 Location of mapped broad-scale habitats and features of conservation importance in Devon Avon Estuary rMCZ

8.4 Summary of Natural England's advice

Table 10 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Devon Avon Estuary rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Coastal saltmarshes and saline reedbeds	High	High	Favourable	Maintain	No change
High energy infralittoral rock	Low	Low	Favourable	Maintain	No change
Intertidal coarse sediment	Low	Low	Favourable	Maintain	No change
Intertidal mud	High	High	Favourable	Maintain	No change
Intertidal sand and muddy sand	High	High	Favourable	Maintain	No change
Moderate energy intertidal rock	High	High	Favourable	Maintain	No change
Subtidal mud	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Subtidal sand	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Tentacled lagoon-worm (*Alkmaria romijni*)	High	High	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

8.5 Additional advice

8.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

8.5.2 Advice on the site boundary

The original (Regional Project recommended) boundary was amended to simplify the boundary along the edge of the river corridor, and include small areas of saltmarsh that extend from the intertidal above mean high water. This boundary amendment was agreed with Defra and implemented and the advice provided for the Devon Avon Estuary is based on this amended boundary.

9 Erme Estuary rMCZ (FS 26)

9.1 Site description

The Erme is a narrow, sheltered estuary approximately 6.5 kilometres long on the south coast of Devon (Lieberknecht *et al.* 2011). The Erme estuary and its steep wooded banks is a notified Site of Special Scientific Interest (SSSI). The rMCZ sits wholly within the SSSI boundary and encompasses the estuary up to the mean high water mark (mapped using OS Boundary Line mean high water), as far as the weir just south of Sequer's Bridge (where the A379 crosses the river). The seaward boundary of the rMCZ has been drawn at the estuary mouth, from a point at Battisborough Island to Fernycombe Point. Intertidal rock can be found at the mouth of the estuary where large expanses of intertidal sediments are revealed at low tide at Mothecombe and Wonwell beach. Further up the estuary the sediment is predominantly muddy with areas of gravel. Tentacled lagoon-worm *Alkmaria romijni* can be found in sediment in the brackish waters of the estuary.

9.2 Site image

Image 9 Erme Estuary. Ecospan verification survey October 2013 © Natural England

9.3 Site maps

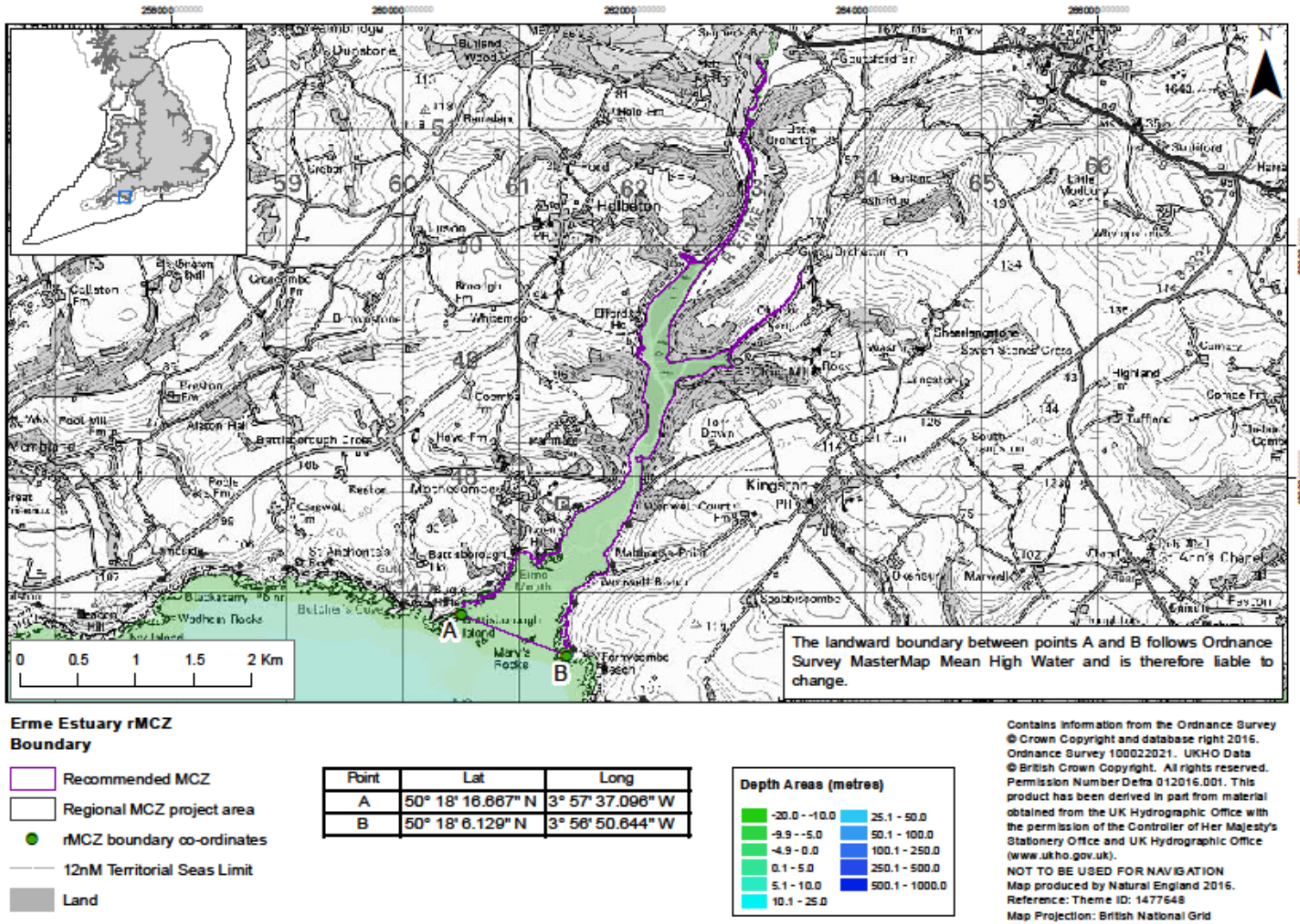


Figure 33 Erme Estuary rMCZ site boundary

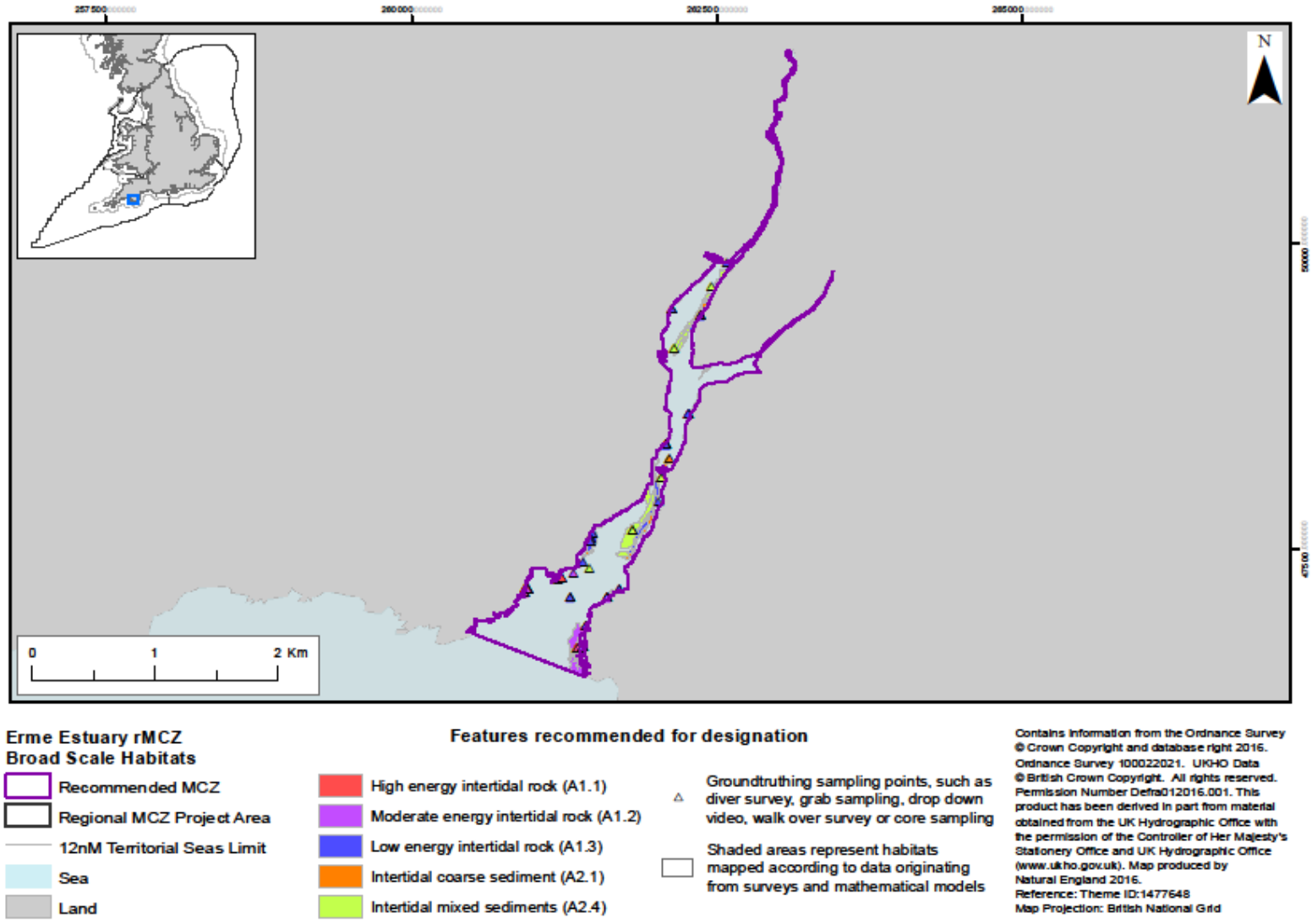


Figure 34 Location of mapped broad-scale habitats in Erme Estuary rMCZ

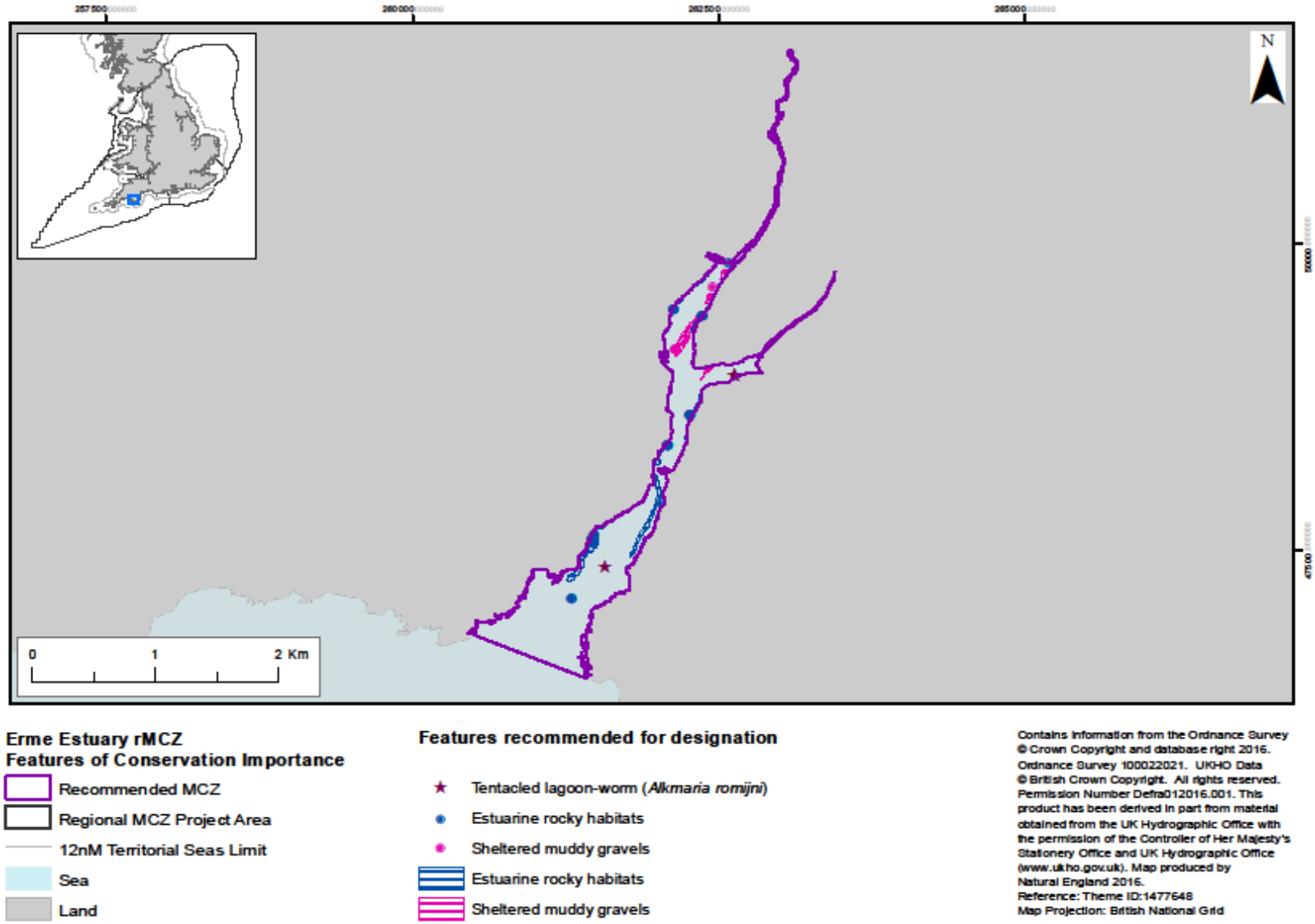


Figure 35 Location of mapped features of conservation importance in Erme Estuary rMCZ

9.4 Summary of Natural England's advice

Table 11 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Erme Estuary rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Estuarine rocky habitats	High	High	Favourable	Maintain	No change
High energy infralittoral rock	Low	Low	Favourable	Maintain	No change
High energy intertidal rock	High	High	Favourable	Maintain	No change
Intertidal coarse sediment	High	High	Unfavourable	Recover	The latest Infaunal Quality Index (IQI) data for this feature have a classification of 'poor' under Water Framework Directive (WFD), therefore direct condition evidence indicates that the feature is not in "good" ecological condition. The low IQI score cannot currently be attributed to a single activity and is likely to be the result of multiple activities occurring within or adjacent to the site. Based on the current condition evidence a revised GMA of Recover is advised for this feature.
Intertidal mixed sediments	High	High	Favourable	Maintain	No change
Low energy infralittoral rock	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Low energy intertidal rock	High	High	Favourable	Maintain	No change
Moderate energy infralittoral rock	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Moderate energy intertidal rock	High	Moderate	Favourable	Maintain	No change
Sheltered muddy gravels	High	High	Favourable	Maintain	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Subtidal mud	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Subtidal sand	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Tentacled lagoon-worm (*Alkmaria romijni*)	Moderate	Moderate	Favourable	Maintain	New feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

9.5 Additional advice

9.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

9.5.2 Advice on boundaries

No additional advice given to Defra on boundaries for this site.

10 Goodwin sands rMCZ (BS 08)

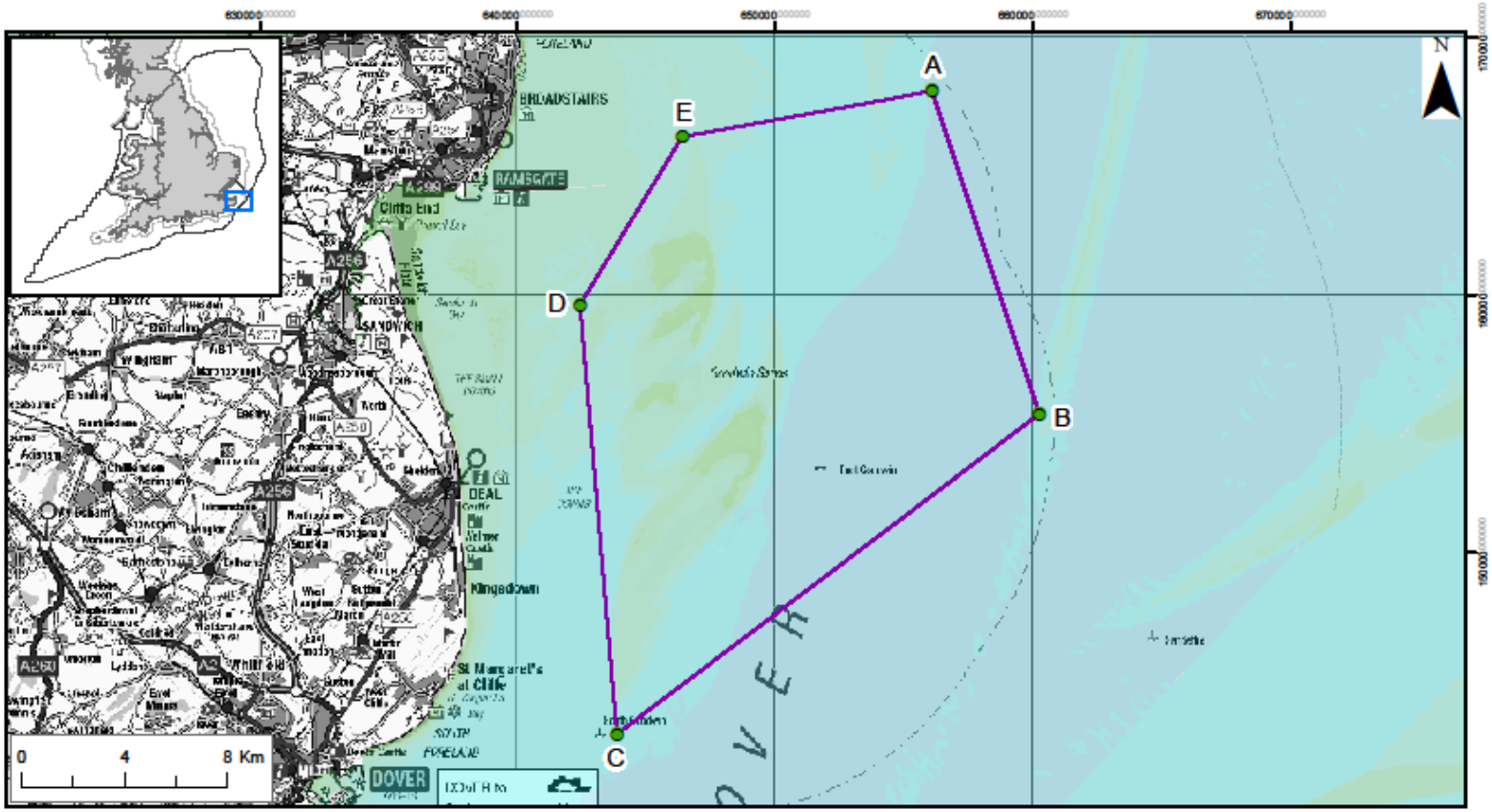
10.1 Site description

The main feature of this site is the Goodwin Sands, a dynamic area of sand and sediments that are constantly changing, with some areas regularly exposed at low tide, providing an important haul out site for the common and grey seal and good foraging grounds for certain bird species. The site also includes deeper areas of subtidal coarse sediment that are known to be of particularly high biodiversity. Other features that Natural England have provided advice on at this site are moderate energy circalittoral rock, ross worm (*Sabellaria spinulosa*) reefs, subtidal blue mussel (*Mytilus edulis*) beds and the geological feature English Channel outburst flood features. The site straddles the six nautical mile boundary line.

10.2 Site image

Image 10 Subtidal coarse sediment © JNCC (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

10.3 Site maps



Point	Lat	Long
A	51° 21' 8.804" N	1° 40' 37.504" E
B	51° 14' 17.689" N	1° 43' 39.935" E
C	51° 8' 0.646" N	1° 29' 4.454" E
D	51° 17' 3.014" N	1° 28' 31.196" E
E	51° 20' 27.260" N	1° 32' 13.339" E

Figure 36 Goodwin Sands rMCZ site boundary
Produced by Natural England

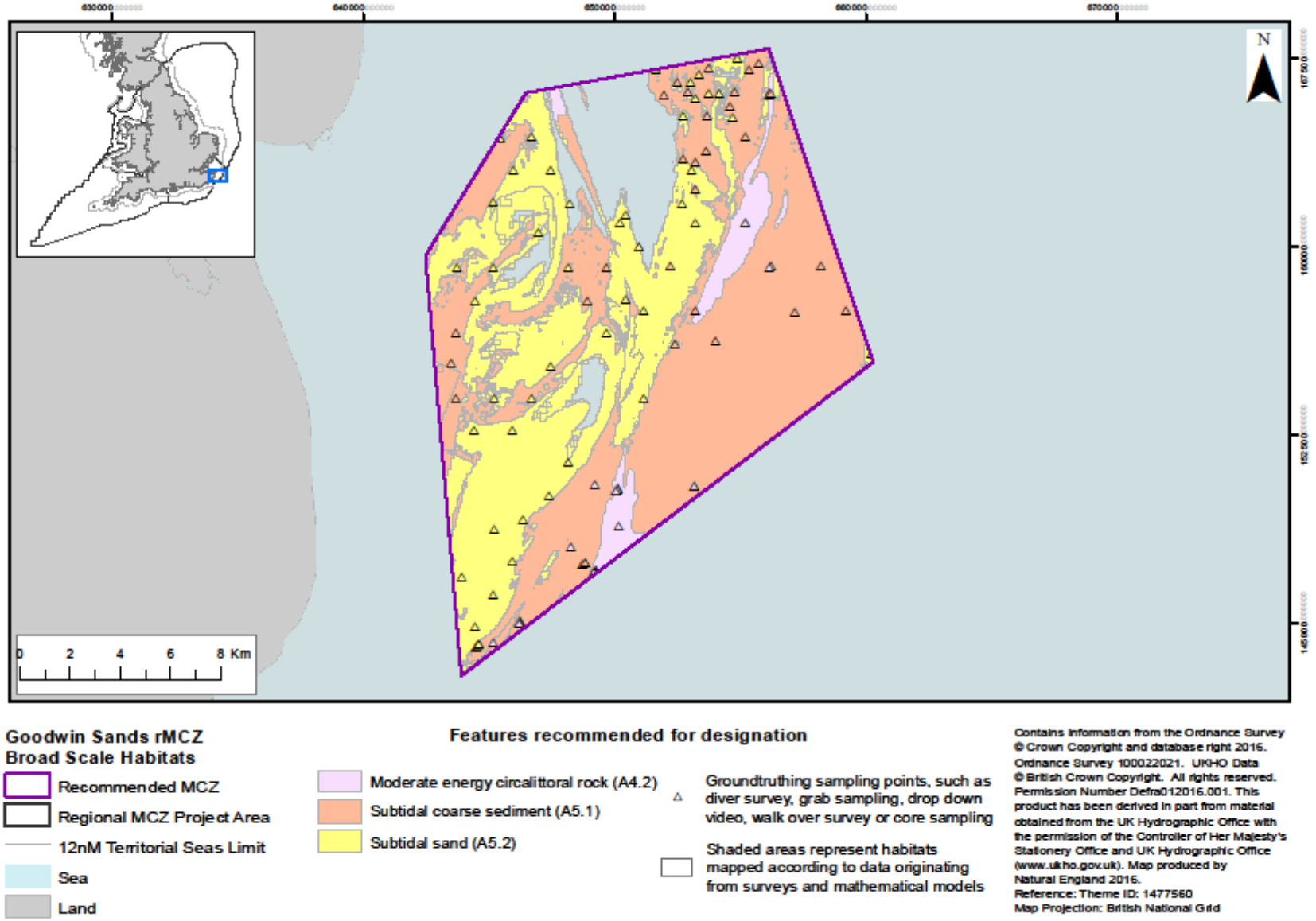


Figure 37 Location of mapped broad-scale habitats in Goodwin Sands rMCZ
Produced by Natural England

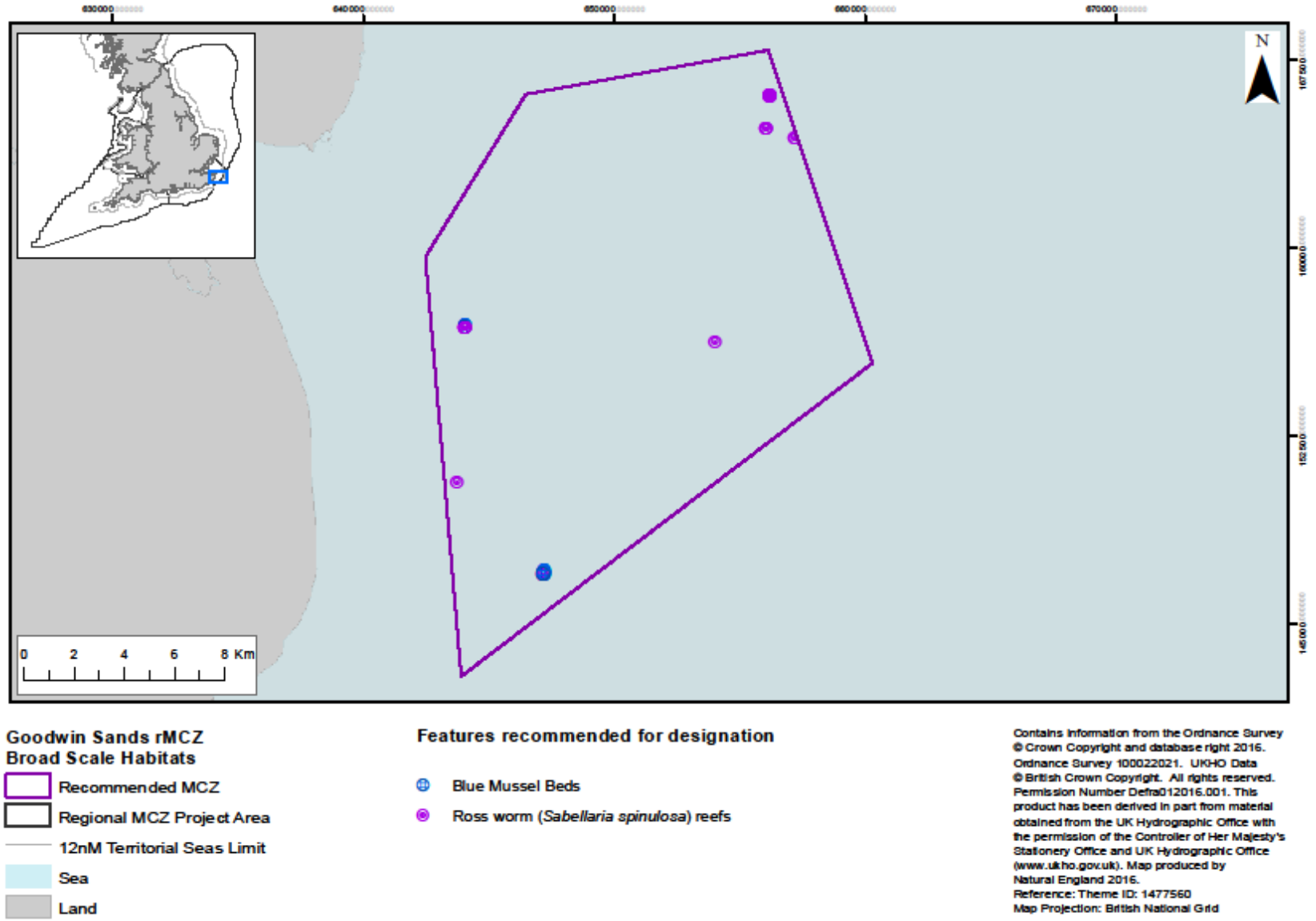


Figure 38 Location of mapped features of conservation importance in Goodwin Sands rMCZ

10.4 Summary of Natural England's advice

Table 12 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Goodwin Sands rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Blue Mussel Beds	High	Moderate	Favourable	Maintain	No change
English Channel outburst flood features	High	High	Favourable	Maintain	No change
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	The feature is exposed to low level demersal fishing activities (seines, trawling, dredges, hydraulic dredges and, if it occurs, electrofishing). These activities exert pressures which the feature is highly sensitive to. The feature therefore has an advised recover GMA.
Moderate energy infralittoral rock	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Ross worm reefs (*Sabellaria spinulosa*)	High	Moderate	Unfavourable	Recover	The feature is exposed to low level demersal fishing activities (trawling, dredges, hydraulic dredges and, if it occurs, electrofishing). These activities exert pressures which the feature is highly sensitive to. The feature therefore has an advised recover GMA.
Subtidal coarse sediment	High	High	Favourable	Maintain	No change
Subtidal sand	High	High	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

10.5 Additional advice

10.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

10.5.2 Advice the site boundary

No additional advice given to Defra on boundaries for this site.

11 Hythe Bay rMCZ (BS 26)

11.1 Site description

The site lies approximately 3.3 kilometres offshore in the western part of Hythe Bay, overlapping the south eastern part of the Hythe Bay Danger Area and covers an area of approximately 44.1 km^2. Within the site, a megafaunal-rich subtidal mud community is present in the soft sediment, which is presumed to be continuous across Hythe Bay, extrapolating the data from 20 point samples taken annually over 10 years around the Hythe long sea outfall. Importantly, this biotope is somewhat richer here than in the national biotope description, as the samples contain the Spoonworm (*Maxmuelleria lankesteri*), a dominance of Ampelisca (*tenucornis/brevicornis*) in places, the burrowing anemone (*Cerianthus lloydii*) and large burrowing shrimps *Callianassa* species and *Upogebia* species which have extensive and deep burrow networks. The Hythe version of this biotope also stands out from any other in the country in the high abundance of the burrowing mollusc *Saxicavella jeffreysi,* found in densities of almost 1000 individuals per square metre. Many other species of mollusc are present within these samples and high densities of some usual groups were also recorded, including *Phoronis muelleri* and *P. pallida.* Overall the site is considered a biodiversity hotspot within the Balanced Seas area. Inshore of the main spoonworm muddy areas are extensive areas of *Ampelisca* mats, exceeding densities of over 5,000 individuals per square metre, again with large numbers of other species present including burrowing shrimps, and dense mollusc communities.

11.2 Site image

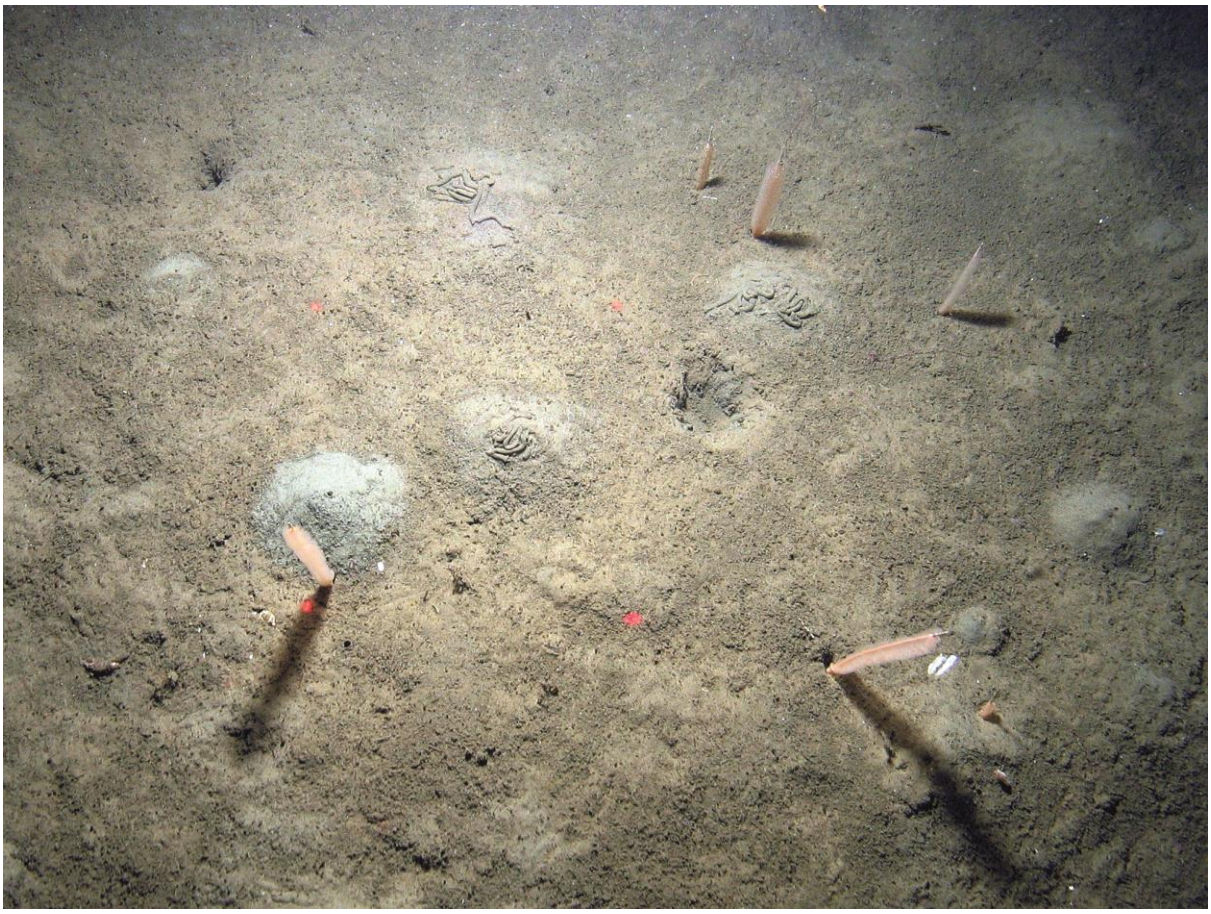
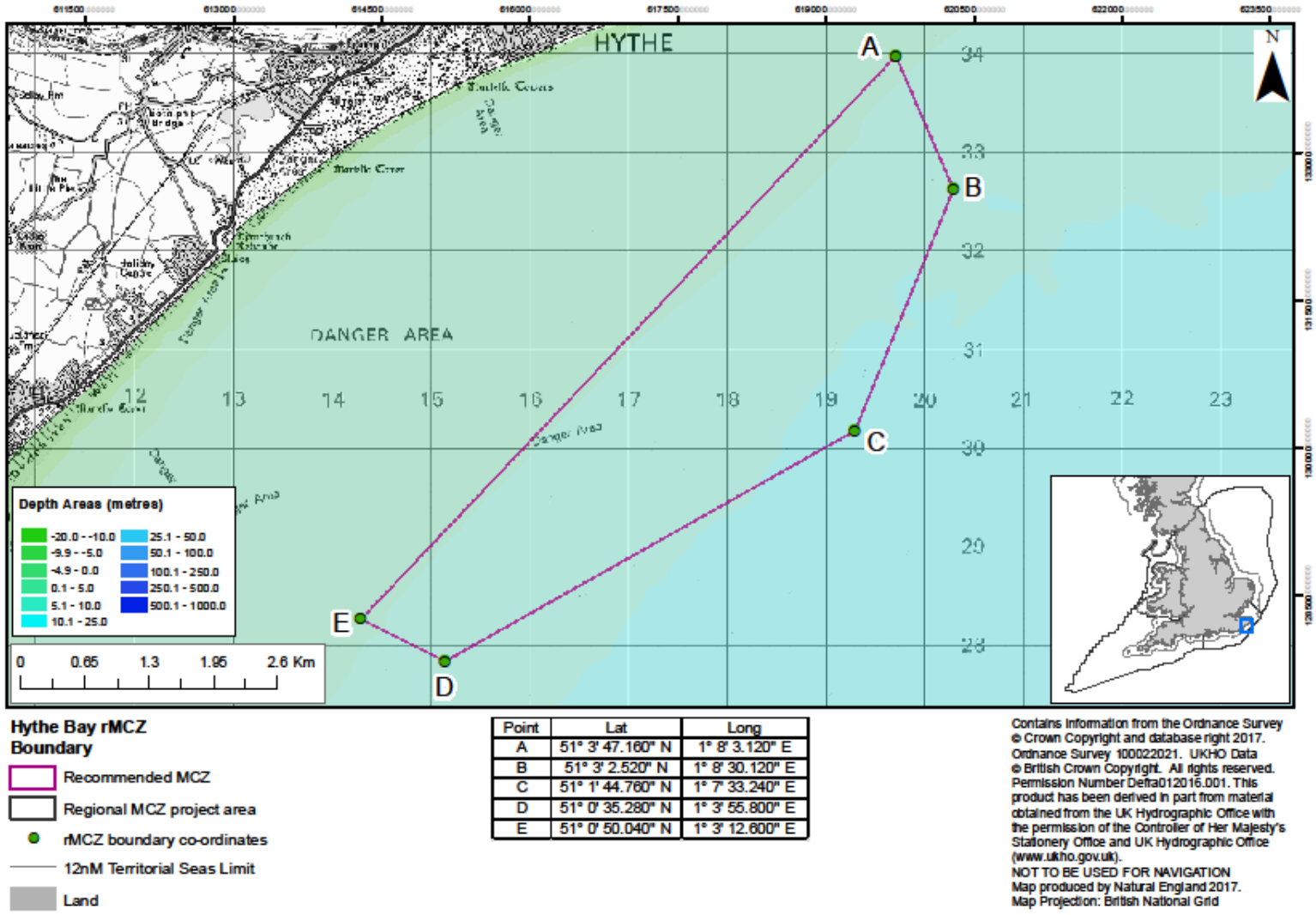


Image 11 Slender sea pens (*Virgularia mirabilis*) in muddy sediment with worm casts (*Arenicola marina*) © JNCC & Cefas (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

11.3 Site maps



Point	Lat	Long
A	51° 3' 47.160" N	1° 8' 3.120" E
B	51° 3' 2.520" N	1° 8' 30.120" E
C	51° 1' 44.760" N	1° 7' 33.240" E
D	51° 0' 35.280" N	1° 3' 55.800" E
E	51° 0' 50.040" N	1° 3' 12.600" E

Figure 39 Hythe Bay rMCZ site boundary

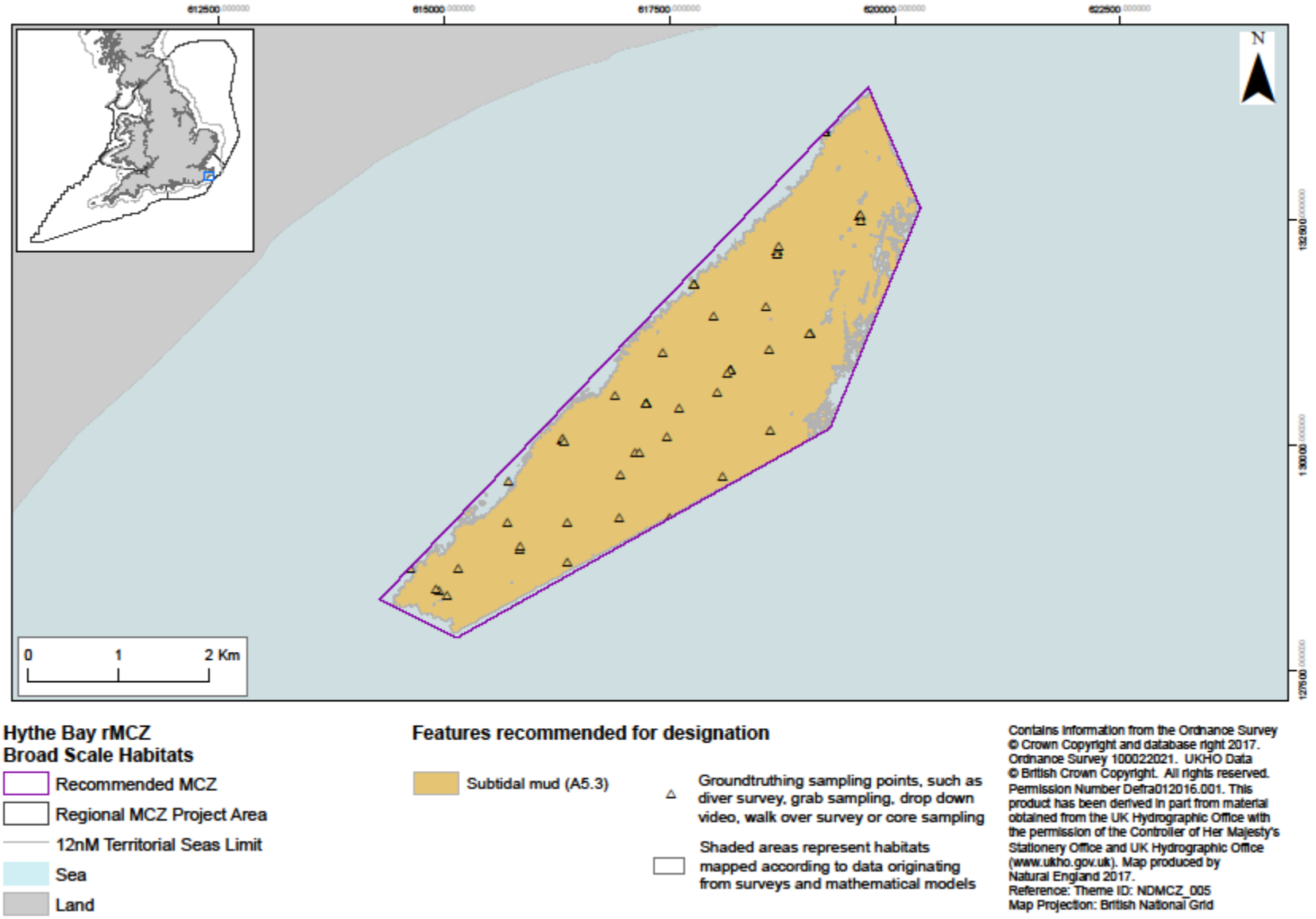


Figure 40 Location of mapped broad-scale habitats in Hythe Bay rMCZ

11.4 Summary of Natural England's advice

Table 13 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Hythe Bay rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Sea pens and burrowing megafauna	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature[12]
Subtidal mud	High	High	Unfavourable	Recover	No change

In Natural England's Tranche 3 pre-consultation advice to Defra, we advised no confidence in the presence of the feature sea pens and burrowing megafauna and agreed with the recommendation to remove the proposed feature from the site.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

[12] Seapens and burrowing megafauna: The Cefas verification surveys undertaken in 2012 did not record the FOCI "Sea-pens and burrowing megafauna" as they did not record sufficient numbers of qualifying species in any samples to classify under the JNCC 04 05 biotope classification system. The infaunal communities were found to be dominated by relatively higher numbers of species more typically associated with sandy muds and muddy sands, as opposed to the burrowing species considered to be typical of this habitat FOCI.

Natural England are recommending that this feature is removed as through further analysis of the historic data and the Cefas verification survey we don't believe that this FOCI was ever present at Hythe. The habitat found at Hythe doesn't easily fit into the FOCI description and the biotopes associated with it. In previous assessments it appears as if the species found at Hythe have been made to fit one of the biotopes in order to provide a description through human judgement. However as it is not an exact fit it is open to subjective judgement which has resulted in different opinions being reached on its presence in the different reports. We therefore believe in this particular case that it would be a more accurate reflection of the site to remove the FOCI 'seapens and burrowing megafauna', and instead describe it as 'megafaunal rich subtidal mud', which will be protected through the subtidal mud broadscale habitat feature. This will make monitoring and therefore management of the site more robust in the future whilst meeting site and network objectives.

11.5 Additional advice

11.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

11.5.2 Advice on the site boundary

The size of the site has been reduced so that it only encompasses the main mapped area of the Subtidal mud feature. The new boundary better aligns with the original Regional Project intentions for the site proposal. The boundary amendment may result in some, albeit likely limited, improvement in stakeholder support for this site. This boundary amendment was agreed with Defra and implemented and the advice provided for Hythe Bay is based on this amended boundary.

12 Kentish Knock East rMCZ (BS 30)

12.1 Site description

This site is located outside the six nautical mile boundary 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 Regional Project boundary. The seabed here is predominantly subtidal coarse sediments (including sands and gravels) and small patches of subtidal sand. Survey 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 a Regional Seas Group (RSG) request to identify suitable areas to meet shortfall broad-scale habitats, particularly Subtidal coarse sediment. 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 have the lowest impact.

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 the 12 nautical mile boundary to capture the entire sediment bank and three broad-scale habitats: Subtidal coarse sediment, Subtidal mixed sediment and Subtidal sand.

12.2 Site image

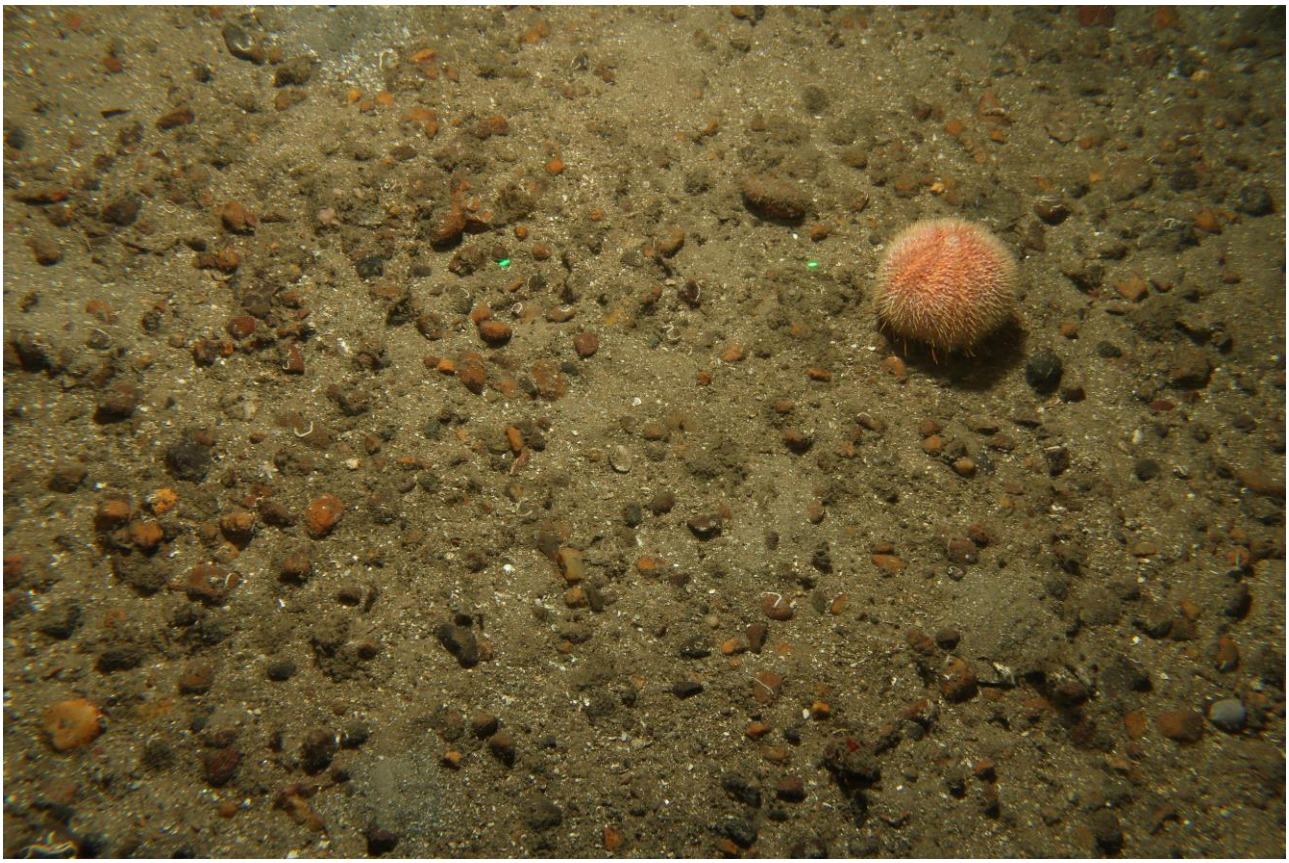
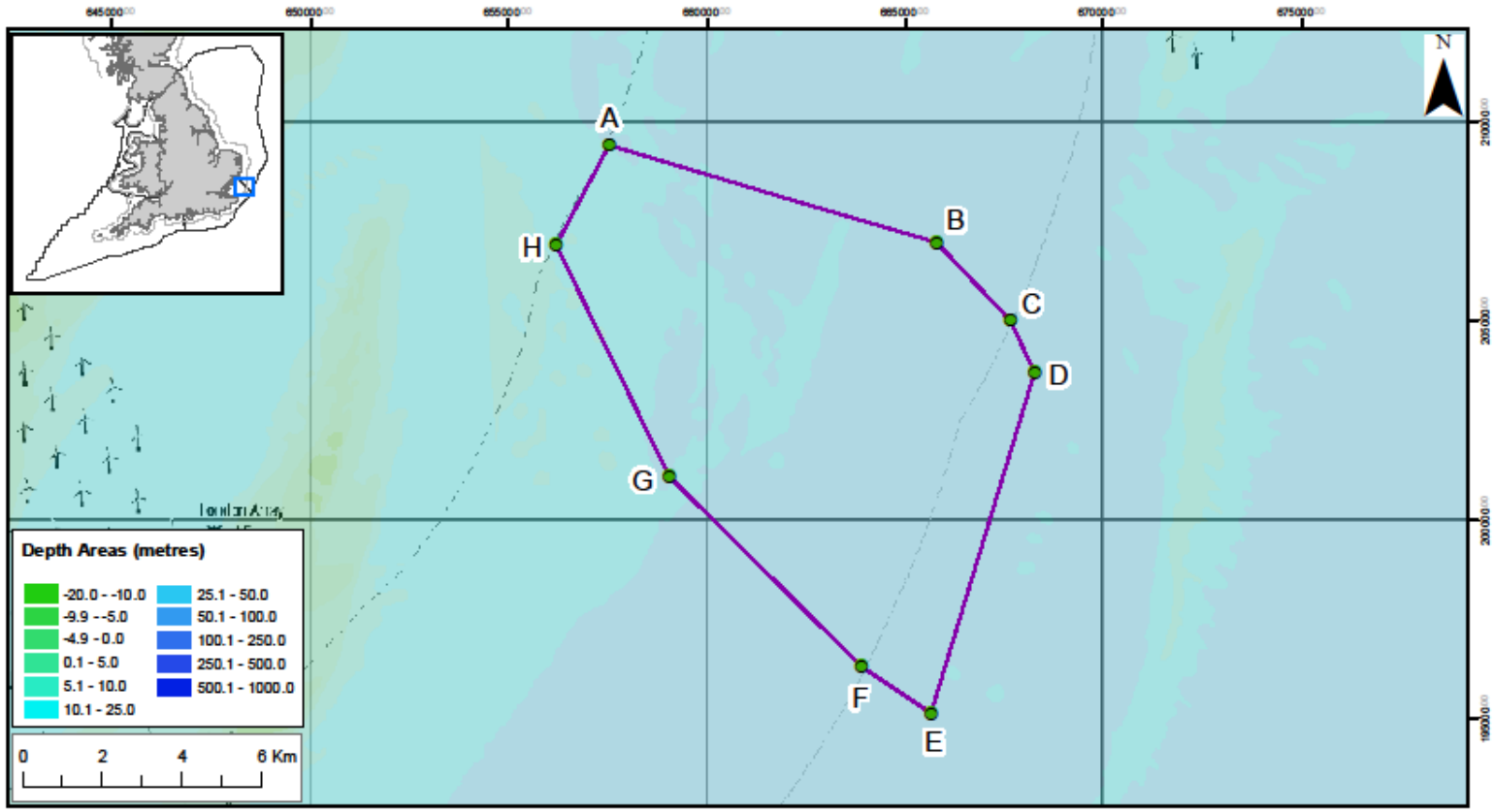


Image 12 Sea urchin on subtidal coarse sediment © Crown Copyright (Please note this photograph is an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

12.3 Site maps



Kentish Knock East rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	51° 43' 27.082" N	1° 43' 39.857" E	E	51° 35' 32.819" N	1° 50' 3.830" E
B	51° 41' 54.328" N	1° 50' 41.863" E	F	51° 36' 13.336" N	1° 48' 34.864" E
C	51° 40' 48.555" N	1° 52' 14.579" E	G	51° 38' 56.059" N	1° 44' 35.832" E
D	51° 40' 5.015" N	1° 52' 42.988" E	H	51° 42' 8.996" N	1° 42' 24.106" E

Map produced by Natural England 2016.
Reference: Theme ID: 1477581
Map Projection: British National Grid

Figure 41 Kentish Knock East rMCZ site boundary

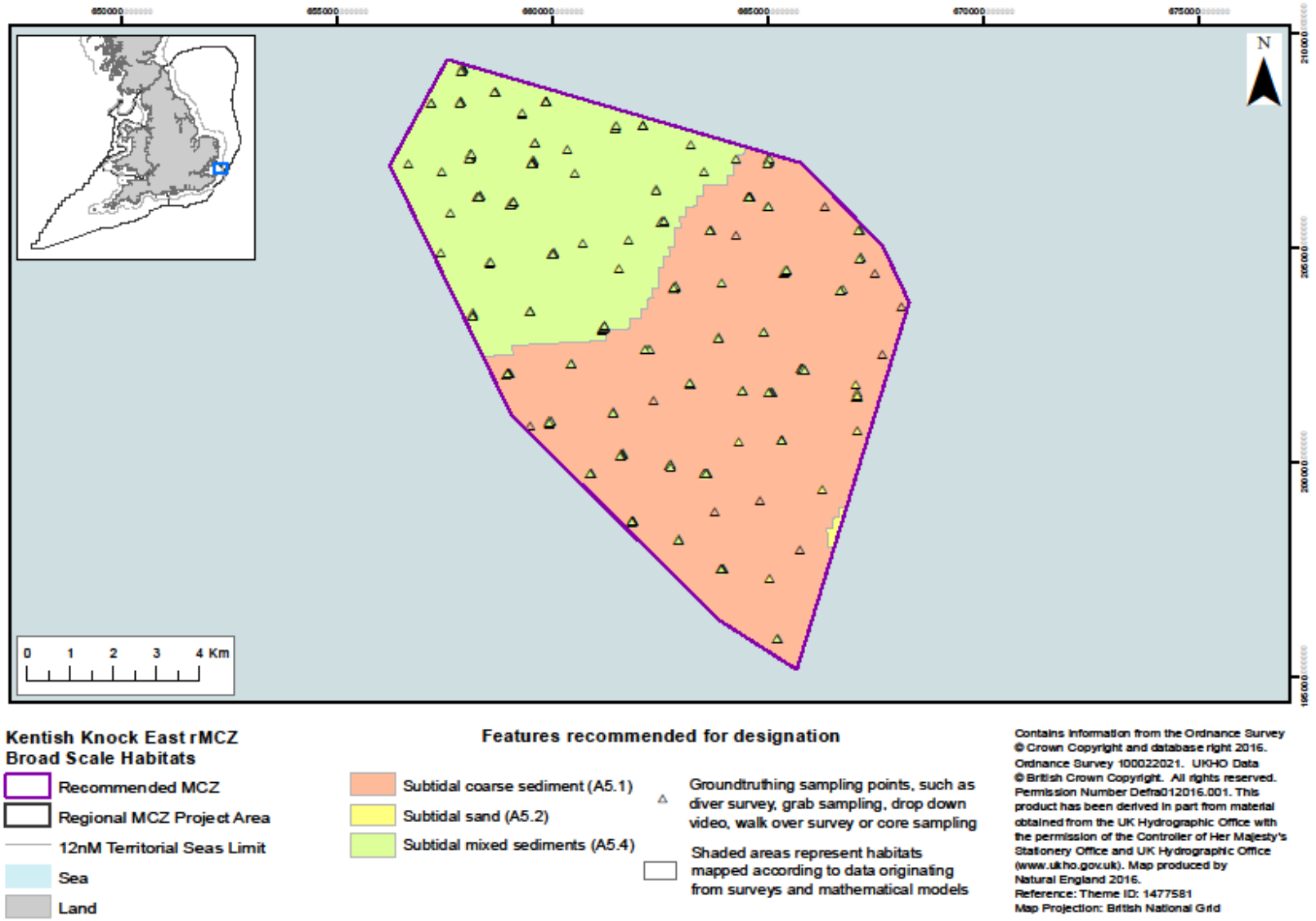


Figure 42 Location of mapped broad-scale habitats in Kentish Knock East rMCZ

12.4 Summary of Natural England's advice

Table 14 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Kentish Knock East rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Subtidal coarse sediment	High	High	Unfavourable	Recover	No change
Subtidal mixed sediments	High	High	Unfavourable	Recover	No change
Subtidal sand	High	High	Favourable	Maintain	The previous GMA was triggered by the feature sensitivity to pressures related to fishing activities where gear comes into contact with the seafloor. Based on assessment of recent verification survey grab sample data, the sensitivities of this feature have been re-assessed due to the site-specific biotopes identified. For this feature the predominant biotopes are SS.SCS.ICS.MoeVen/SS.SSa.IFiSa.IMoSa/SS.SSa.CFiSa.EpusObor Apri. Pressures primarily associated with this activity are: abrasion/disturbance of the surface of the substratum or seabed; penetration or disturbance of the substratum subsurface; siltation rate changes, including smothering (light); and removal of non-target species. Using worst-case scenarios the most sensitive biotope present (and by proxy the feature) is considered to have low sensitivity to this activity.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

12.5 Additional advice

12.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

12.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

13 Morte Platform rMCZ (FS 44)

13.1 Site description

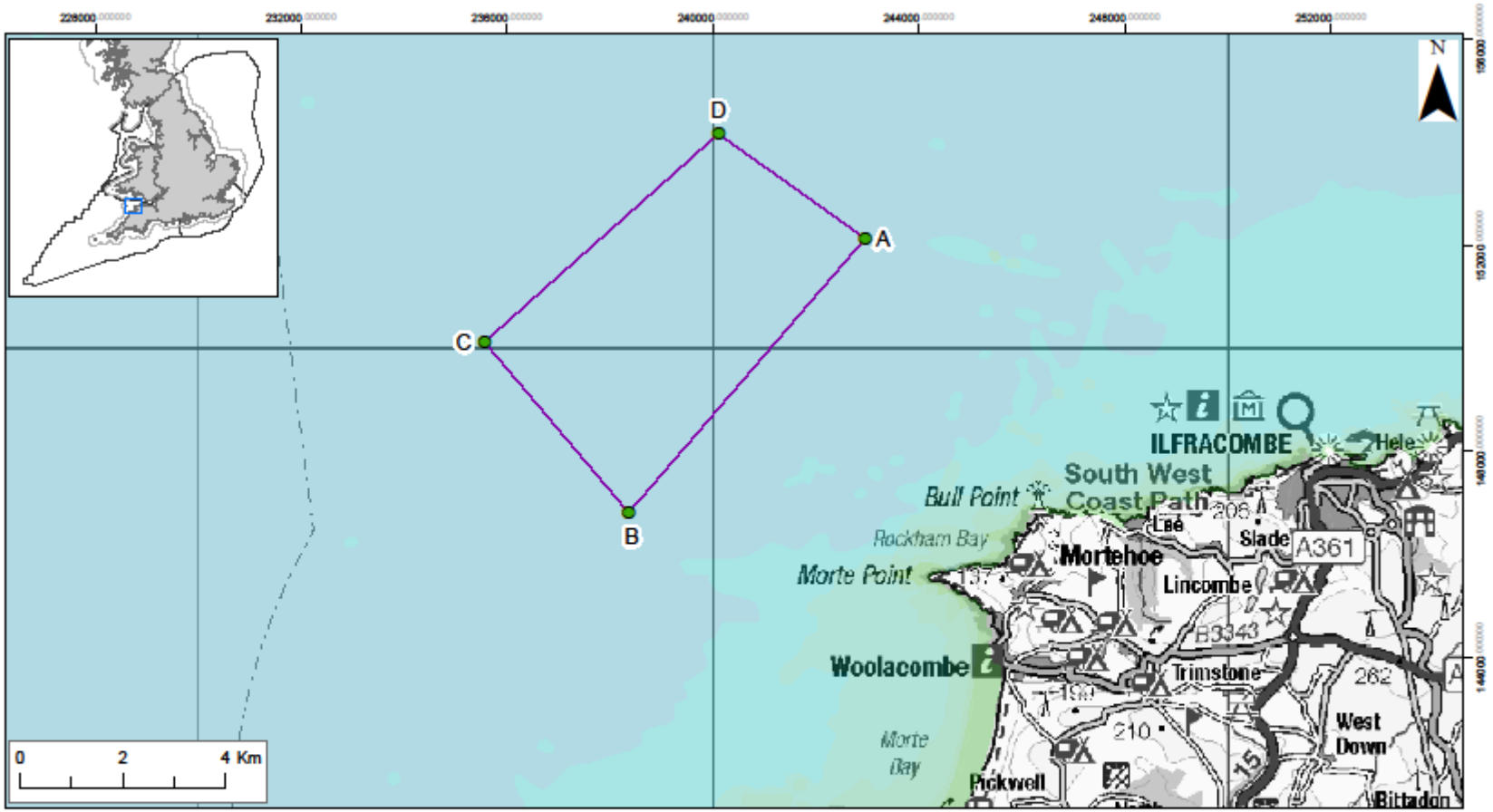
The Morte Platform is an area of rocky outcrops surrounded by sediment, approximately five kilometres off Baggy Point in North Devon. The depth of the area ranges between 35 and 40 metres below sea level.

The area was initially put forward by the North Devon Biosphere Reserve Marine Working Group through the Devon Local Group (with support from cross-sector stakeholders, including representatives of the fishing and renewable energy sectors), who highlighted the higher than average species diversity of the site when compared to the south west in general. The seabed includes rich communities of subtidal living reefs including ross worm reefs and mussel beds which provide shelter for other marine species. The higher than average seabed diversity and mixture of habitats found in this site are rarely seen elsewhere and are the result of the unusual physical conditions of the seabed.

13.2 Site image

Image 13 Moderate energy circalittoral rock © Crown Copyright (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

13.3 Site maps



Morte Platform rMCZ Boundary

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

Point	Lat	Long
A	51° 14' 48.231" N	4° 15' 5.418" W
B	51° 11' 51.061" N	4° 18' 53.550" W
C	51° 13' 35.433" N	4° 21' 23.116" W
D	51° 15' 51.044" N	4° 17' 35.567" W

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

Figure 43 Morte Platform rMCZ site boundary

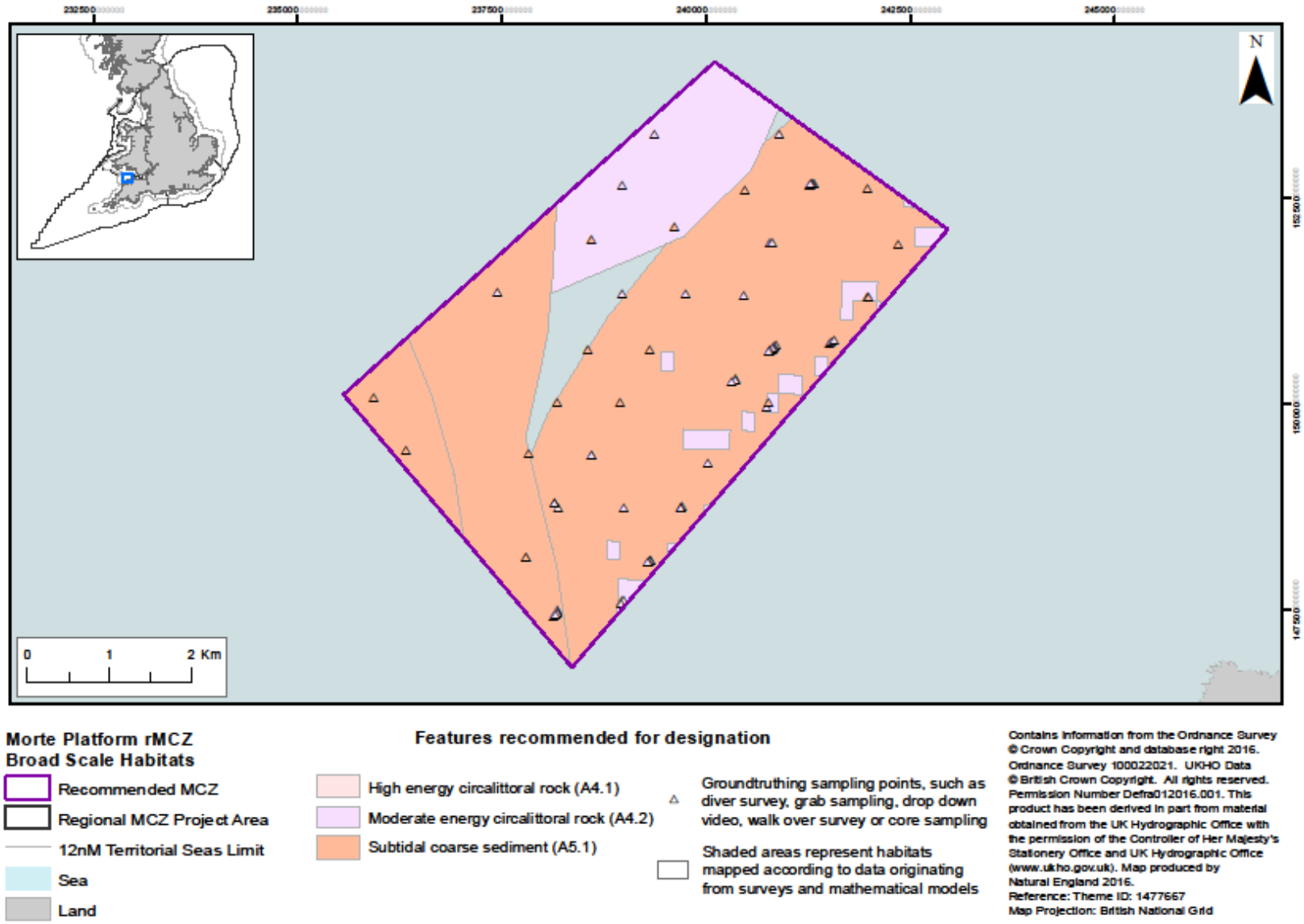


Figure 44 Location of mapped broad-scale habitats in Morte Platform rMCZ

13.4 Summary of Natural England's advice

Table 15 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Morte Platform rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
High energy circalittoral rock	High	Moderate	Unfavourable	Recover	The recover GMA has been triggered due to current evidence suggesting that low levels of dredging (Devon & Severn IFCA advice 2016) and low levels of demersal trawling (VMS and MB0117 data) occur within the site. Given the current evidence, this feature's sensitivity to pressures generated by dredging and trawling activities and the likely exposure of this feature to these activities, a revised GMA of Recover is now advised.
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	The recover GMA has been triggered due to current evidence suggesting that low levels of dredging (Devon & Severn IFCA advice 2016) and low levels of demersal trawling (VMS and MB0117 data) occur within the site. Given the current evidence, this feature's sensitivity to pressures generated by dredging and trawling activities and the likely exposure of this feature to these activities, a revised GMA of Recover is now advised.
Subtidal coarse sediment	High	High	Unfavourable	Recover	The recover GMA has been triggered due to current evidence suggesting that low levels of dredging (Devon & Severn IFCA advice 2016) and low levels of demersal trawling (VMS and MB0117 data) occur within the site. Given the current evidence, this feature's sensitivity to pressures generated by dredging and trawling activities and the likely exposure of this feature to these activities, a revised GMA of Recover is now advised.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

13.5 Additional advice

13.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

13.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

14 Norris to Ryde rMCZ (BS 19)

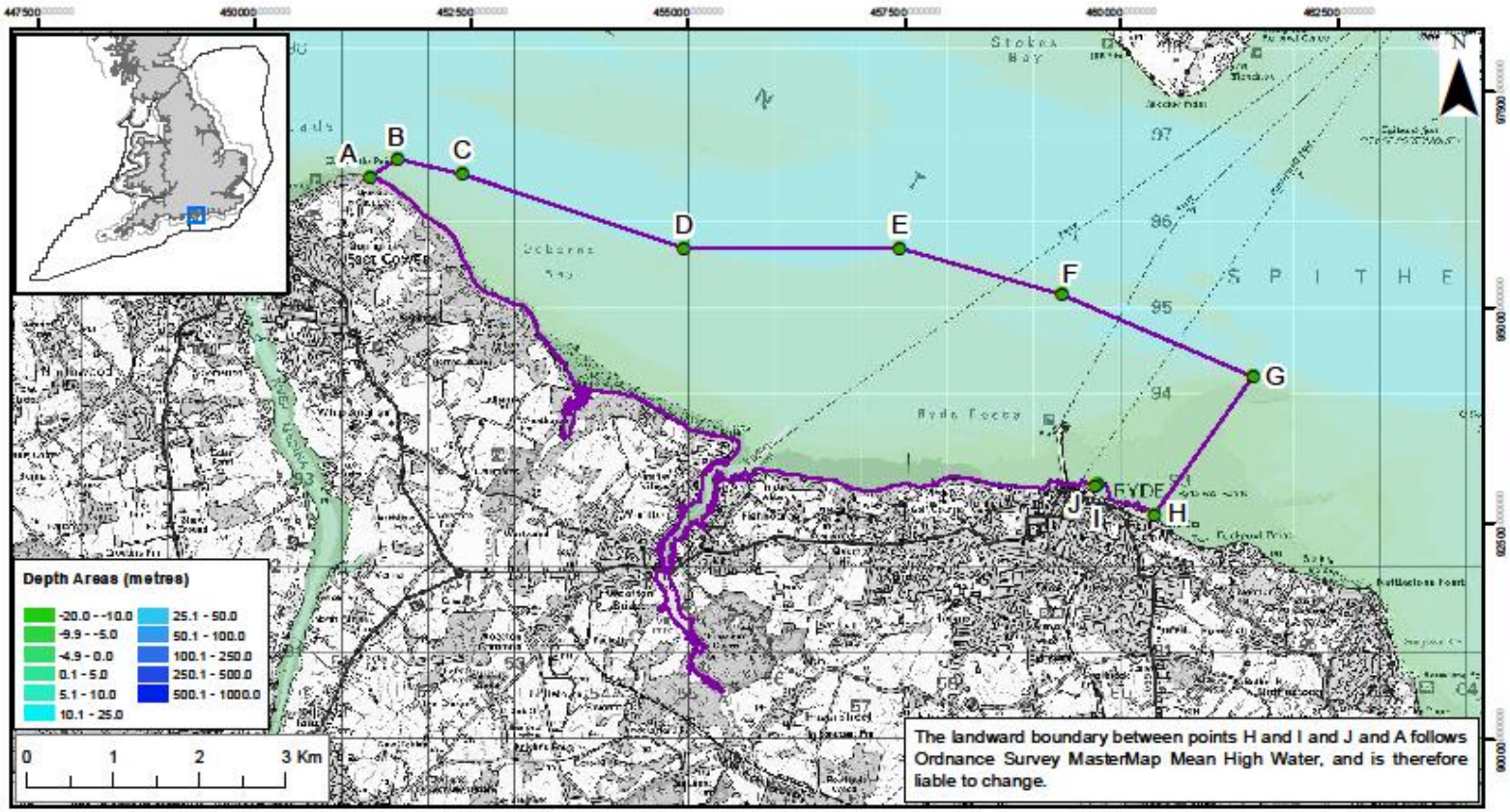
14.1 Site description

This site covers the southern stretch of the Solent, running adjacent to the north-east coast of the Isle of Wight, from just north of Norris Castle to the widest part of Ryde Sands. A dominant feature of this site is subtidal mixed sediment which extends throughout most of the site. The site is also important for two other benthic habitats, sheltered muddy gravels and subtidal mud. Meanwhile, the intertidal zone supports extensive seagrass beds (*Zostera noltii* and *Z. marina*) which are considered to be the best in the Solent. Moving up river, the Old Mill Pond in Wootton Creek supports high densities of the delicate tentacled lagoon-worm (*Alkmaria romijni*), a nationally scarce marine species. This site is also important for the native oyster (*Ostrea edulis*), a commercially important species that supported a lucrative fishery before it experienced dramatic population declines about five years ago. This site is also home to notable mantis shrimp warrens and Neolithic archaeological remains.

14.2 Site image

Image 14 Subtidal mixed sediments © Gavin Black/Natural England (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

14.3 Site maps



Norris to Ryde rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	50° 45' 57.627" N	1° 16' 24.831" W	F	50° 45' 11.022" N	1° 9' 37.731" W
B	50° 46' 4.227" N	1° 16' 8.871" W	G	50° 44' 39.161" N	1° 7' 45.650" W
C	50° 45' 58.514" N	1° 15' 30.394" W	H	50° 43' 47.849" N	1° 8' 45.050" W
D	50° 45' 29.910" N	1° 13' 20.378" W	I	50° 43' 59.584" N	1° 9' 17.616" W
E	50° 45' 29.077" N	1° 11' 13.231" W	J	50° 43' 58.501" N	1° 9' 19.829" W

Figure 45 Norris to Ryde rMCZ site boundary

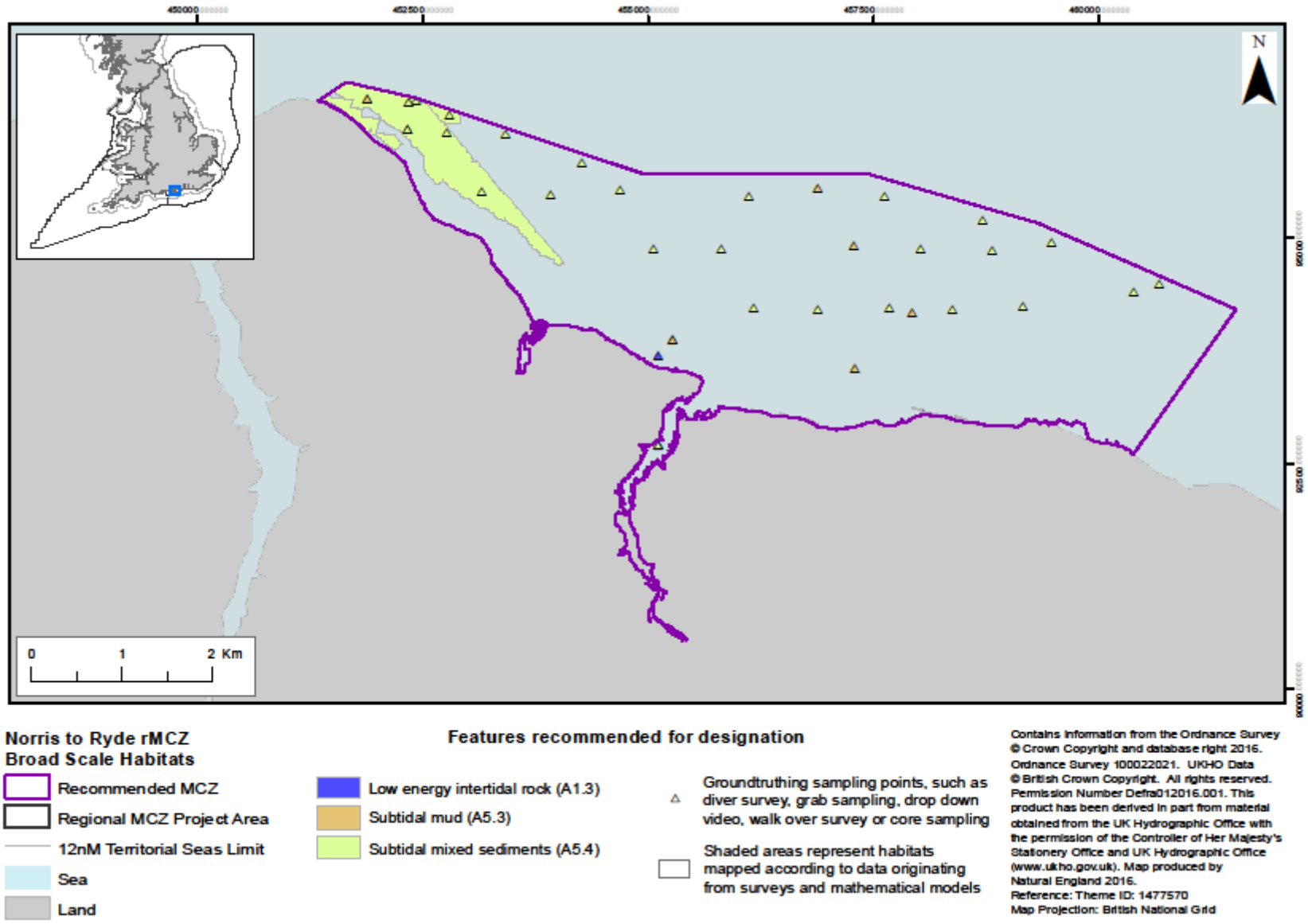


Figure 46 Location of mapped broad-scale habitats in Norris to Ryde rMCZ

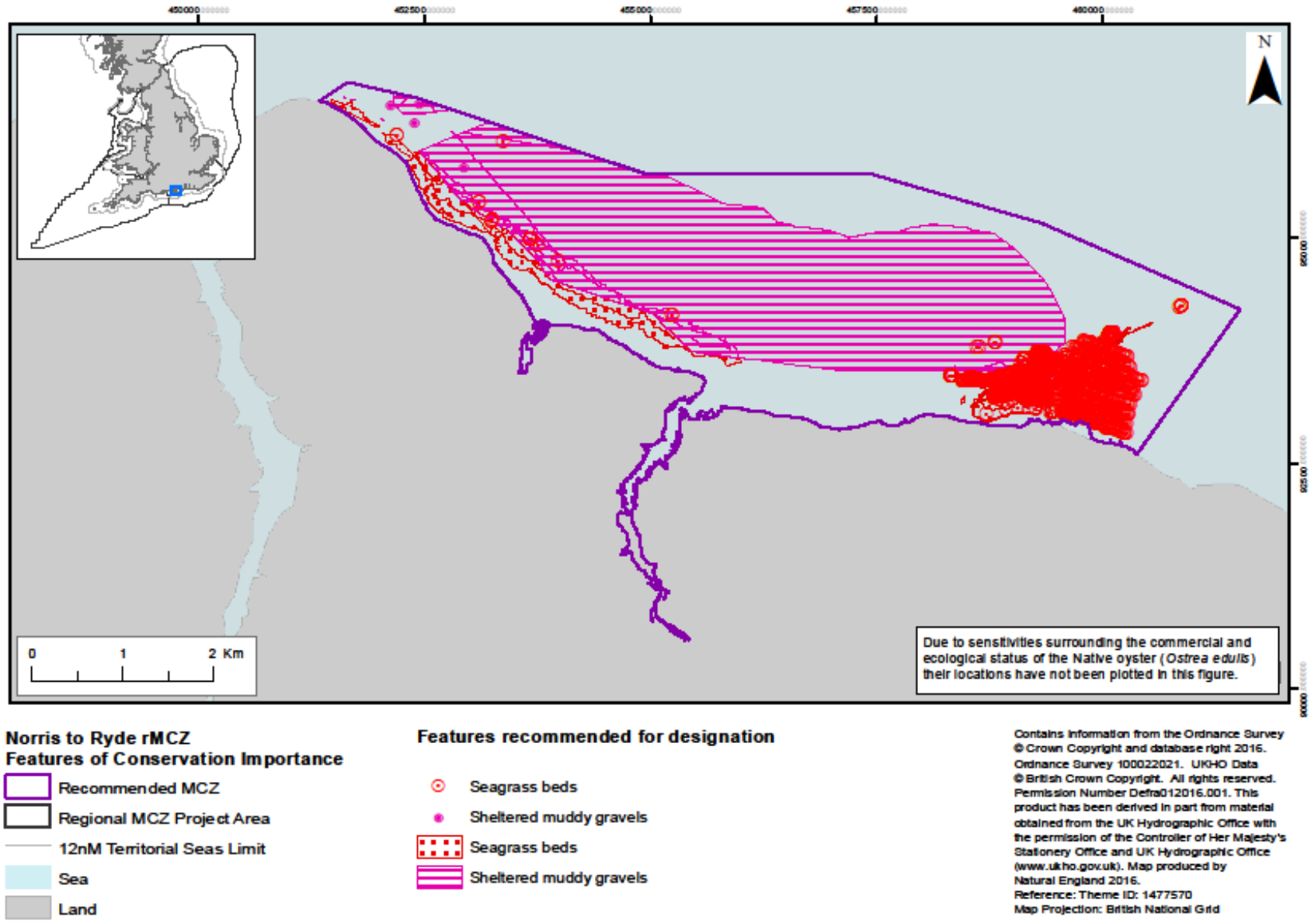


Figure 47 Location of mapped features of conservation importance in Norris to Ryde rMCZ

14.4 Summary of Natural England's advice

Table 16 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Norris to Ryde rMCZ.

Feature name	Confidence in feature Presence	Confidence if feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Estuarine rocky habitats	Low	Low	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Low energy intertidal rock	Moderate	Moderate	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Native oyster (*Ostrea edulis*)	Moderate	Moderate	Unfavourable	Recover	No change
Peat and clay exposures	Low	Low	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Seagrass beds	High	High	Unfavourable	Recover	No change
Sheltered muddy gravels	Moderate	Moderate	Unfavourable	Recover	No change
Subtidal coarse sediment	Low	Low	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Subtidal mixed sediments	High	High	Unfavourable	Recover	No change
Subtidal mud	High	Moderate	Favourable	Maintain	Since the previous GMA was assessed, several changes have occurred in the data analysed, namely some polygonal data has been removed and some site specific biotope analysis data was obtained. These changes have resulted

Feature name	Confidence in feature Presence	Confidence if feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					in reduced exposure to potentially damaging interactions and more tailored sensitivities being developed, respectively.
Subtidal sand	Low	Low	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Tentacled lagoon-worm (*Alkmaria romijni*)	Low	Low	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

14.5 Additional advice

14.5.1 Advice on specific features

14.5.1.1 Subtidal mixed sediment in Norris to Ryde rMCZ

In the Eastern Channel region, the feature 'subtidal mixed sediment (A5.4)' is present in Norris to Ryde and Yarmouth to Cowes rMCZs. If designated, both sites would contribute to the gap identified for this feature in the existing MPA network. This is in line with the current requirement that all inshore site options put forward for designation in Tranche 3 should contribute to outstanding adequacy targets.

Based on the data we have analysed to date, we have high confidence in both presence and extent of this feature in both sites. However, in both instances, these mixed sediments are affected by *Crepidula fornicata,* a non-native marine mollusc. Specifically, we know that this species is associated with the two biotopes:

- SS.SMx.SMxVS.CreMed - *Crepidula fornicata* and *Mediomastus fragilis* in variable salinity infralittoral mixed sediment; and
- SS.SMx.IMx.CreAsAn - *Crepidula fornicata* with ascidians and anemones on infralittoral coarse mixed sediment.

More commonly known as the Slipper limpet, this species is well established in parts of the United Kingdom, with high population abundances occurring in some areas, including the Eastern Channel. Classed as 'High Risk' by the Great Britain Non-Native Species Secretariat (GBNNSS) (Sewell and Sweet 2011) and the Environment Agency, it is known to cause a range of environmental issues including spatial competition, trophic competition, alteration of the substratum and nutrient load of the water column.

If designation of subtidal mixed sediments is pursued in this region, selecting these biotopes will be unavoidable. Stakeholders with the view that *C. fornicata* presence is an indicator of low-quality habitat are likely to respond negatively to this decision. Indeed, it is important to acknowledge that eradicating this species from either site will be unfeasible using current known methods and therefore, meeting the requirements of a 'recover' management recommendation is not currently possible. Nonetheless, there are management options that could deliver benefits. For example, restricting activities such as trawling may decrease the spread of *C. fornicata*, an outcome that would benefit the mixed sediments and surrounding sensitive habitats of conservation importance (HOCI) such as seagrass and native oyster beds.

Consequently, we advise that this feature should be considered for designation at these two sites, with a view to implementing appropriate management measures that seek to decrease the impacts of bottom towed fishing gear as well as reduce the spread of *C. fornicata* to reduce overall pressures on this habitat feature

14.5.2 Advice the site boundary

No additional advice given to Defra on boundaries for this site.

15 Offshore Foreland rMCZ (BS 9)

15.1 Site description

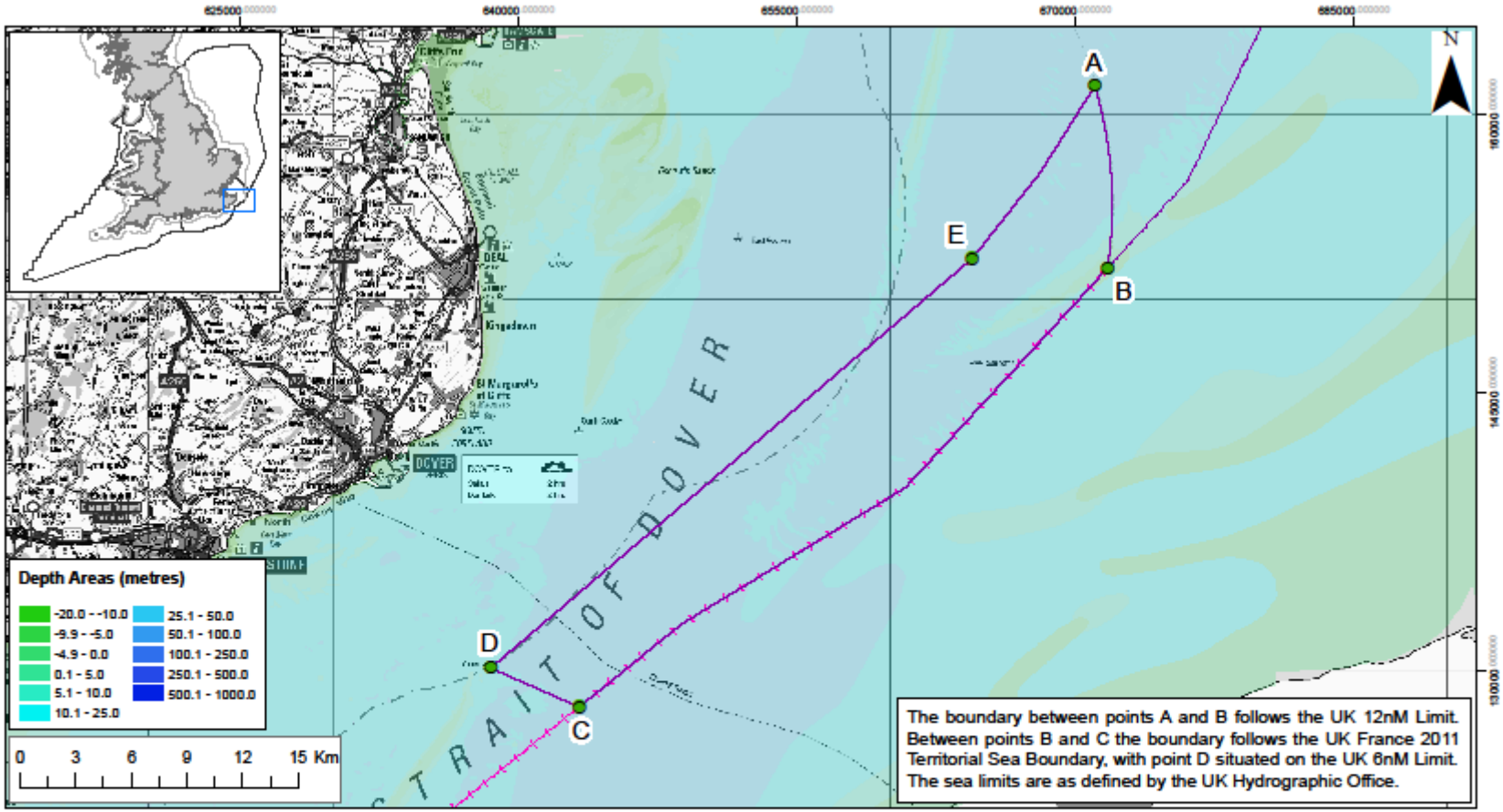
The site is elongated and lies adjacent to the median line in the narrowest part of the Channel in the west, and abuts the 12 nautical mile line in the north east; its centre is roughly between Deal in Kent and Gravelines, just west of Dunkirk in France. Although the site follows the outer twelve nautical mile boundary line (see section 15.4.2 below), it lies fully outside the inner six nautical mile boundary line.

The site contains a mix of moderate energy circalittoral rock, subtidal coarse sediment and subtidal sand. Surveys have indicated that the north of this rMCZ has high biodiversity for benthic species of taxonomic distinctness. The site contains part of the English Channel Outburst Flood Feature, an important example of ancient geomorphological processes that separated the UK from mainland Europe. Although no specific supporting features have been identified, various species of flatfish (e.g. plaice, sole, undulate ray) are likely to be present, and thus there might be spawning and nursery grounds within the site.

15.2 Site image

Image 15 Subtidal sand © Crown Copyright (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

15.3 Site maps



Foreland rMCZ Boundary

- Recommended MCZ
- Regional MCZ project area
- rMCZ boundary co-ordinates
- UK Continental Shelf
- UK_France 2011 Territorial Sea Boundary
- 12nM Territorial Seas Limit
- 6nM Limit
- Land

Point	Lat	Long
A	51° 17' 17.499" N	1° 53' 8.239" E
B	51° 11' 57.835" N	1° 53' 15.421" E
C	51° 0' 0.443" N	1° 27' 55.326" E
D	51° 1' 15.376" N	1° 23' 55.539" E
E	51° 12' 27.789" N	1° 47' 3.679" E

Figure 48 Offshore Foreland rMCZ site boundary

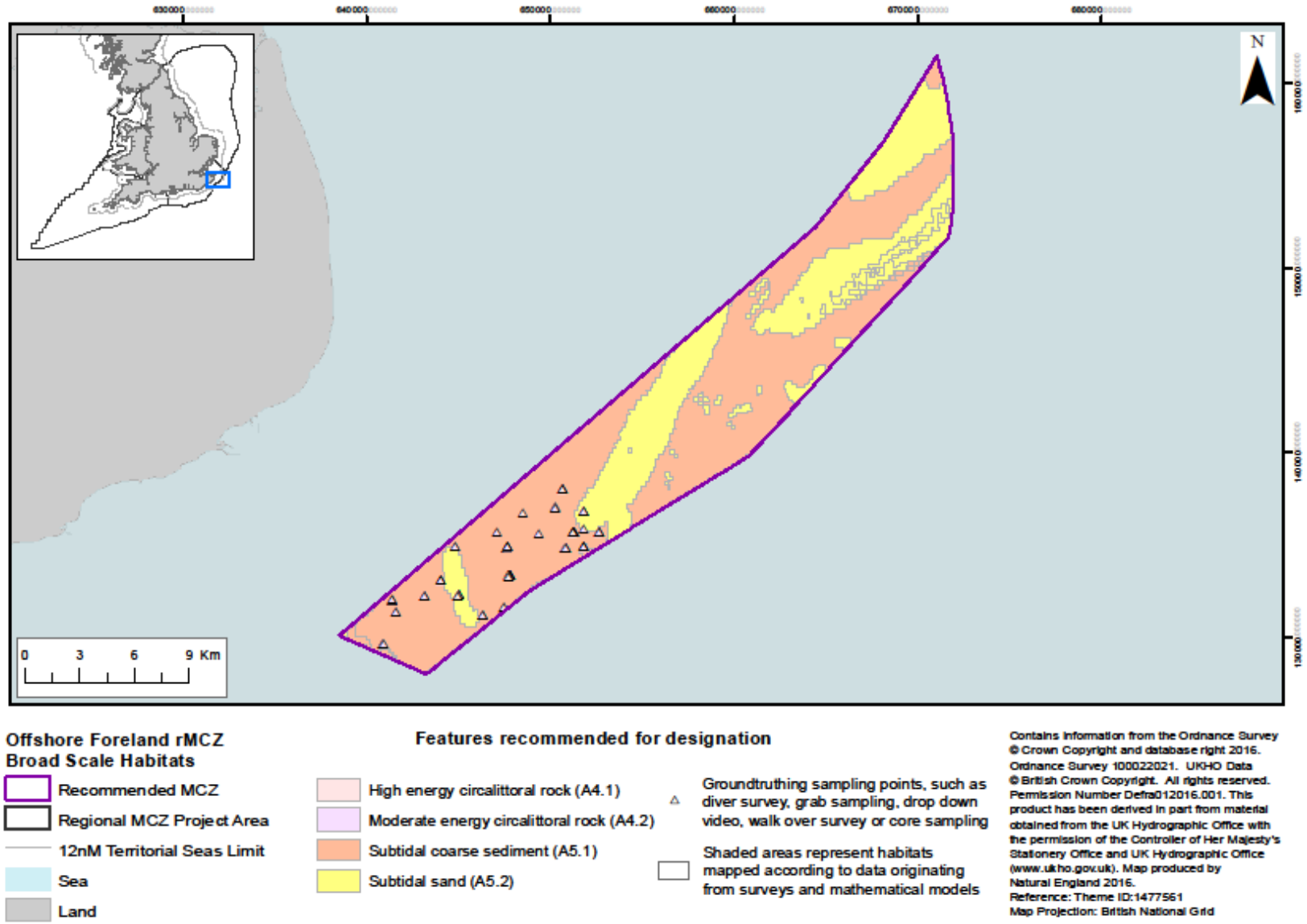


Figure 49 Location of mapped broad-scale habitats in Offshore Foreland rMCZ

15.4 Summary of Natural England's advice

Table 17 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Offshore Foreland rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
English Channel outburst flood features	High	High	Favourable	Maintain	No change
High energy circalittoral rock	High	Moderate	Unfavourable	Recover	Previously, following advice from the SNCBs, the conservation objective for this feature was changed from the original Regional Project recommendations (from Recover to Maintain) as 'Recover' was deemed to be overly precautionary. The detailed Balanced Seas report for Offshore Foreland expands on the rationale for this change, stating: "The RSG fishing industry representatives said that this area is trawled because of the sediment covering the rock; they do not trawl over exposed rock and therefore there is uncertainty over the data for this area and the suitability of this Conservation Objective." Additional evidence from the rMCZ verification survey in 2014 found that the south-west section of the site is likely to contain fine-scale bedforms (<50 metres), predominantly a thin veneer of 'A5.1 Subtidal coarse sediment' with exposed patches of the BSHs 'A4.1 High energy circalittoral rock' and 'A4.2 Moderate energy circalittoral rock'. The ability to differentiate areas of rocky habitat from areas with thin overlying sediment using the available [acoustic, grab and video] data is limited, so this area is marked as BSH 'A5.1 Subtidal coarse sediment' on the updated BSH map. The high mobility of the sediment veneers, due to the exposed position of the rMCZ and strong currents associated with the English Channel, means it is also likely that the precise location and makeup of the sediment overlying the bedrock may change over time. The high spatial variability of the feature, and its integration into surrounding sediment habitats casts doubt over whether fishing activity can sufficiently avoid accidental damage to the feature, so a more precautionary GMA is appropriate.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
High energy infralittoral rock	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Moderate energy circalittoral rock	High	Moderate	Unfavourable	Recover	No change
Subtidal coarse sediment	High	High	Unfavourable	Recover	Due to additional evidence and increased understanding the sensitivity of BSH 'A5.1 Subtidal Coarse Sediment' to physical disturbance has been increased since the previous 2012 assessment. As a result the GMA for this feature has changed from 'Maintain' to 'Recover' as the feature is sensitive to the low levels of benthic fishing activity throughout the site. Ultimately this may be over-precautionary in the north-east section of the site, as the exposed nature of the rMCZ and the strong currents associated with the English Channel mean it is likely that the biotopes have a low sensitivity and high recoverability to physical disturbance, and so low, infrequent benthic fishing activity may not exceed natural levels of disturbance. The predominant biotope identified in this feature was SS.SCS.CCS (93 stations) and two SS.SCS.CCS.PomB (two stations). However, this GMA is additionally suitable due to the uncertainty around the nature of 'A5.1 Subtidal coarse sediment' in the south-west portion of the site. The rMCZ verification survey found it likely that fine-scale bedforms (<50 metres) exist in this area, predominantly a thin veneer of 'A5.1 Subtidal coarse sediment' with exposed patches of the BSHs 'A4.1 High energy circalittoral rock' and 'A4.2 Moderate energy circalittoral rock'. The ability to differentiate areas of rocky habitat from areas with thin overlying sediment using the available [acoustic, grab and video] data is limited, so this area is marked as BSH 'A5.1 Subtidal coarse sediment' on the updated BSH map. Due to the exposed position of the rMCZ and strong currents associated with the English Channel, it is also likely that the precise location and makeup of the sediment overlying the bedrock may change over time. The sensitivity of this habitat mosaic to physical disturbance is likely to be higher than that of more typical high-energy 'A5.1 Subtidal coarse

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					sediment', warranting a more precautionary GMA for the overall feature.
Subtidal sand	High	High	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

15.5 Additional advice

15.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

15.5.2 Advice on the site boundary

In 2011 Balanced Seas recommended the boundary of Offshore Foreland rMCZ followed the 12 nautical mile limit and the England-France boundary. In 2014 the England-France boundaries and 12 nautical mile limits changed, meaning a strip of the rMCZ was now outside of the 12 nautical mile limit; and a separate area was in French waters. The revised boundary now follows the new 12 nautical mile limit and England-France boundary limits to follow the recommendations of the Balanced Seas recommendations, and does not result in any negative ecological implications for the site. This boundary amendment has been agreed with Defra and the advice on this site is based on the amended boundary.

16 Orford Inshore rMCZ (NG 01b)

16.1 Site description

Subtidal mixed sediments cover nearly the entire site in water depths of between 20-30 metres. The site lies approximately 14.36 kilometres off the East of England, offshore from the Alde Ore Estuary, mostly within the 6-12 nautical mile limits (and with a small portion beyond the 12 nautical mile limit). The site is of high importance as a nursery and spawning ground for fish species such as Dover, lemon sole, sprat and sandeels. Skates, rays, small spotted catsharks and several crustacean species are also found here. The site is thought to be important for foraging seabirds, such as the black-legged kittiwake, northern fulmar, northern gannet and Sandwich tern.**Site image**

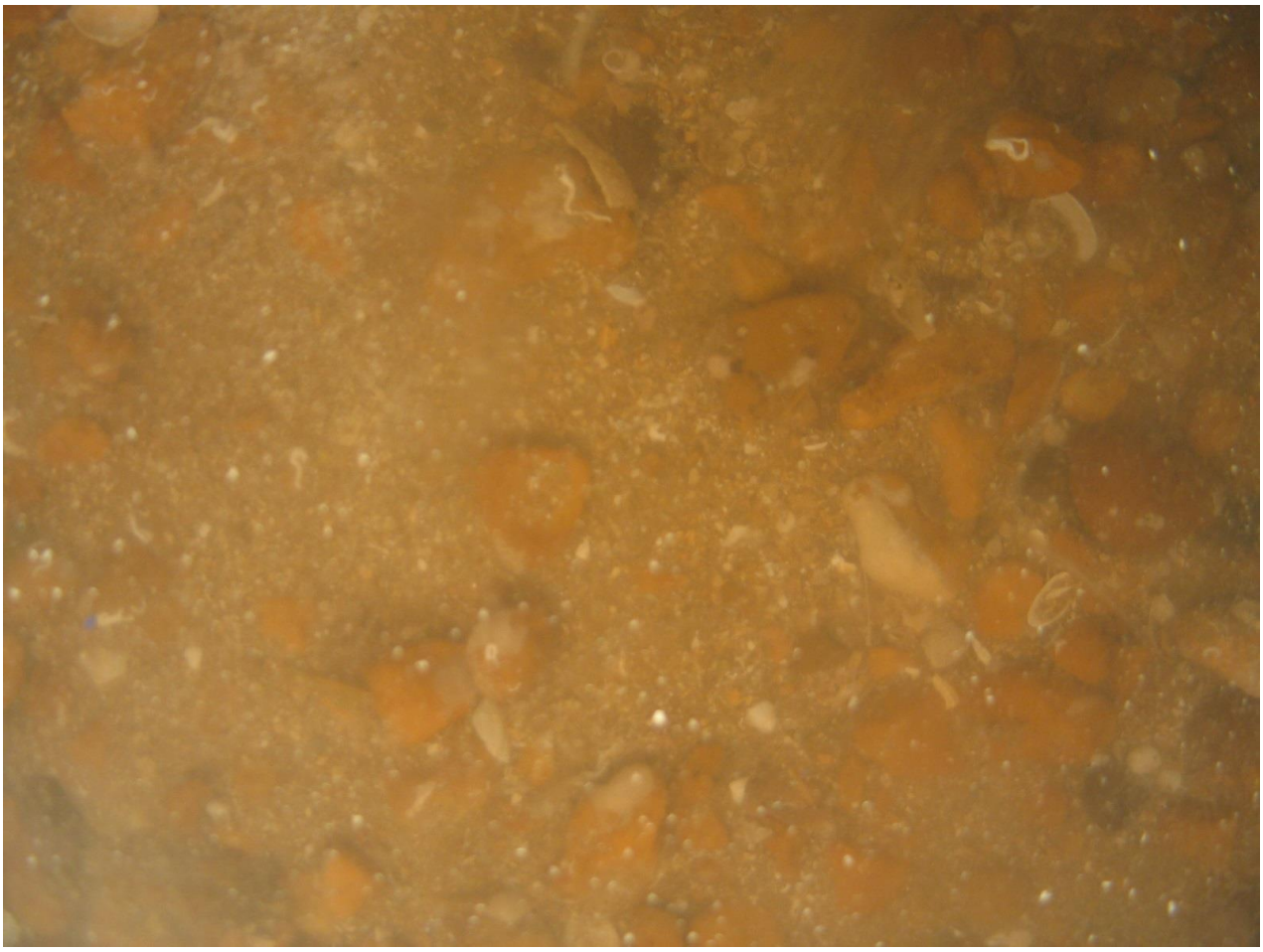
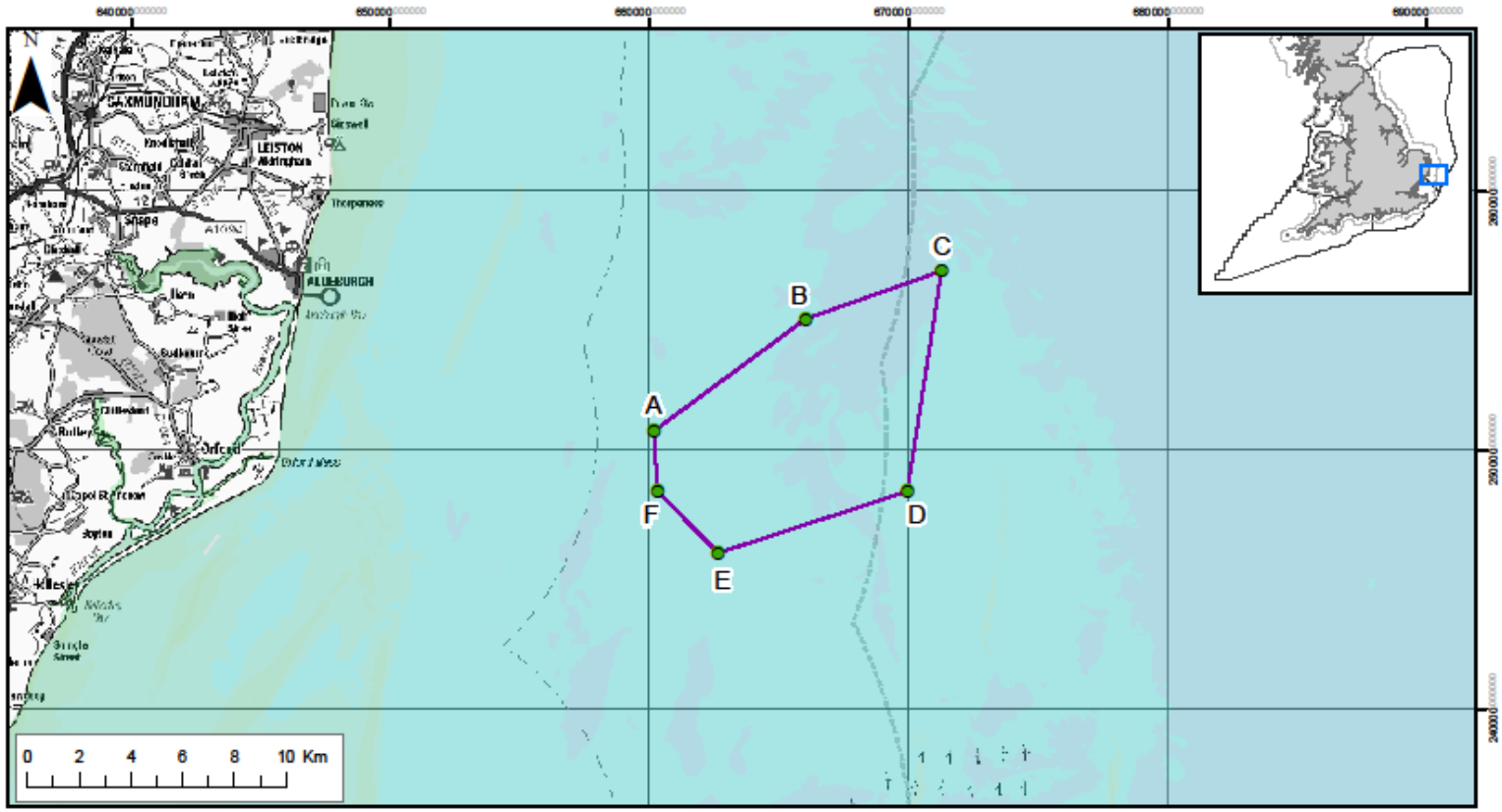


Image 16 Orford Inshore subtidal mixed sediment. CEFAS March 2012 as part of Orford Inshore rMCZ Post-Survey Site Report 2014 © Natural England

16.3 Site maps



Orford Inshore rMCZ Boundary

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

Point	Lat	Long
A	52° 5' 37.225" N	1° 47' 48.720" E
B	52° 7' 47.332" N	1° 53' 9.916" E
C	52° 8' 37.192" N	1° 57' 49.886" E
D	52° 4' 4.088" N	1° 56' 14.905" E
E	52° 3' 0.375" N	1° 49' 47.154" E
F	52° 4' 21.240" N	1° 47' 50.697" E

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

Map produced by Natural England 2016.
Reference: Theme ID: 1477593
Map Projection: British National Grid

Figure 50 Orford Inshore rMCZ site boundary

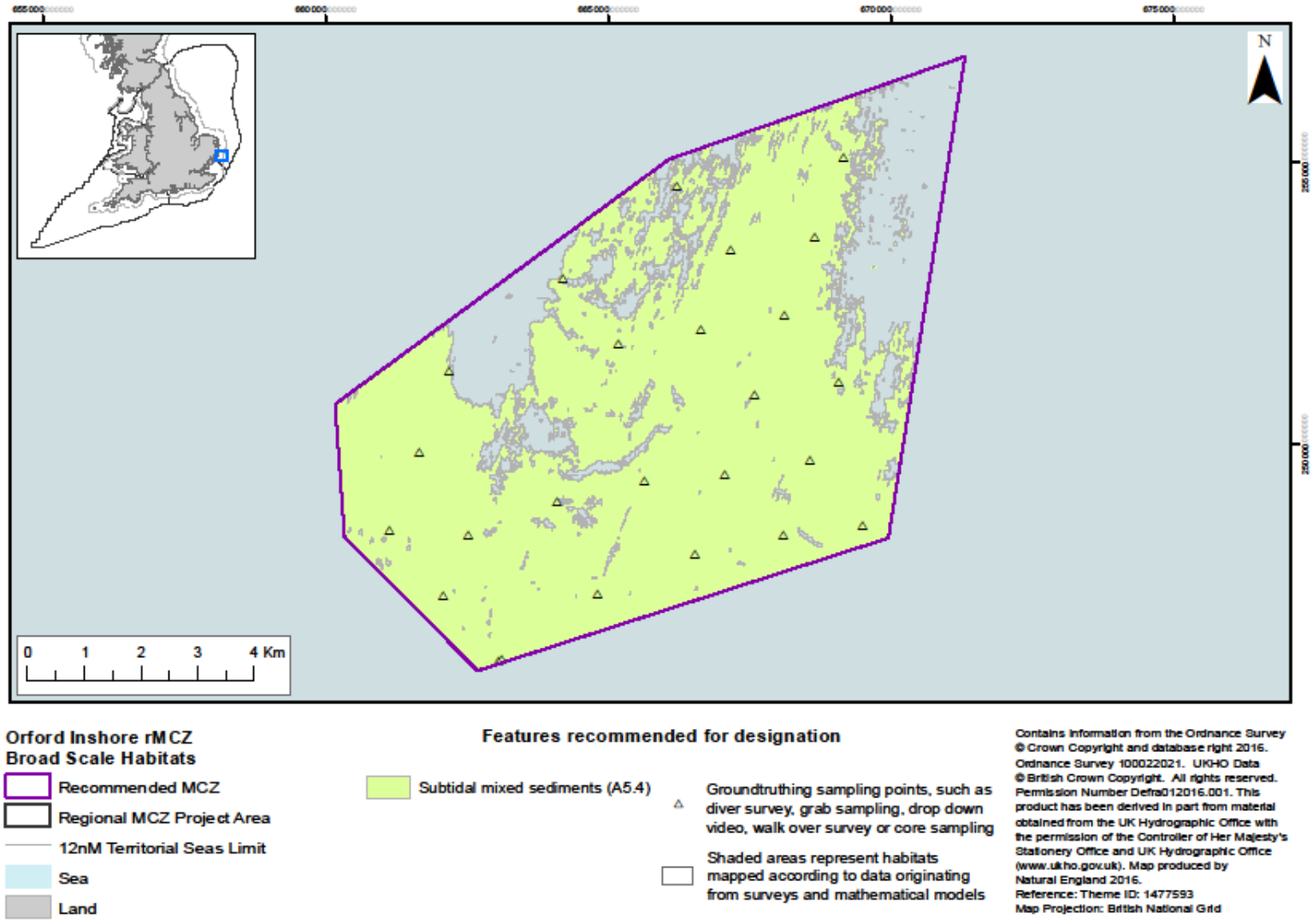


Figure 51 Location of mapped broad-scale habitats in Orford Inshore rMCZ

16.4 Summary of Natural England's advice

Table 18 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Orford Inshore rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Subtidal mixed sediments	High	High	Unfavourable	Recover	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

16.5 Additional advice

16.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

16.5.2 Advice on boundaries

No additional advice given to Defra on boundaries for this site.

17 Otter Estuary rMCZ (FS 21)

17.1 Site description

The Otter Estuary rMCZ is a small estuarine site on the south coast of Devon, 19 kilometres south east of Exeter, adjacent to the town of Budleigh Salterton. Natural England is providing advice on the estuary because of its extensive intertidal mud flats, other sediment habitats, coastal saltmarsh and saline reedbeds.

Flowing due south, the lower two kilometre reach of the River Otter is bounded by a sea embankment to the west and sandstone cliff (of up to 10 metres high) to the east. The estuary broadens to a maximum width of 500 metres. Here the deep, fine alluvium has enabled a well-developed pan and creek system to form. A shingle barrier running eastwards from the west shore virtually closes the estuary from the sea with the river entering through a five metre gap. Behind the barrier the relatively extensive marsh constitutes a rich diversity of flora and fauna, forming a natural flood defence. The intertidal mud at this site is ecologically linked to the saltmarsh and saline reedbed habitat, with several distinct communities of mud-dwelling invertebrates in the estuary.

This variety of species, together with adjacent habitats, provides food and shelter for a corresponding variety of bird species, some of which can be present in large numbers, principally curlew and lapwing. The area is an important additional feeding station for birds from the nearby Exe Estuary, especially during severe weather (English Nature 2001).

The estuary is also a nursery area for fish (including bass), with supporting benthic habitats. One of the reasons for the inclusion of this and other estuarine rMCZs in the network was in recognition of the added ecological importance of estuaries in terms of productivity, and their ecological function as nursery areas. The endangered European eel has also been recorded here.

17.2 Site image

Image 17 Otter Estuary image from Ecospan verification survey 2013 – report commissioned by Natural England © Natural England

17.3 Site maps

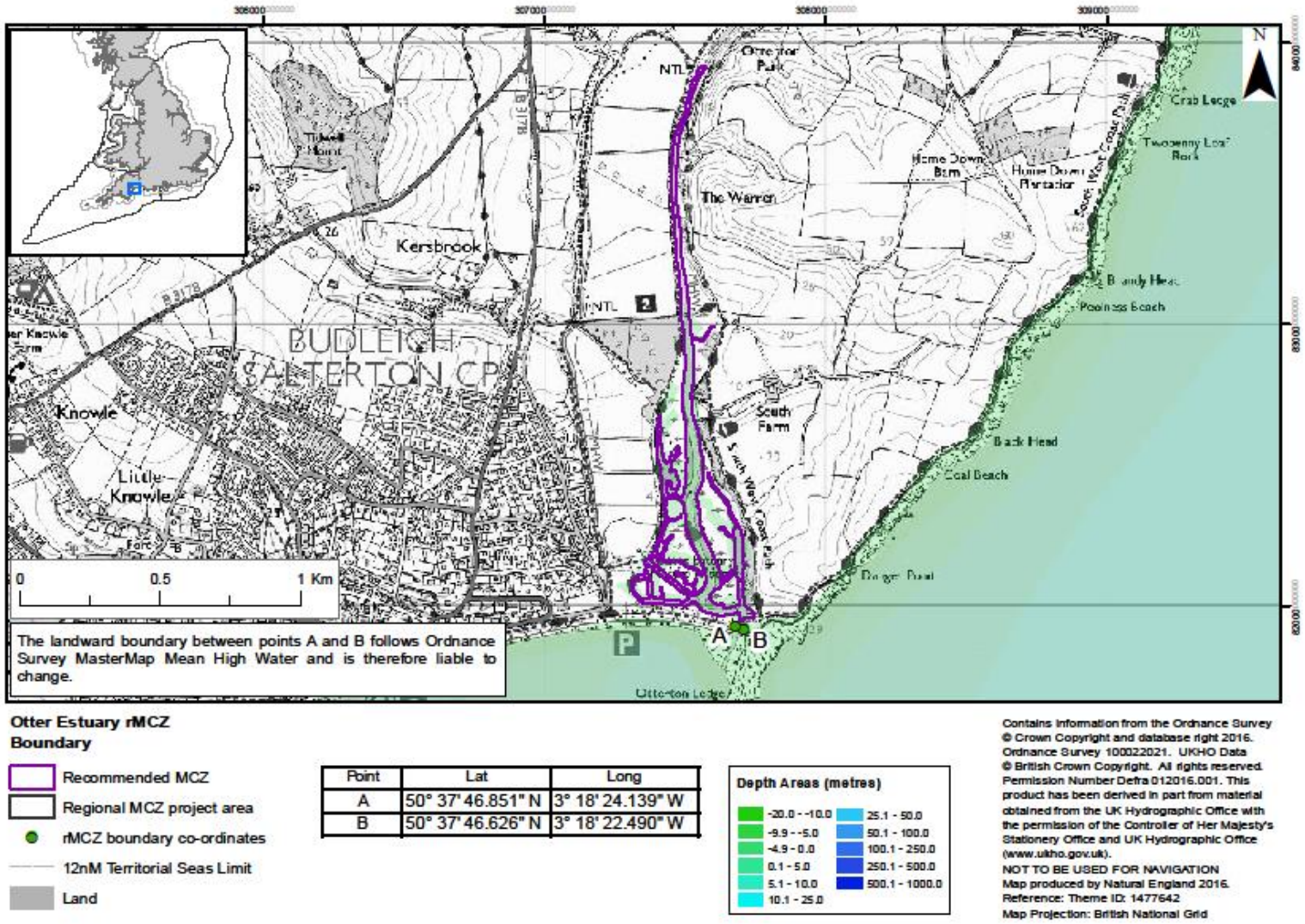


Figure 52 Otter Estuary rMCZ site boundary

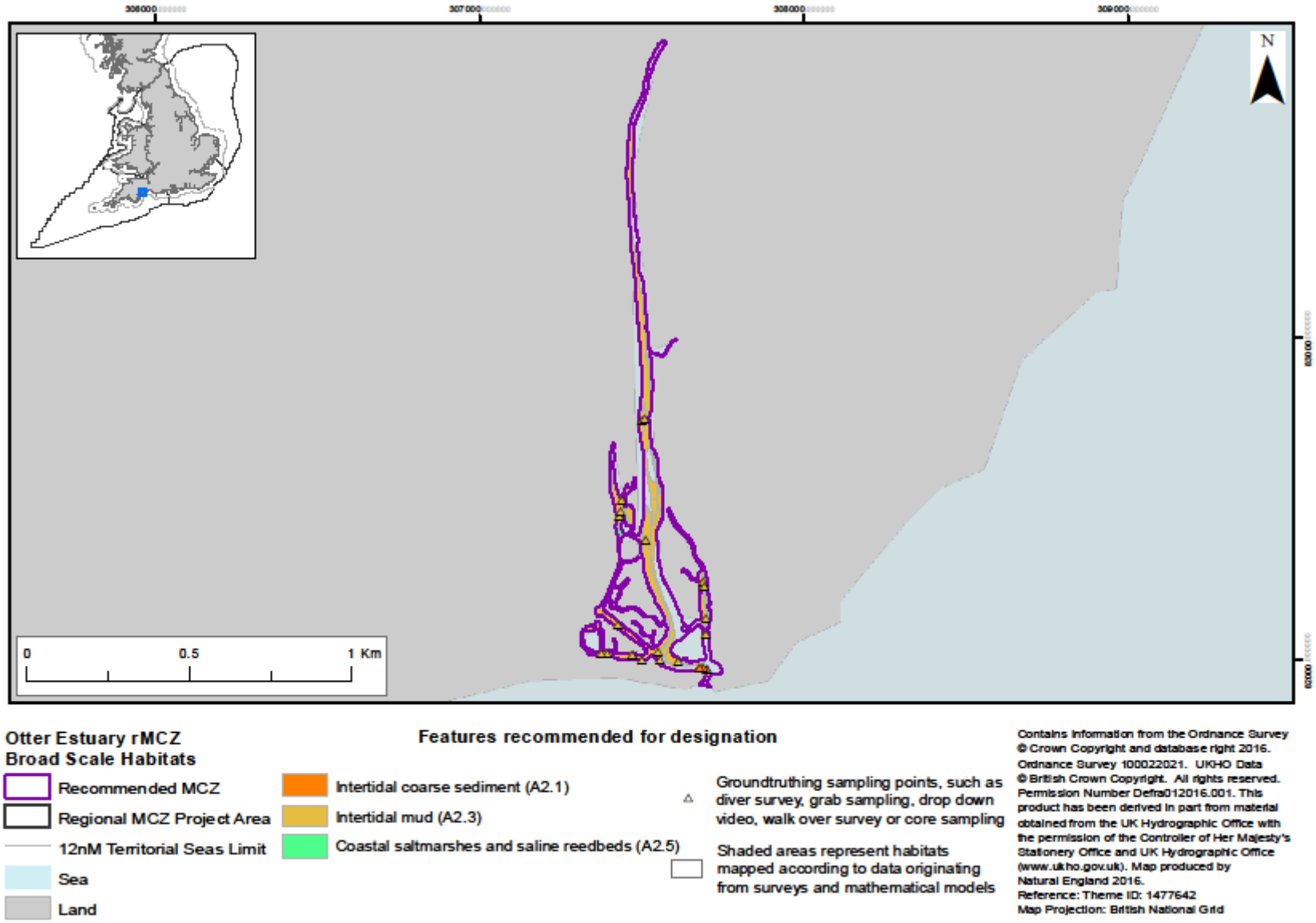


Figure 53 Location of mapped broad-scale habitats in Otter Estuary rMCZ

17.4 Summary of Natural England's advice

Table 19 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Otter Estuary rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Coastal saltmarshes and saline reedbeds	High	High	Favourable	Maintain	No change
High energy infralittoral rock	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Intertidal coarse sediment	High	High	Favourable	Maintain	No change
Intertidal mud	High	High	Favourable	Maintain	No change
Subtidal sand	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

17.5 Additional advice

17.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

17.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

18 Ribble Estuary rMCZ (ISCZ 17)

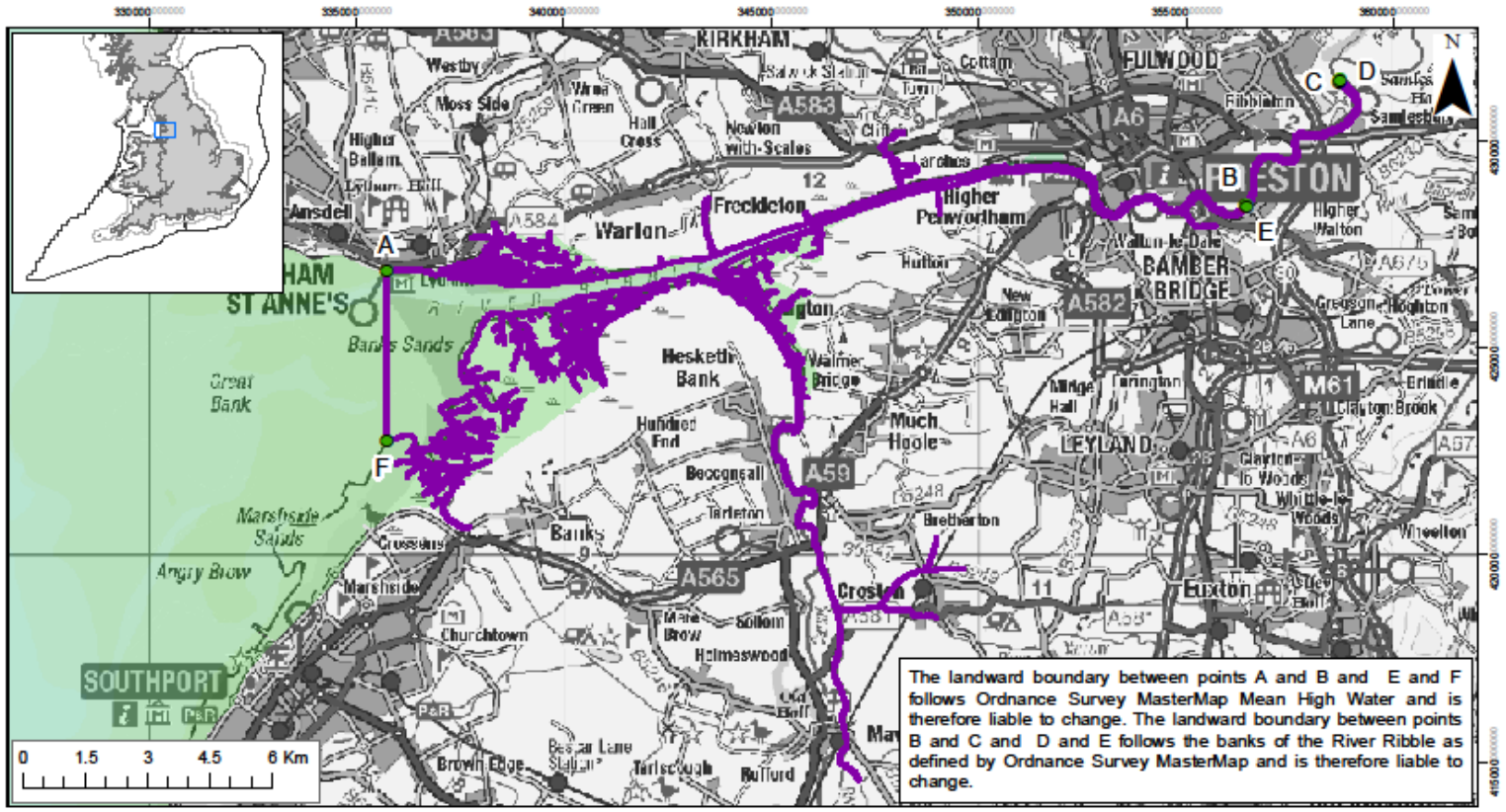
18.1 Site description

This rMCZ covers an area of 13 km^2 and is located on the north-west coast of England, near to Preston. It extends up to the tidal limit on the Ribble near Walton-le-Dale, on the River Douglas near Rufford and on the River Yarrow near Croston. Natural England is providing advice on the Ribble Estuary rMCZ for the highly mobile species smelt (*Osmerus eperlanus*). Within the Ribble there is a small self-recruiting smelt population, which is believed to have a strong potential for recovery. The estuary has extensive saltmarsh habitats which are important fish nursery grounds for a range of species. The outer estuary falls within the Ribble and Alt Estuaries Special Protection Area (SPA) and Ramsar site and the Ribble Estuary Site of Special Scientific Interest (SSSI) which provide protection to the saltmarsh and benthic habitats.

18.2 Site image

Image 18 Ribble Estuary rMCZ near tidal limit © Emily Hardman, Natural England

18.3 Site maps



Ribble Estuary rMCZ Boundary

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

Point	Lat	Long
A	53° 44' 2.416" N	2° 58' 33.663" W
B	53° 45' 1.309" N	2° 39' 44.103" W
C	53° 46' 38.690" N	2° 37' 41.829" W
D	53° 46' 40.238" N	2° 37' 40.341" W
E	53° 45' 0.194" N	2° 39' 41.885" W
F	53° 41' 49.774" N	2° 58' 30.472" W

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	

Figure 54 Ribble Estuary rMCZ site boundary

18.4 Summary of Natural England's advice

Full details of Natural England's advice on smelt (*Osmerus eperlanus*) and the evidence that has informed this advice can be found in Chapter 6 of **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**.

18.5 Additional advice

18.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

18.5.2 Advice on boundaries

The original (Regional Project recommended) rMCZ boundary was based on the OS map tidal limit. However, most stakeholders consider the true tidal limit to be located upstream of this location. It is highly likely that smelt spawning occurs at or close to the true tidal limit. The upstream limit of the boundary has therefore been extended to the weir at Red Scar wood so that the site encompasses the true tidal limit. This amendment was agreed with Defra and implemented and the current advice is based on the amended boundary.

19 Selsey Bill and the Hounds rMCZ (BS 25.2)

19.1 Site description

The site captures the unusual outcropping rock features that run along the mean low water limit on the western side of Selsey Bill, and extends out seawards to include the Hounds in the north-west and the rocky features off the headland itself. Survey data show the seabed to consist of, subtidal sand, coarse and mixed sediments as well as large areas of infralittoral rock in the western region of the site. The distinctive attributes here are the unusual outcrops of limestone and clay exposures (the Hounds, the Malt Owers, the Streets, the Grounds and the Mixon), some of which may be exposed at low tide. Along the north western coastline, a section of the geological feature, Bracklesham Bay, is incorporated into the site boundaries, where the Earnley Clay Formation exposes Eocene fossils along the beach.

This site is well known for its high biodiversity created by the unusual seabed topography and indicated by the benthic biotope richness data. In the south east of the site is the Mixon Hole, a dramatic 20 metre drop in the seafloor exposing clay cliffs capped with limestone and supporting a rich diversity of habitats and species (designated as a marine Site of Nature Conservation Importance (mSNCI) by East and West Sussex County Councils).

19.2 Site image

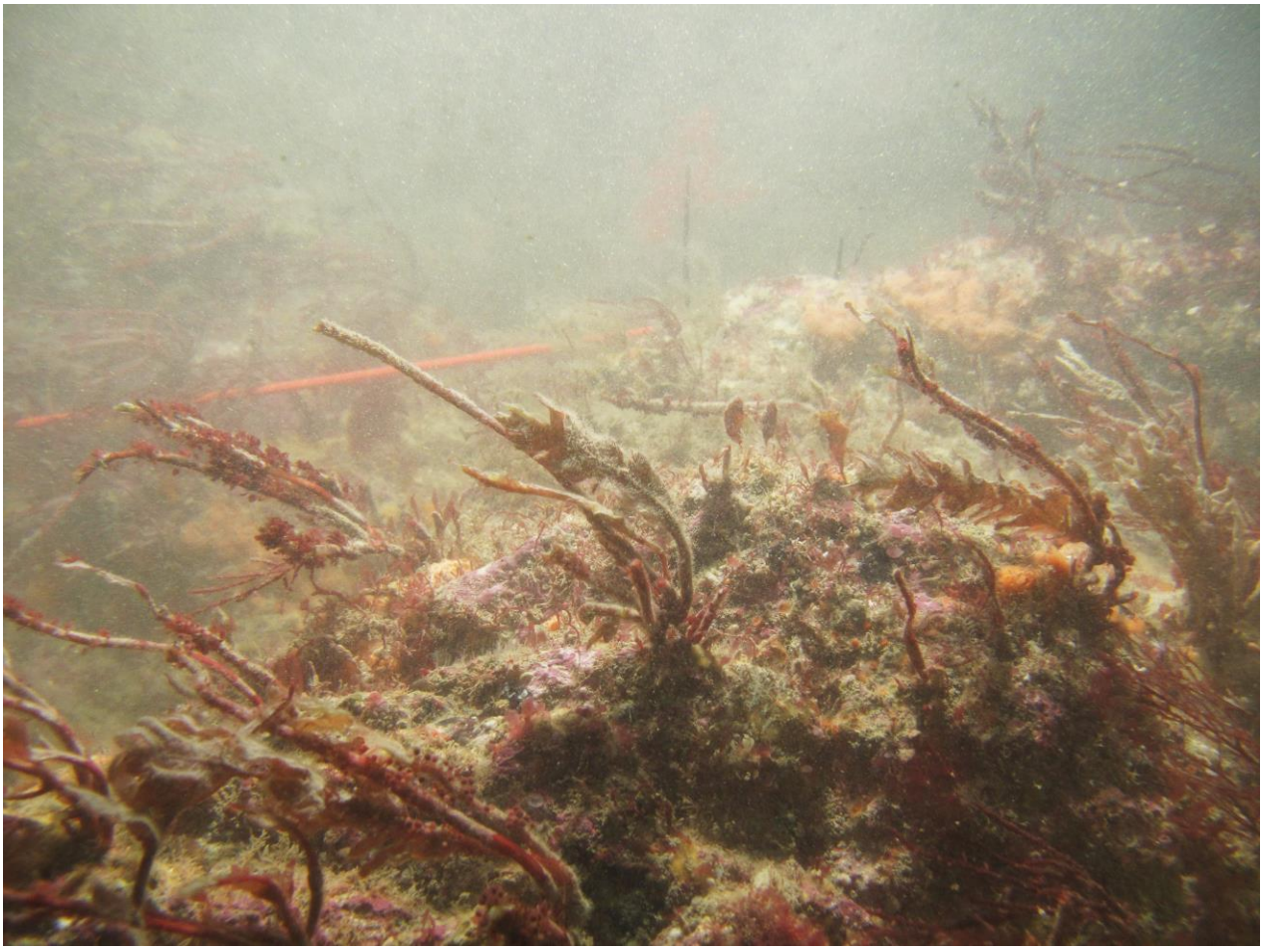
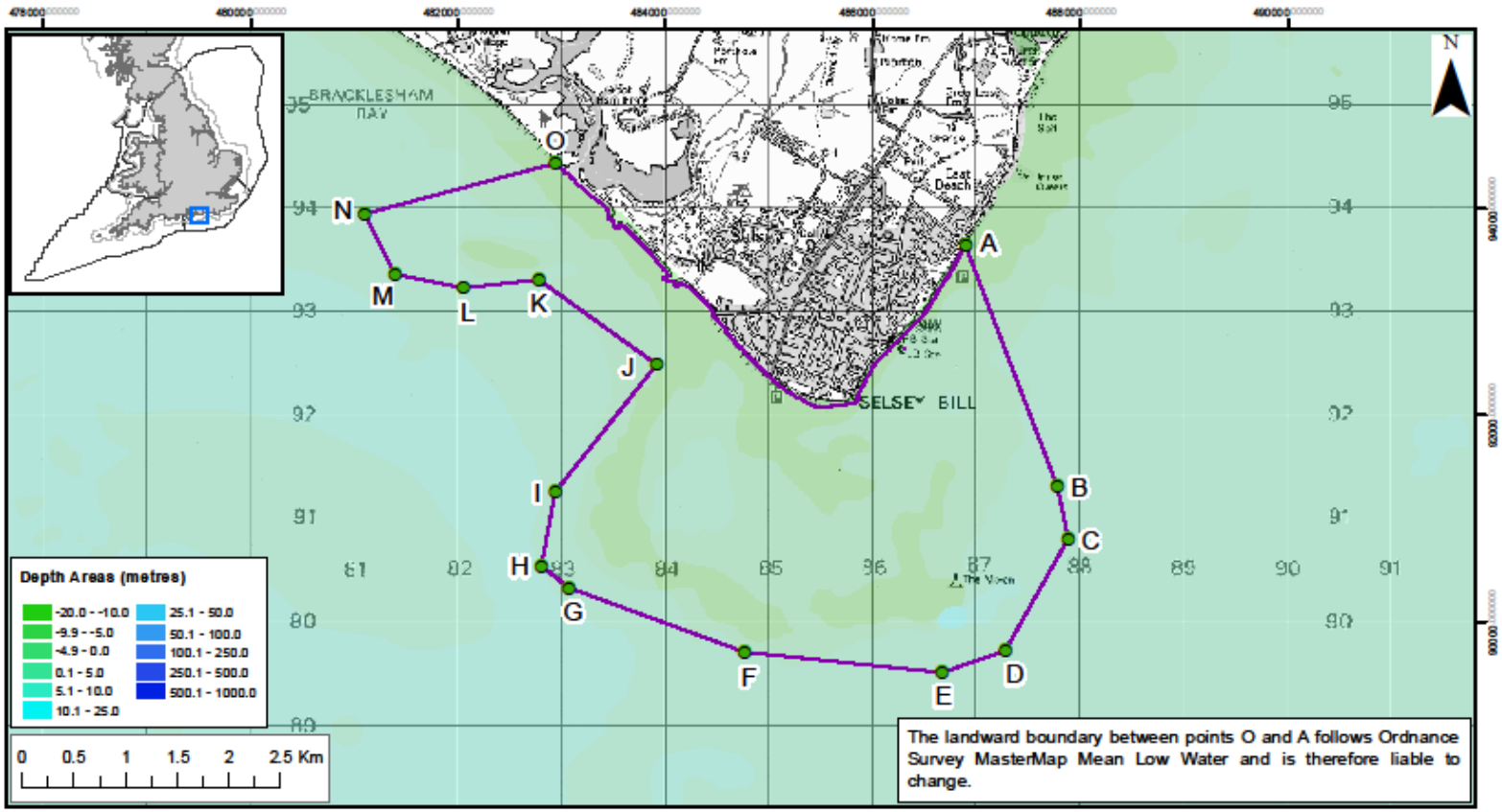


Image 19 Moderate energy infralittoral rock © Crown Copyright (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

19.3 Site maps



Selsey Bill and the Hounds rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	50° 44' 9.321" N	0° 46' 12.283" W	I	50° 42' 54.145" N	0° 49' 35.581" W
B	50° 42' 53.121" N	0° 45' 29.012" W	J	50° 43' 33.547" N	0° 48' 44.922" W
C	50° 42' 37.111" N	0° 45' 23.401" W	K	50° 44' 0.491" N	0° 49' 42.549" W
D	50° 42' 2.270" N	0° 45' 55.797" W	L	50° 43' 58.558" N	0° 50' 19.171" W
E	50° 41' 55.400" N	0° 46' 26.801" W	M	50° 44' 3.203" N	0° 50' 53.283" W
F	50° 42' 2.854" N	0° 48' 4.116" W	N	50° 44' 22.247" N	0° 51' 7.166" W
G	50° 42' 24.024" N	0° 49' 29.523" W	O	50° 44' 36.850" N	0° 49' 32.878" W
H	50° 42' 31.101" N	0° 49' 42.973" W			

Figure 55 Location of Selsey Bill and the Hounds rMCZ site boundary

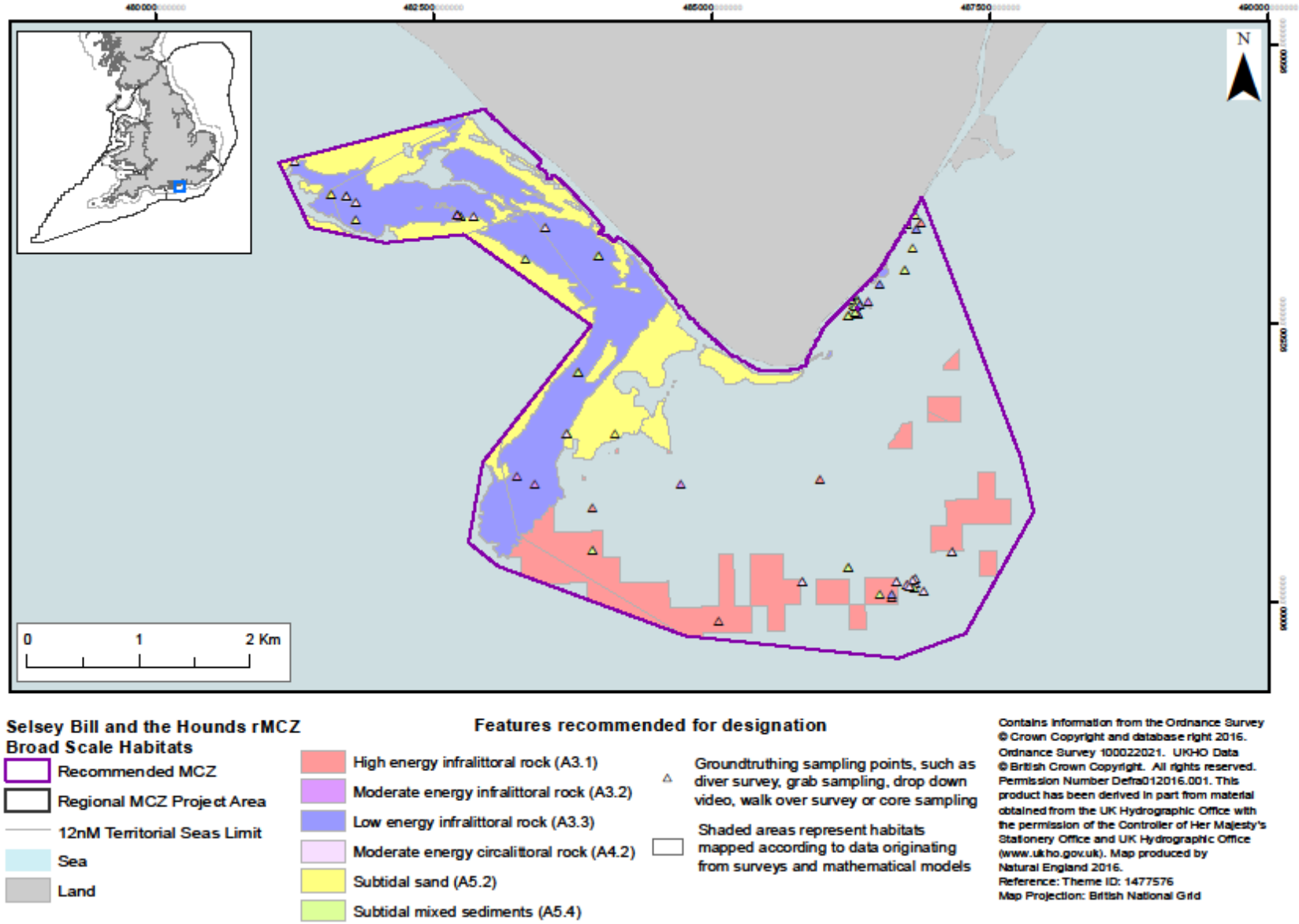


Figure 56 Location of mapped broad-scale habitats in Selsey Bill and the Hounds rMCZ

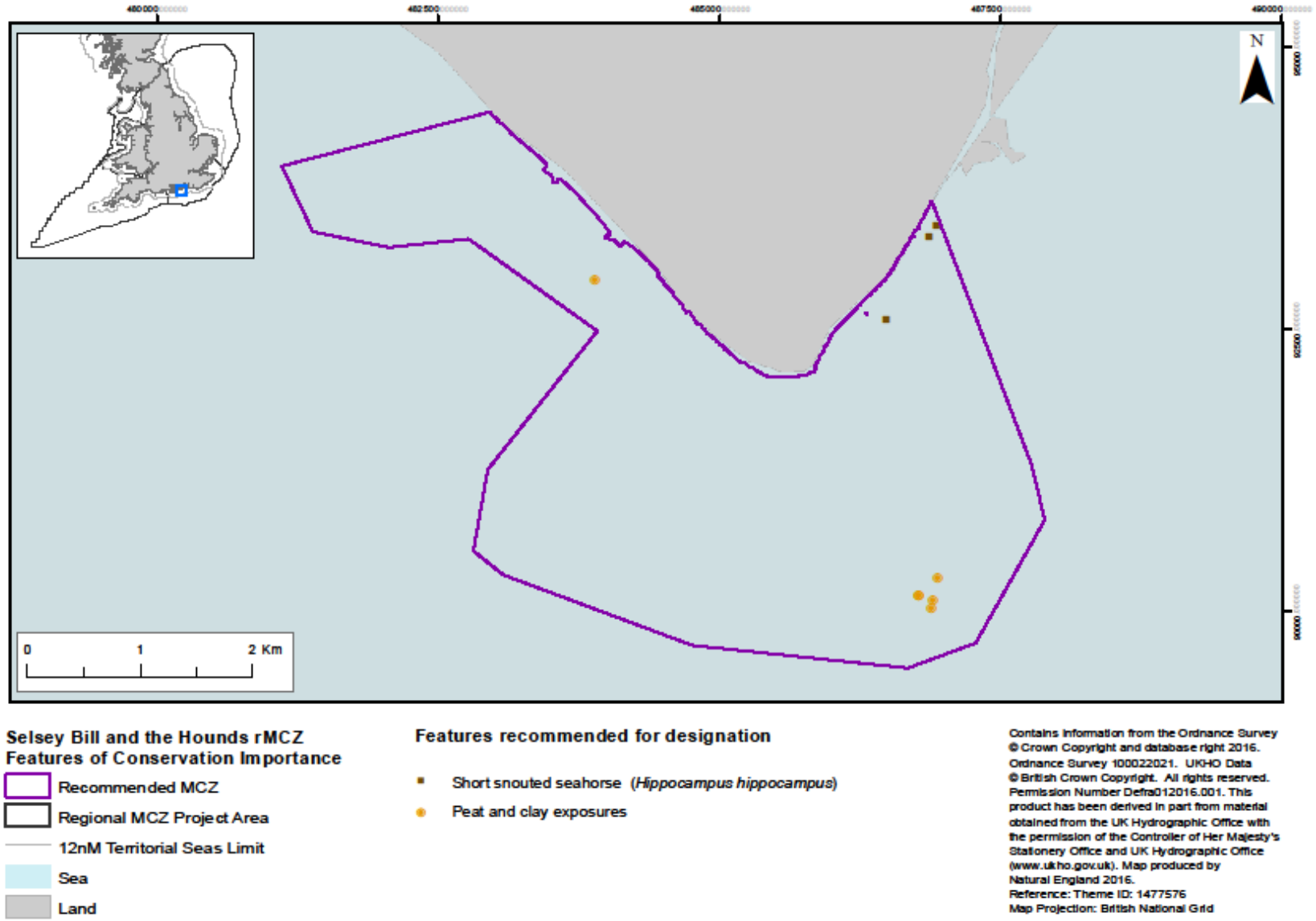


Figure 57 Location of mapped features of conservation importance in Selsey Bill and the Hounds rMCZ

19.4 Summary of Natural England's advice

Table 20 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Selsey Bill and the Hounds rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Bracklesham Bay	High	Low	Favourable	Maintain	No change
High energy infralittoral rock	Moderate	Moderate	Unfavourable	Recover	No change
Infralittoral rock and thin mixed sediment	No confidence	No confidence	Not assessed	Not assessed	Realigned to EUNIS level 3 BSH feature (circalittoral rock, subtidal sand and subtidal coarse sediment). Non-ENG feature as described here will not be advised on further. Please refer to section 19.5.1.1 for further information.
Infralittoral rock and thin sandy sediment	Moderate	Moderate	Not assessed	Not assessed	Realigned to EUNIS level 3 BSH feature (circalittoral rock, subtidal sand and subtidal coarse sediment). Non-ENG feature as described here will not be advised on further. Please refer to section 19.5.1.1 for further information.
Moderate energy infralittoral rock	Moderate	Moderate	Unfavourable	Recover	New feature (so has not been previously assessed)
Low energy infralittoral rock	Moderate	Moderate	Unfavourable	Recover	New feature (so has not been previously assessed)
Moderate energy circalittoral rock	Moderate	Moderate	Unfavourable	Recover	New feature (so has not been previously assessed)
Peat and clay exposures	Moderate	Moderate	Unfavourable	Recover	IFCA sighting data indicates a low level of trawling activity occurring over the site which could potentially overlap with the feature. Due to the feature's moderate-high sensitivity to the pressures associated with these activities Natural England advises a recover GMA.
Short snouted seahorse (*Hippocampus hippocampus*)	Moderate	Moderate	Favourable	Maintain	No change
Subtidal mixed sediments	Moderate	Moderate	Favourable	Maintain	No change
Subtidal sand	Moderate	Moderate	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

19.5 Additional advice

19.5.1 Advice on specific features

19.5.1.1 Non-ENG features

Infralittoral rock and thin sandy sediment (non_ENG_20)

Following recent surveys and the production of an updated habitat map in 2014 (SCOPAC 2015), areas previously described as Infralittoral rock and thin sandy sediment (non_ENG_20) in Selsey Bill and The Hounds rMCZ are now considered to be Subtidal sand (A5.2), Moderate energy circalittoral rock (A4.2) and Low and Moderate energy infralittoral rock (A3.3 and A3.2, respectively). This new data is of higher quality than that available during the regional project recommendations and therefore provides greater confidence. As a result, we now have limited evidence remaining to support Infralittoral rock and thin sandy sediment (non_ENG_20) in Selsey Bill and The Hounds rMCZ.

Despite achieving data sufficiency with a score of moderate confidence for both presence and extent, we advise that Infralittoral rock and thin sandy sediment (non_ENG_20) should not be considered for designation at this site. Instead we suggest this habitat be re-aligned to the ENG features – Moderate energy infralittoral rock (A3.2), Low energy infralittoral rock (A3.3), Moderate energy circalittoral rock (A4.2) and Subtidal sand (A5.2) (see section 2.3.2 below).

Infralittoral rock and thin mixed sediment (non_ENG_21)

Following recent surveys (JNCC and Natural England 2012) and the subsequent production of an updated habitat map in 2014, areas previously described as Infralittoral rock and thin mixed sediment (non_ENG_21) in Selsey Bill and The Hounds rMCZ are now considered to be Subtidal mixed sediment (A5.4), Moderate energy circalittoral rock (A4.2) and Low and Moderate energy infralittoral rock (A3.3 and A3.2, respectively). This new data is of higher quality than that available during the regional project recommendations and therefore provides greater confidence. As a result, we no longer have evidence to support the presence or extent of Infralittoral rock and thin mixed sediment (non_ENG_21) in Selsey Bill and The Hounds rMCZ.

We advise that Infralittoral rock and thin mixed sediment (non_ENG_21) should not be considered for designation in Selsey Bill and The Hounds rMCZ, due to its no confidence score for both presence and extent. However in light of the data provided by the recent surveys detailed above, we suggest the habitat be re-aligned to the ENG features – Subtidal mixed sediment (A5.4), Moderate energy infralittoral rock (A3.2), Low energy infralittoral rock (A3.3) and Moderate energy circalittoral rock (A4.2)

19.5.1.2 ENG features

Subtidal sand is an existing proposed feature of Selsey Bill and the Hounds rMCZ, and based on recent survey evidence we propose realigning the "thin sandy sediment" element of the Non_ENG_20 feature to this more widely recognised EUNIS sediment feature.

Subtidal mixed sediments is an existing proposed feature of Selsey Bill and the Hounds rMCZ, and based on recent survey evidence, we propose realigning the "mixed sediment" element of the

Non_ENG_21 feature to this more widely recognised EUNIS sediment feature.

The more widely recognised ENG EUNIS rock features detailed below are our suggested realignments of the rock areas previously put forward by the Regional Seas Project for Selsey Bill and The Hounds rMCZ: Infralittoral rock and thin mixed sediment (non_ENG_21) and Infralittoral rock and thin sandy sediment (non_ENG_21).

Across the whole site there are a significant number of point data from eight different sources have contributed to the assessment of moderate confidence in both the presence and extent of **Moderate energy infralittoral** rock in Selsey Bill and The Hounds rMCZ. There are data from four different sources have contributed to the assessment of moderate confidence for both present and extent of **Low energy infralittoral rock** in Selsey Bill and The Hounds rMCZ.

Twelve sources of evidence have contributed to the assessment of moderate confidence in both presence and extent of **Moderate energy circalittoral rock** in Selsey Bill and The Hounds rMCZ. Among the areas described as Moderate energy circalittoral rock is 'The Mixon'; an area highlighted by the Regional Project as of particular interest - "The Mixon Hole is an almost vertical 20 metre high soft light grey clay cliff overlain by an exposure of stiff blue clay with a cap of limestone bedrock." In addition to the justifications made regarding the re-alignment of the non_ENG to ENG features, designation of Moderate energy circalittoral rock would ensure appropriate protection and feature-specific management for this unusual circalittoral habitat.

19.5.1.3 Bracklesham Bay geological feature

The geological feature of Bracklesham Bay within Selsey Bill and the Hounds rMCZ was rated High / Low for presence / extent in our Confidence Assessment. Our confidence assessment result for extent was manually downgraded to Low to align with the 2012 Confidence Assessment result, since no other new data were available. However, taking the recommendations of the Regional Project and notes from the Geological Conservation Review into account, we recommend further consideration of this feature for designation in order to protect the succession of sediments belonging to the Middle Eocene Bracklesham Group and the rich fossil marine molluscan assemblages that it contains, as well as the unique variety of fossilised fish species and abundance of fossils at this site.

The Geological Conservation Review texts for these features (Daley & Balson 1999) states that locally much of the beds are obscured by recent beach deposits. Exposure of the solid geology depends on the state of the tide and the shifting beach sands and shingle and may only be exposed at very low tides. The review concludes: 'the conservation value of this highly fossiliferous site is derived from its unique record of chondrichthyan species of this Early–Mid-Eocene age, its rich marine molluscan assemblages as well as the chronostratigraphical and magnetostratigraphical data it has provided. It remains worthy of further collecting and attention to its palaeontology, palaeoecology and stratigraphy'.

These features were key reasons for the notification of the Bracklesham Bay SSSI, however this designation only partially protects the richly diverse range of fossils and stratigraphical succession down to mean low water, and designation of the MCZ feature would afford additional protection below mean high water.

The limited available 'map' evidence we have is from 1977 (Curry *et al.* 1977) and is based on an expert sketch of the intertidal area (see Figure 58 below), as such it was not possible for us to rate the confidence in subtidal extent any higher than 'Low' at this time. The current lack of evidence on extent/distribution is due to this feature not being a focus of targeted verification surveys, and no available recent geological surveys, rather than an indication that the feature is not widespread.

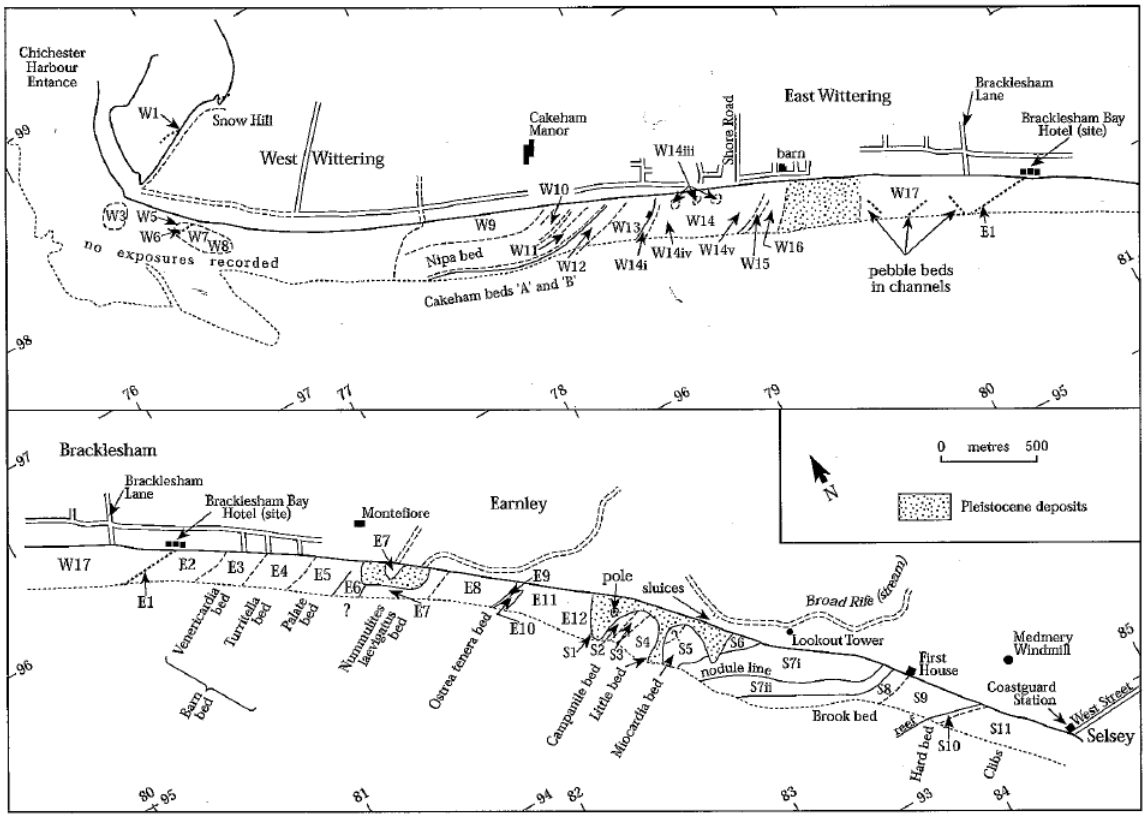


Figure 6.19 Map of the foreshore exposures from Wittering to Selsey, Bracklesham Bay, West Sussex (from Curry *et al.*, 1977, fig. 4). For the stratigraphical relationships of the beds prefixed W, E and S, see Figure 6.20.

Figure 58 The Bracklesham Beds (Eocene) of Bracklesham Bay and Selsey, Sussex (from Curry *et al*. 1977)

19.5.2 Advice on the site boundary

Short snouted seahorses (*Hippocampus hippocampus*) were originally recommended by the Regional Project as a feature of the rMCZ, but the original boundary did not capture the records. The boundary has therefore been extended to encompass the seahorse records.

This site is one of four Tranche 3 rMCZs being considered for this feature, for which there is currently considered to be a replication gap in the MPA network, and this site is considered to provide the best example.

These boundary amendments have been agreed with Defra and the current advice is based on this amended boundary.

20 The Solway Firth rMCZ (ISCZ 15)

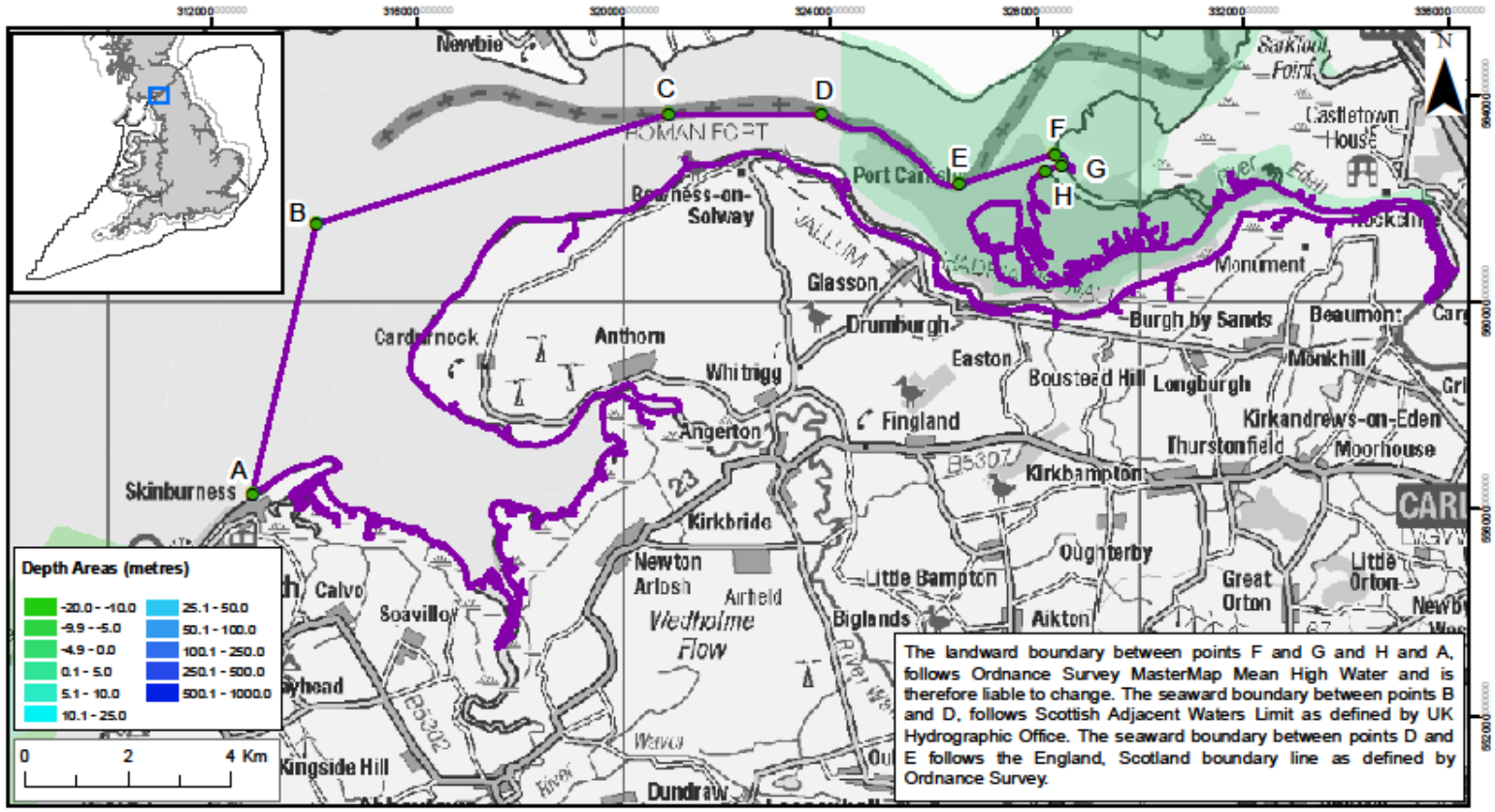
20.1 Site description

This site is located in the Solway Firth in the north eastern Irish Sea. The site extends from the shore to the middle of the estuary where the devolved administrative boundaries of Scottish waters begin. This rMCZ completely falls within the Solway Firth SAC, which already protects many of the benthic features throughout the site, such as the coastal saltmarsh habitat which is an important nursery area for a range of fish species, including bass. The rMCZ has been selected as a representative area where there are historic records of spawning smelt *Osmerus eperlanus* upstream. On a national level, smelt have been subject to declines in abundance. Historically, smelt were common in the Solway Firth and were the target of a large fishery.

20.2 Site image

Image 20 Solway Firth rMCZ potential smelt spawning habitat © Laurence Browning, Natural England

20.3 Site maps



Solway Firth rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	54° 53' 37.803" N	3° 21' 39.916" W	E	54° 56' 58.726" N	3° 8' 56.472" W
B	54° 56' 26.640" N	3° 20' 36.321" W	F	54° 57' 18.885" N	3° 7' 12.027" W
C	54° 57' 39.499" N	3° 14' 14.934" W	G	54° 57' 11.964" N	3° 7' 4.229" W
D	54° 57' 41.307" N	3° 11' 27.086" W	H	54° 57' 7.530" N	3° 7' 23.018" W

Figure 59 Solway Firth rMCZ site boundary

20.4 Summary of Natural England's advice

Full details of Natural England's advice on smelt (*Osmerus eperlanus*) and the evidence that has informed this advice can be found in Chapter 7 of **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**.

20.5 Additional advice

20.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

20.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site

21 South of Portland rMCZ (FS 18)

21.1 Site description

This rMCZ is located approximately half a kilometre to the south-west of Portland Bill, extending out for about six kilometres, with a width of approximately three kilometres. The rMCZ is in the 30 to 60 metre depth range. The site encompasses a portion of the geological / geomorphological feature of importance, Portland Deep. This is a depression in the seabed off the south-west of Portland Bill, and the area is characterised by strong tidal streams (the Portland Race). The north-western corner of the site includes an area of coarse and sandy sediment ripples on the seabed. The southern and western side of Portland has been mapped as an area of higher than average benthic species diversity. The site is included in Natural England's advice in order to protect the unique area of seabed within the Portland Deep, as well as to contribute to the Ecological Network Guidance targets for the network as a whole (JNCC 2016).

21.2 Site image

Image 21 Moderate energy circalittoral rock © Crown Copyright (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

21.3 Site maps

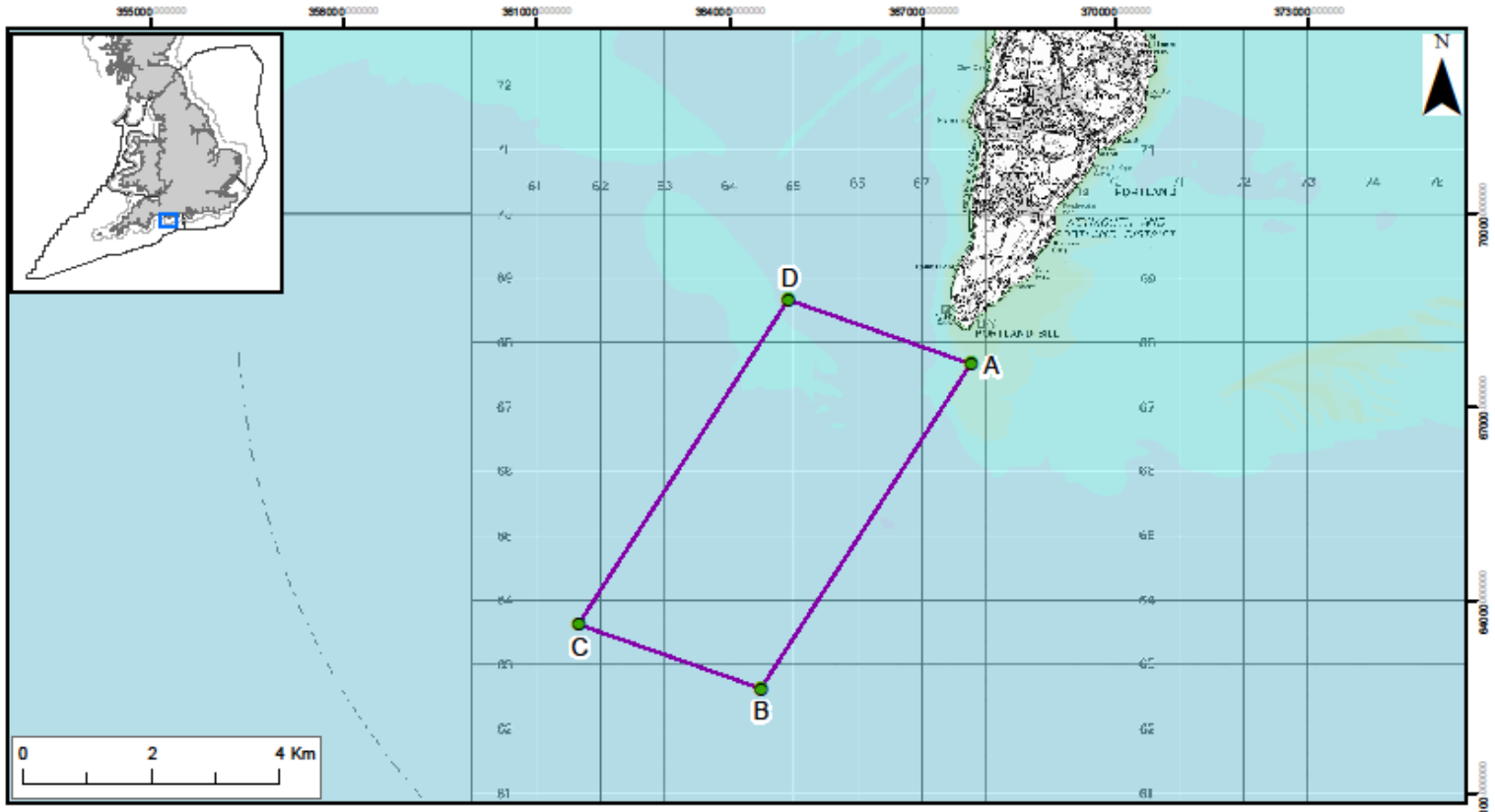


Figure 60 South of Portland rMCZ site boundary

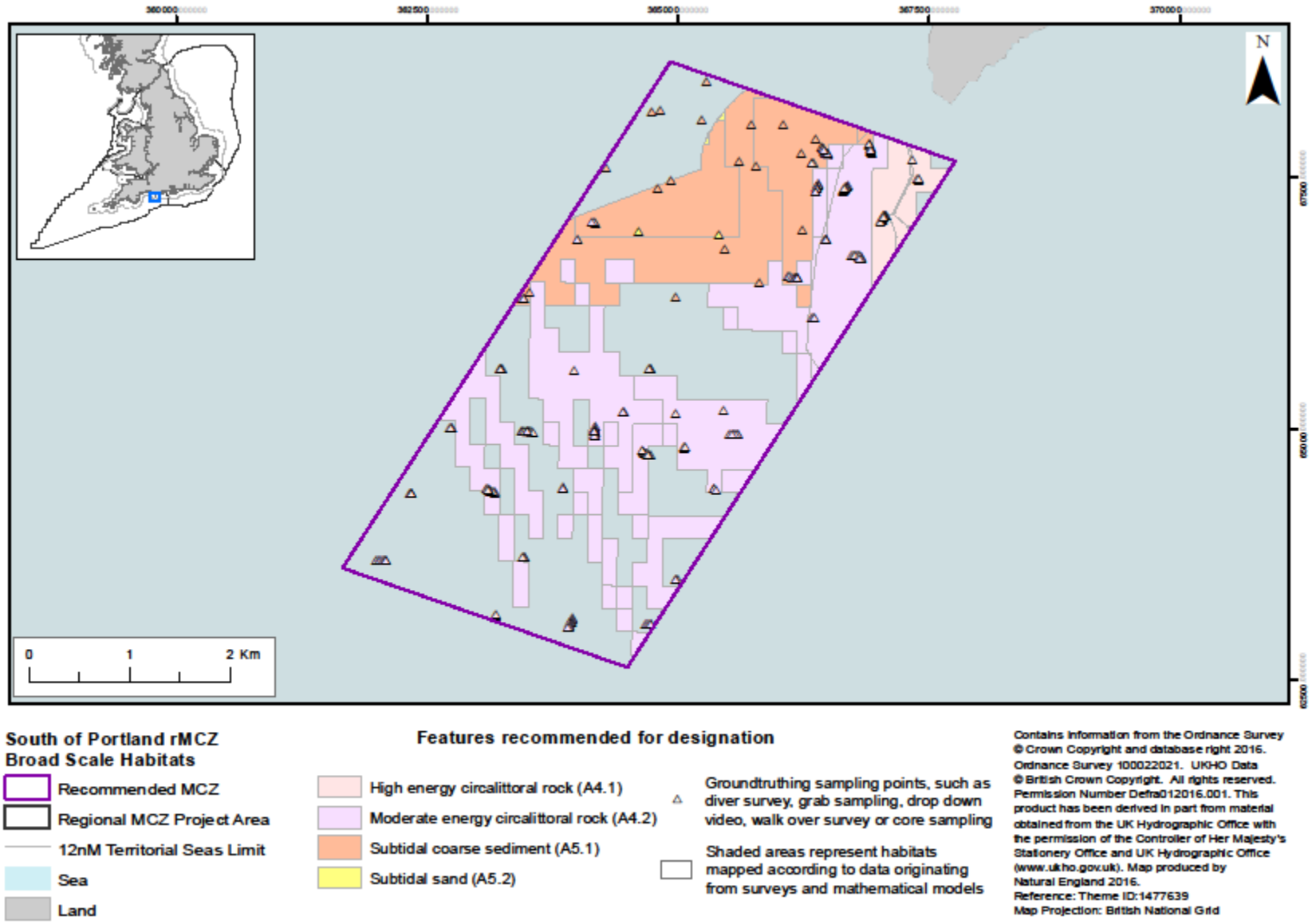


Figure 61 Location of mapped broad-scale habitats in South of Portland rMCZ

21.4 Summary of Natural England's advice

Table 21 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the South of Portland rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
High energy circalittoral rock	High	Moderate	Unfavourable	Recover	New fishing data has become available since the last assessment, and therefore a recover GMA has been triggered due to a vulnerability to trawling and dredging which take place over the feature.
Moderate energy circalittoral rock	High	Moderate	Unfavourable	Recover	New fishing data has become available since the last assessment, and therefore a recover GMA has been triggered due to a vulnerability to trawling and dredging which take place over the feature.
Portland Deep	High	High	Favourable	Maintain	No change
Subtidal coarse sediment	High	High	Unfavourable	Recover	New fishing data has become available since the last assessment, and therefore a recover GMA has been triggered due to a vulnerability to trawling and dredging which take place over the feature.
Subtidal mixed sediments	Low	Low	Unfavourable	Recover	New fishing data has become available since the last assessment, and therefore a recover GMA has been triggered due to a vulnerability to trawling and dredging which take place over the feature.
Subtidal sand	Moderate	Moderate	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

21.5 Additional advice

21.5.1 Advice on specific features

21.5.1.1 Subtidal mixed sediments in South of Portland rMCZ

We currently have low confidence in both the presence and extent of subtidal mixed sediments (A5.4) within South of Portland rMCZ. These low confidence calculations are based on limited data of one ground-truthing point. The point occurs within a polygon of subtidal coarse sediment (A5.1) in which we have high confidence in both presence and extent. In addition to the ground-truthing point, there is further point data for A5.4 based on the parent feature (A5) which occurs throughout the same polygon.

Current expert judgement of the site is that A5.4 could occur due to the mixed nature of the features within the site; predominantly rock, coarse sediment and sand.

This feature is potentially subject to risk from fishing activity, since dredging and trawling currently occur within this site, according to our best available evidence.

Based on the potential for subtidal mixed sediments to occur within the site, and the feature's potential moderate/high vulnerability to dredging and demersal trawling, we advise that the feature should be further considered for designation in this site.

21.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

22 Studland Bay rMCZ (FS 15)

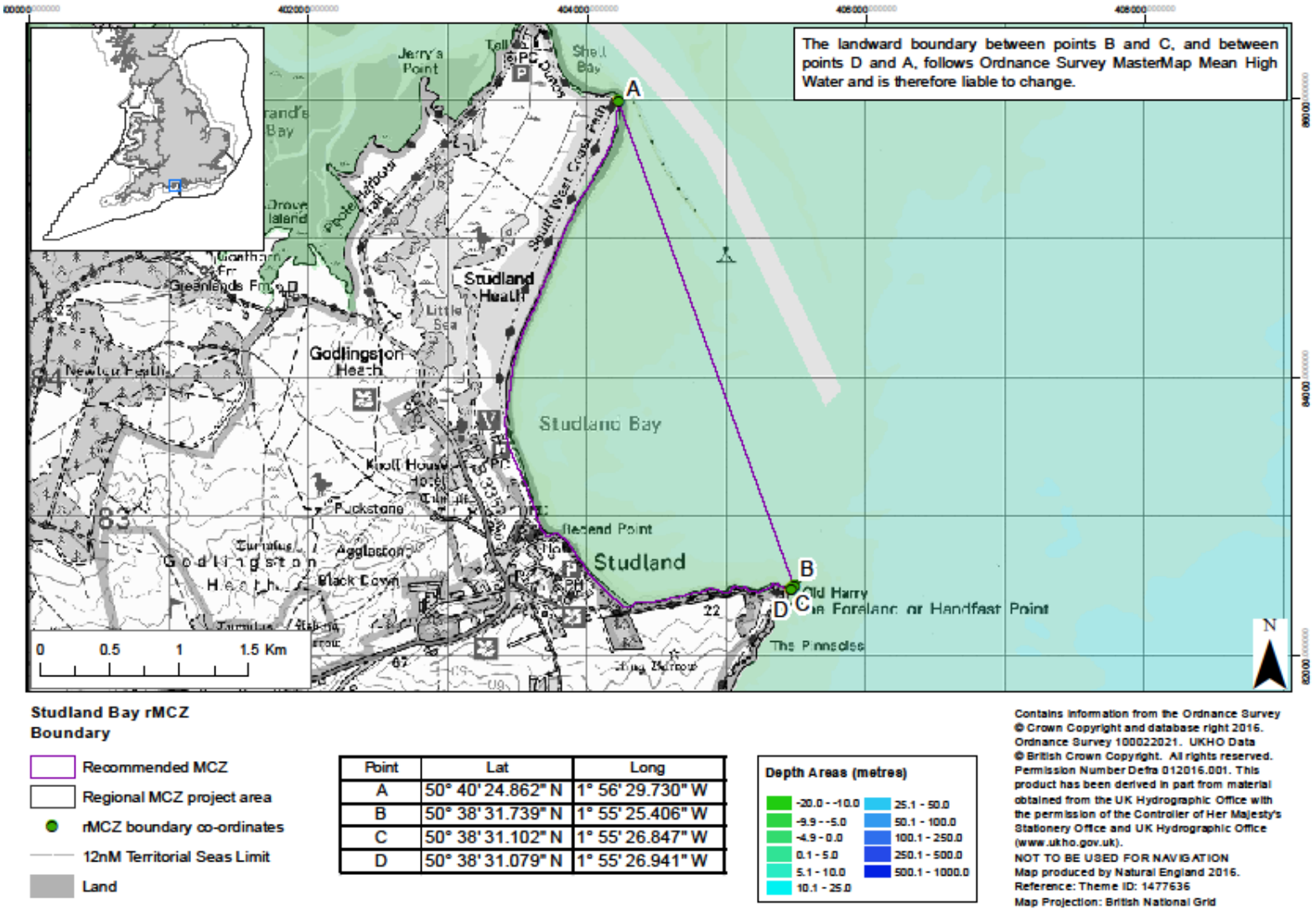
22.1 Site description

Studland Bay is located to the south of Poole Harbour. The shallow, sandy bay curves approximately five kilometres around from north to south and faces in a westerly direction within the larger Poole Bay area. Natural England is providing advice on this site predominately because of the extensive seagrass bed found in the shallow subtidal waters. It is one of two significantly large seagrass beds in Dorset and the only large bed in the east of Dorset, supporting a rich combination of marine biota not found in other habitats. Subtidal seagrass beds (predominantly *Zostera marina*) are key habitats with high rates of primary production and are a main source of food for overwintering wildfowl. They act as a nursery ground for juvenile fish and provide shelter for a wide range of species, including the long-snouted seahorse (*Hippocampus guttulatus*) and cuttlefish (*Sepia officinalis*), also use the seagrass to lay their eggs.

22.2 Site image

Image 22 Seagrass beds © Natural England (Please note this photograph is provided as an example of the above habitat and feature only and does not necessarily represent the habitats and features found at the site).

22.3 Site maps



Point	Lat	Long
A	50° 40' 24.862" N	1° 56' 29.730" W
B	50° 38' 31.739" N	1° 55' 25.406" W
C	50° 38' 31.102" N	1° 55' 26.847" W
D	50° 38' 31.079" N	1° 55' 26.941" W

Figure 62 Studland Bay rMCZ site boundary

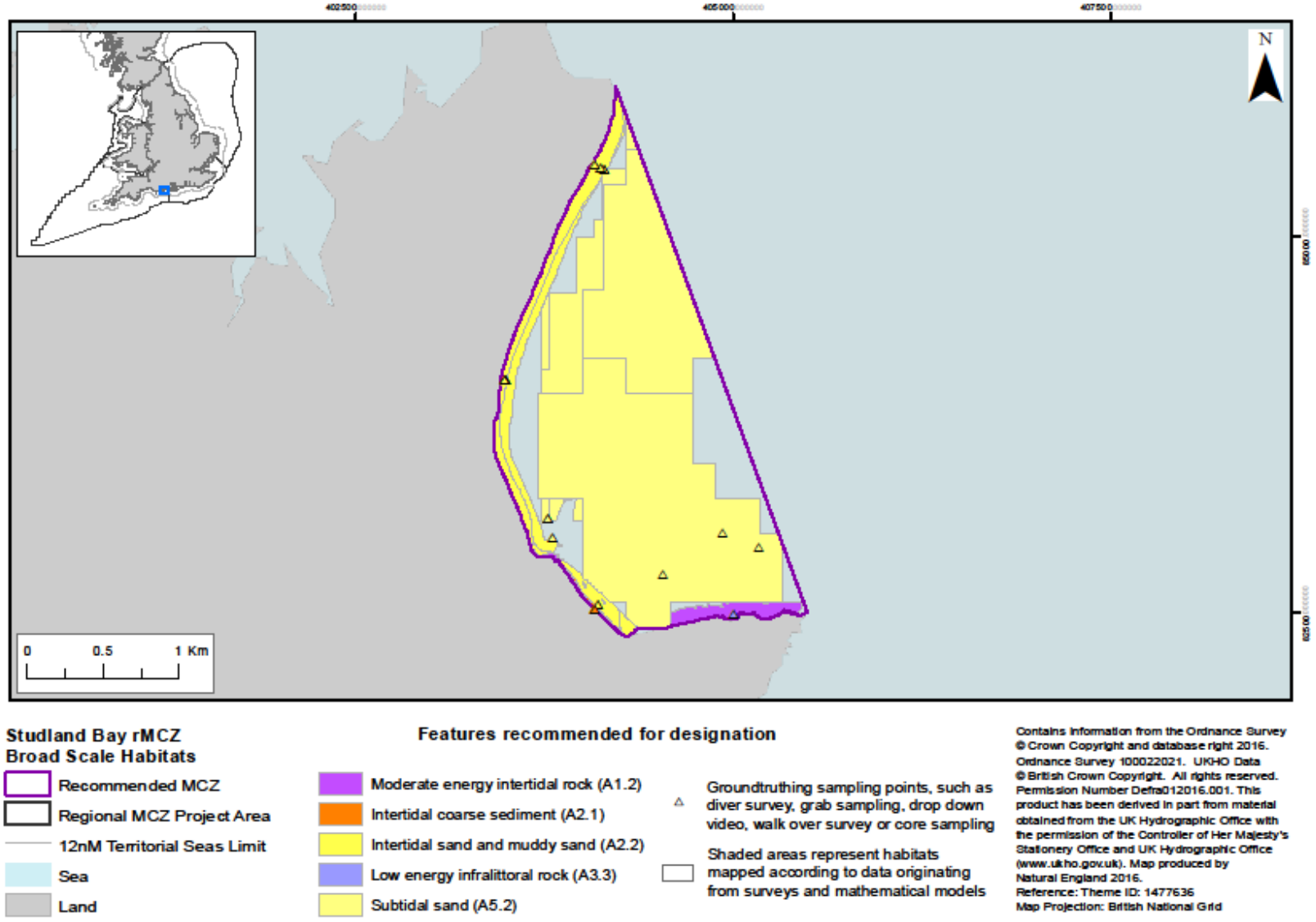


Figure 63 Location of mapped broad-scale habitats in Studland Bay rMCZ

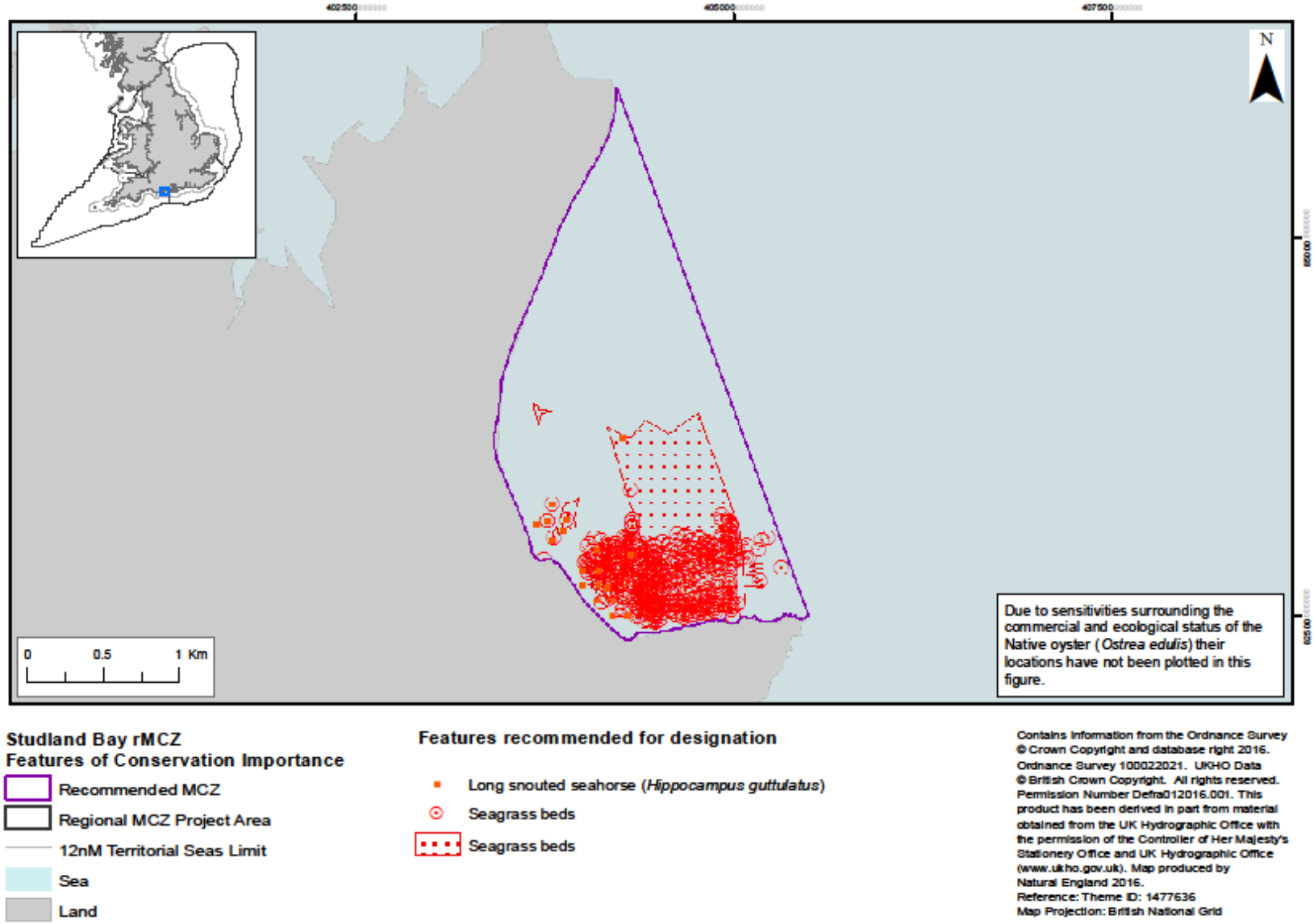


Figure 64 Location of mapped features of conservation importance in Studland Bay rMCZ

22.4 Summary of Natural England's advice

Table 22 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Studland Bay rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Intertidal coarse sediment	High	High	Favourable	Maintain	No change
Intertidal mixed sediments	Low	Low	Favourable	Maintain	The feature has previously been triggered into recover GMA by a range of recreational activities. During this assessment, when examining the pressures of the activities it was judged that these pressures would either not impact the feature, not reach the pressure benchmark for damage or the activity is not at a level that would be of concern, therefore a maintain GMA has been advised.
Intertidal mud	Low	Low	Favourable	Maintain	No change
Intertidal sand and muddy sand	High	High	Favourable	Maintain	No change
Long snouted seahorse (*Hippocampus guttulatus*)	High	High	Favourable	Maintain	The feature has previously been triggered into recover GMA by a range of fishing and recreational activities (anchoring, mooring). During this assessment, when examining the pressures of the activities it was judged that these pressures would not impact the species directly, therefore a maintain GMA has been advised. The habitat for which this species has been recorded in (seagrass) has a Recover GMA and therefore any potential damaging activities could be managed through its designation.
Low energy infralittoral rock	Moderate	Moderate	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Moderate energy intertidal rock	High	High	Favourable	Maintain	No change
Native oyster (*Ostrea edulis*)	High	High	Favourable	Maintain	No change
Seagrass beds	High	High	Unfavourable	Recover	No change
Sheltered muddy gravels	Low	Low	Unfavourable	Recover	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Short snouted seahorse (*Hippocampus hippocampus*)	Low	Low	Favourable	Maintain	The feature has previously been triggered into recover GMA by a range of fishing and recreational activities (anchoring, mooring). During this assessment, when examining the pressures of the activities, it was judged that these pressures would not impact the species directly. Therefore a maintain GMA has been applied. The habitat where this species has been recorded (seagrass) has a Recover GMA and therefore any potential damaging activities could be managed through its designation.
Subtidal chalk	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Subtidal coarse sediment	Low	Low	Unfavourable	Recover	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Subtidal mixed sediments	Low	Low	Unfavourable	Recover	Change in GMA to recover is due to better understanding of where the feature and activity interact and therefore exposure to activity Z11.2 (powerboating or sailing with an engine) and Z11.4 (sailing without an engine) have been updated to exposed.
Subtidal sand	Moderate	Moderate	Favourable	Maintain	No change
Undulate ray (*Raja undulata*)	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

22.5 Additional advice

22.5.1 Advice on specific features

22.5.1.1 Subtidal mixed sediments and Sheltered muddy gravels in Studland Bay rMCZ

We currently have low confidence in both the presence and extent of subtidal mixed sediments (A5.4) within Studland Bay rMCZ. These low confidence calculations are based on limited data of 1 point, which occurs within a polygon of subtidal sand (A5.2; moderate confidence in presence and extent) and also within a polygon of seagrass beds (HOCI_17) – a feature which has high confidence in presence and extent within the site. There is currently no polygon data for subtidal mixed sediments within the site.

Similarly, we have low confidence in the presence and extent of sheltered muddy gravels (HOCI_19), as this feature is solely represented by the same data point as subtidal mixed sediments.

Although both subtidal mixed sediments and sheltered muddy gravels have a potential moderate/high vulnerability to damage from powerboating, sailing and anchoring, due to our low confidence in the presence of the features and their location within high confidence seagrass beds, we advise that these features should not be further considered for designation.

22.5.1.2 Subtidal coarse sediment in Studland Bay rMCZ

We currently have low confidence in both presence and extent of subtidal coarse sediment (A5.1) within Studland Bay rMCZ. Evidence for this feature within the site is based on polygonal data from EU SeaMap, which is based on predictive modelling. Further, no ground truthing points for A5.1 occur within the same area or within the site boundary.

However, the feature is considered to be potentially at high risk due its assessed moderate/high vulnerability to current and future levels of fishing activity (demersal trawling), according to our best available evidence. Therefore, on the basis of risk, we advise that A5.1 should be further considered for designation at this site.

22.5.1.3 Undulate Ray in Studland Bay rMCZ

Undulate ray (*Raja undulata)* would contribute to filling a gap in the MPA network if designated in Studland Bay rMCZ. Currently, it is the only viable rMCZ site option for the species/feature in the region. Based on Protocol E (JNCC and Natural England 2012), we would have moderate confidence for the presence of *R. undulata* in the site and low confidence in its extent.

These confidences are currently based on three records; two records from CEFAS and one record from SeaSearch. For a non-mobile species, these records would provide adequate confidence for feature designation, as it would be contributing to filling a gap in the MPA network. However, as undulate rays are a mobile species, confidence in their presence/extent alone is not considered sufficient. Instead, for consistency, this mobile species feature has also been assessed against the Highly Mobile Species MCZ Principles (JNCC and Natural England 2016).

We do not have sufficient evidence for undulate rays in Studland Bay meeting these principles and,

thereby, do not have sufficient confidence that the site would serve to conserve the species. The evidence currently available has not been deemed sufficient to demonstrate that the area is of critical importance to a key life cycle stage (i.e. feeding or breeding behaviours) (Principle 1) or site fidelity (i.e. Persistence: Principle 2). We are therefore advising "No Confidence" in the feature and that it is not taken forward to designation.

22.5.2 Advice on the site boundary

No additional advice given to Defra on boundaries for this site.

23 Swanscombe rMCZ (BS 05b)

23.1 Site description

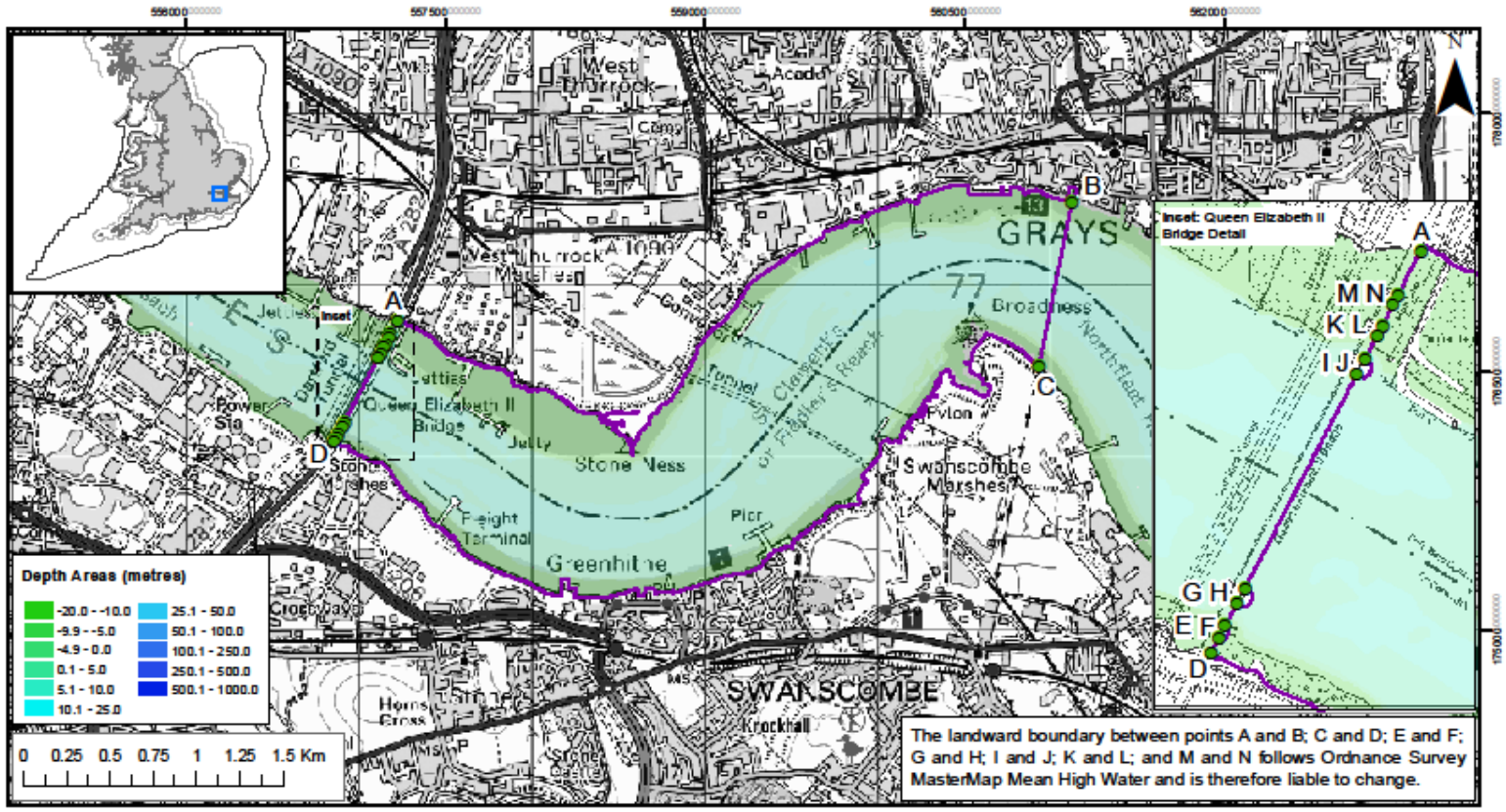
The Swanscombe rMCZ was originally proposed during the Regional Projects as part of a larger Thames Estuary rMCZ, along with what is now the Upper Thames Estuary rMCZ. For more information on the division of the Thames Estuary into two separate sites, please refer to Section 23.5.2.1.

The Swanscombe rMCZ stretches along the lower part of the tidal River Thames from The Queen Elizabeth II Bridge to Columbia Wharf in Grays. The site aims to protect a geographically restricted but important population of tentacled lagoon-worm (*Alkmaria romijni*), for which there is currently a gap in the MPA network in relation to the Ecological Network Guidance targets (Natural England and JNCC 2010; JNCC 2016) and their habitat that occurs at Greenhithe.

23.2 Site image

Image 23 Intertidal mixed sediments © JNCC (Please note this photograph is provided as an example of the above feature only and does not necessarily represent the features found at the site).

23.3 Site maps



Swanscombe rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	51° 28' 5.782" N	0° 15' 43.693" E	H	51° 27' 47.015" N	0° 15' 26.936" E
B	51° 28' 24.103" N	0° 19' 6.930" E	I	51° 27' 58.936" N	0° 15' 37.567" E
C	51° 27' 53.571" N	0° 18' 55.143" E	J	51° 27' 59.720" N	0° 15' 38.298" E
D	51° 27' 43.409" N	0° 15' 23.708" E	K	51° 28' 1.068" N	0° 15' 39.500" E
E	51° 27' 44.279" N	0° 15' 24.487" E	L	51° 28' 1.551" N	0° 15' 40.034" E
F	51° 27' 45.004" N	0° 15' 25.053" E	M	51° 28' 2.756" N	0° 15' 41.011" E
G	51° 27' 46.214" N	0° 15' 26.220" E	N	51° 28' 3.342" N	0° 15' 41.548" E

Map produced by Natural England 2016.
Reference: Theme ID: 1477557
Map Projection: British National Grid

Figure 65 Swanscombe rMCZ site boundary

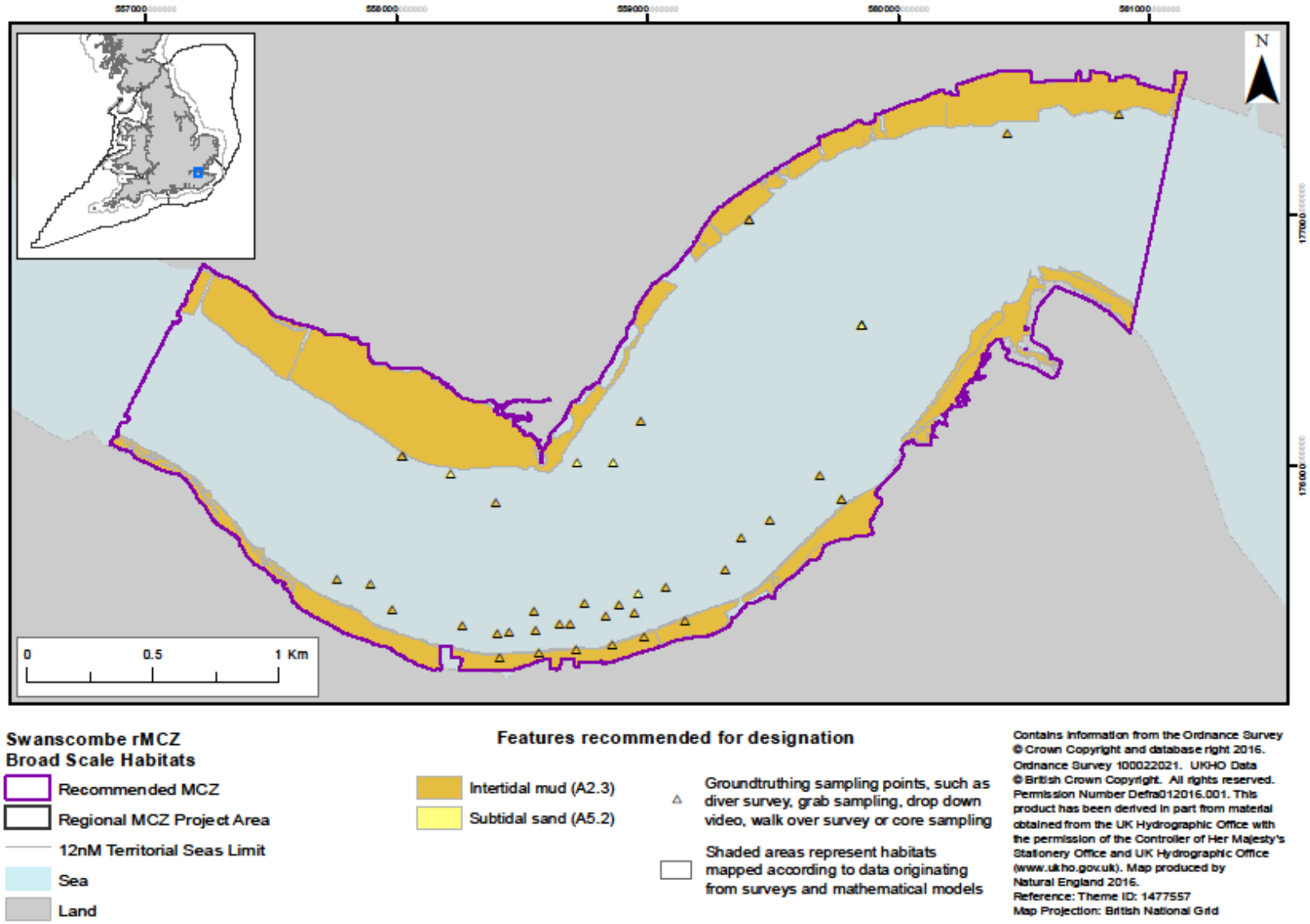


Figure 66 Location of mapped broad-scale habitats in Swanscombe rMCZ

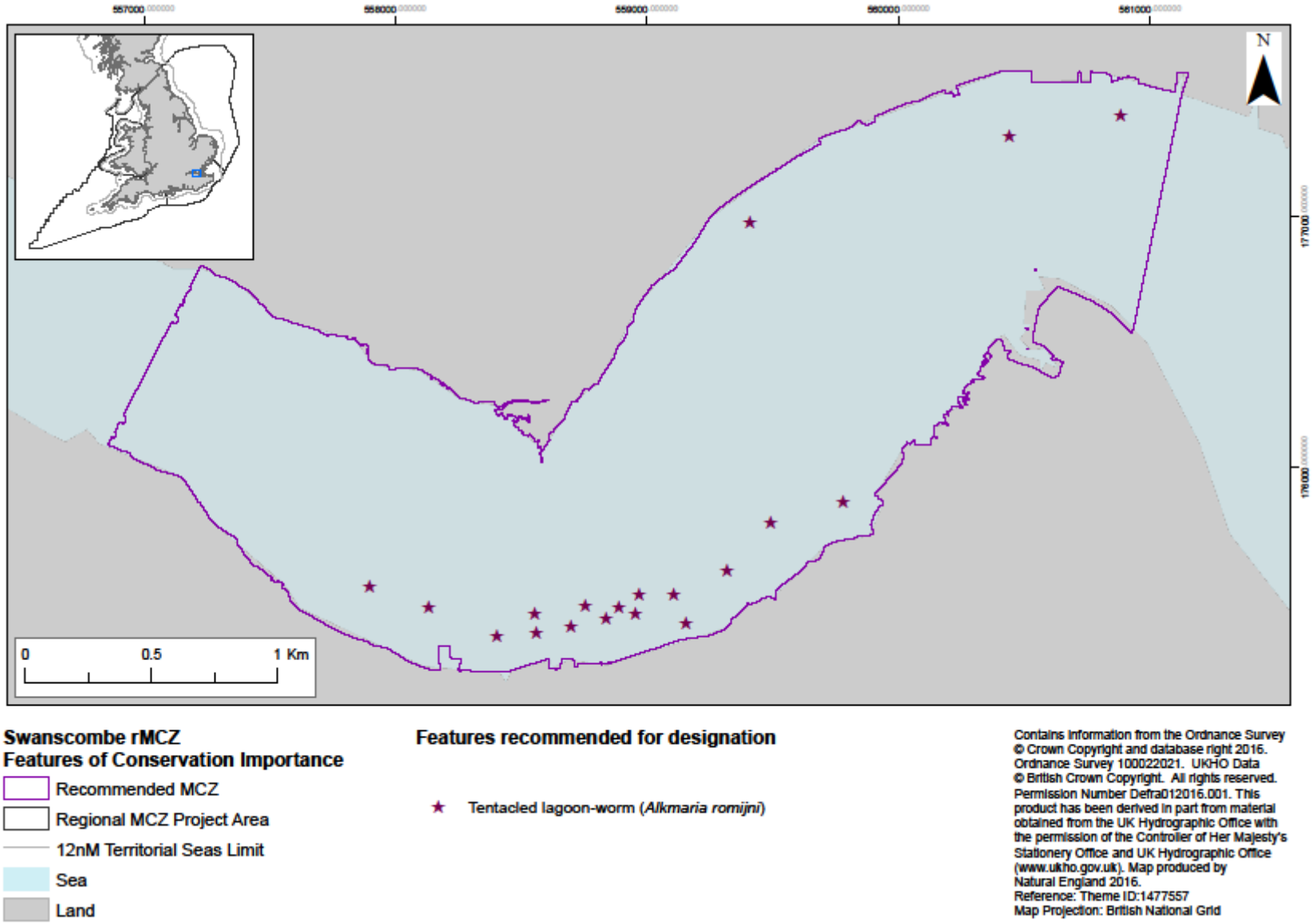


Figure 67 Location of mapped features of conservation importance in Swanscombe rMCZ

23.4 Summary of Natural England's advice

Table 23 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Swanscombe rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on General Management Approach (GMA)	Rationale where the GMA has changed since the last advice provided for the feature
Intertidal mixed sediments	Low	Low	Favourable	Maintain	New feature (Previously assessed as part of joint Thames site)
Intertidal mud	High	Moderate	Favourable	Maintain	New feature (so has not been previously assessed)
Intertidal sand and muddy sand	Low	Low	Favourable	Maintain	New feature (Previously assessed as part of joint Thames site)
Sheltered muddy gravels	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Subtidal coarse sediment	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Subtidal mud	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Subtidal sand	Moderate	Moderate	Favourable	Maintain	New feature (Previously assessed as part of joint Thames site)
Tentacled lagoon-worm (*Alkmaria romijni*)	Moderate	Moderate	Favourable	Maintain	New feature (Previously assessed as part of joint Thames site)

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

23.5 Additional advice

23.5.1 Advice on specific features

23.5.1.1 Intertidal sand and muddy sand and Intertidal mixed sediments in Swanscombe rMCZ

There is currently low confidence in both the presence and extent of both Intertidal sand and muddy sand (A2.2), and Intertidal mixed sediments (A2.4). For A2.2, these low confidence calculations are based on limited data of 2 points, with no underlying polygon data. The small number of point data sources were from 1994 and an unknown time period. These points were located in areas surrounded by more recent point data for Intertidal mud (A2.3) from high quality surveys. In addition, the only polygon data present represents intertidal mud. Therefore, the confidence levels in the presence and extent of these features were manually downgraded to Low / Low confidence. Based on this evidence alone we would advise that these features should not be further considered for designation.

Using expert judgement it is advised that the site is more likely to be predominantly muddy sediment.

Intertidal sand and muddy sand and Intertidal mixed sediments are considered to be moderately or highly vulnerable to a range of pressures, which could be exerted by activity within the site (e.g. change to another seabed type, habitat structure change, wave exposure change, etc.) However, based on current site knowledge, relevant activities are unlikely to reach the levels of exposure within the site that would put these features at risk. There are planned/proposed activities that might pose risk to these features in the future, however the uncertainty associated with this future risk assessment combined with the uncertainty associated with the presence of the features means we do not think this provides sufficient justification for their protection.

These features are not gaps in the Southern North Sea region as other areas of A2.2 and A2.4 are designated and proposed in other Marine Protected Areas in the region.

In summary, despite the potential moderate/high vulnerabilities of Intertidal sand and muddy sand and Intertidal mixed sediments, we advise that these features should not be further considered for designation based on the low confidence we have in the presence of these features within Swanscombe rMCZ.

23.5.2 Advice on the site boundary

23.5.2.1 Upper Thames Estuary and Swanscombe rMCZs

The Regional Project recommended Thames Estuary rMCZ has been split by Defra into two separate sites, one encompassing the upstream 'Smelt box' (site named Upper Thames Estuary) and the other incorporating the area downstream where the tentacled lagoon-worm (*Alkmaria romijni*) and other features are located (site named Swanscombe).

The boundary was amended in the lower part of the site to fit more closely around new records of the tentacled lagoon-worm for which there is currently considered to be a gap in the ecological network. Our full (quantitative) pre-consultation advice on the Swanscombe (and Upper Thames Estuary) rMCZ is based on this boundary that was developed with Defra.

23.5.2.2 Additional qualitative advice on the Swanscombe rMCZ boundary

This additional advice describes two potential boundary amendments to the Swanscombe rMCZ. These boundary amendments were proposed by the Port of London Authority (PLA) and Natural England has developed this additional qualitative advice in response to a request by Defra, following delivery of our pre-consultation advice (provided to Defra in February 2017).

There is no reason on conservation or evidence grounds to amend the boundary of this rMCZ. Natural England is providing this advice in response to the PLA's request for Defra to consider amending the boundary, to avoid an area in which there is a planned expansion of the Navigator Oil Terminal jetty

(western boundary amendment) and to help ensure clarity for stakeholders over where the site boundary falls (eastern boundary amendment). Natural England understands that Defra may choose to amend the boundary as proposed by the PLA if they wish to reduce stakeholder objection to this rMCZ. To support any such decision, Natural England provides below a qualitative assessment of how the boundary amendments might affect Natural England's pre-consultation Tranche 3 rMCZ advice.

Boundary amendment proposed by the PLA:

The PLA has requested a boundary change to both ends of the Swanscombe rMCZ (**Figure 68** provided by PLA; **Figure 69** is Natural England's digital interpretation of this proposal). At the eastern end of the site, the PLA have requested that the boundary be amended so that the southern point coincides with an easily identifiable landmark (lighthouse). The change proposed at the western end of the site is primarily to avoid the Navigator Oil Terminal jetty, for which there are plans for expansion, and also to ensure the boundary closely follows the line of survey point data where tentacled lagoon-worms were found.

The current western boundary uses the Queen Elizabeth II Bridge as an easily recognisable boundary to aid management of the site. The current eastern boundary is based on an existing unitary authority boundary (**Figure 69**).

Rationale for Natural England's advice on this proposed boundary amendment:

Whilst Natural England have previously discussed the boundary amendment proposal with PLA and Defra, it was not incorporated into our formal pre-consultation advice as Natural England felt it could reduce the ecological value of the site (see below) and it also could not be incorporated into out pre-consultation advice within the available timescales (i.e. the information was received from the PLA after Natural England's boundary decision cut-off date).

At a recent meeting (21/02/2017) between the PLA, Defra and Natural England the proposed boundary amendment was discussed again. Therefore, as requested by Defra, Natural England is now providing qualitative advice on this potential boundary amendment, on the basis of expert judgement.

Natural England's general advice on the proposed boundary amendment:

It is Natural England's expert opinion that suitable conditions for the tentacled lagoon-worm feature are likely to be found throughout the current Swanscombe site; the absence of known records of the species does not indicate that it is absent from other locations (i.e. caution should be applied when using surveys to assume absence). There are known records upstream of this site, as far as Woolwich. Therefore the boundary currently advised on (February 2017) has not been clipped to the survey points, as requested by the PLA.

It is also important to note that currently the species has some protection under Schedule 5 of the Wildlife and Countryside Act (WCA), and so developers would need to consider this species regardless of it being located within or outside of an MCZ boundary. However, the protection afforded by the WCA is subject to review and so Natural England maintains its advice that there is ecological and conservation benefit to protecting tentacled lagoon-worm as a feature of this rMCZ.

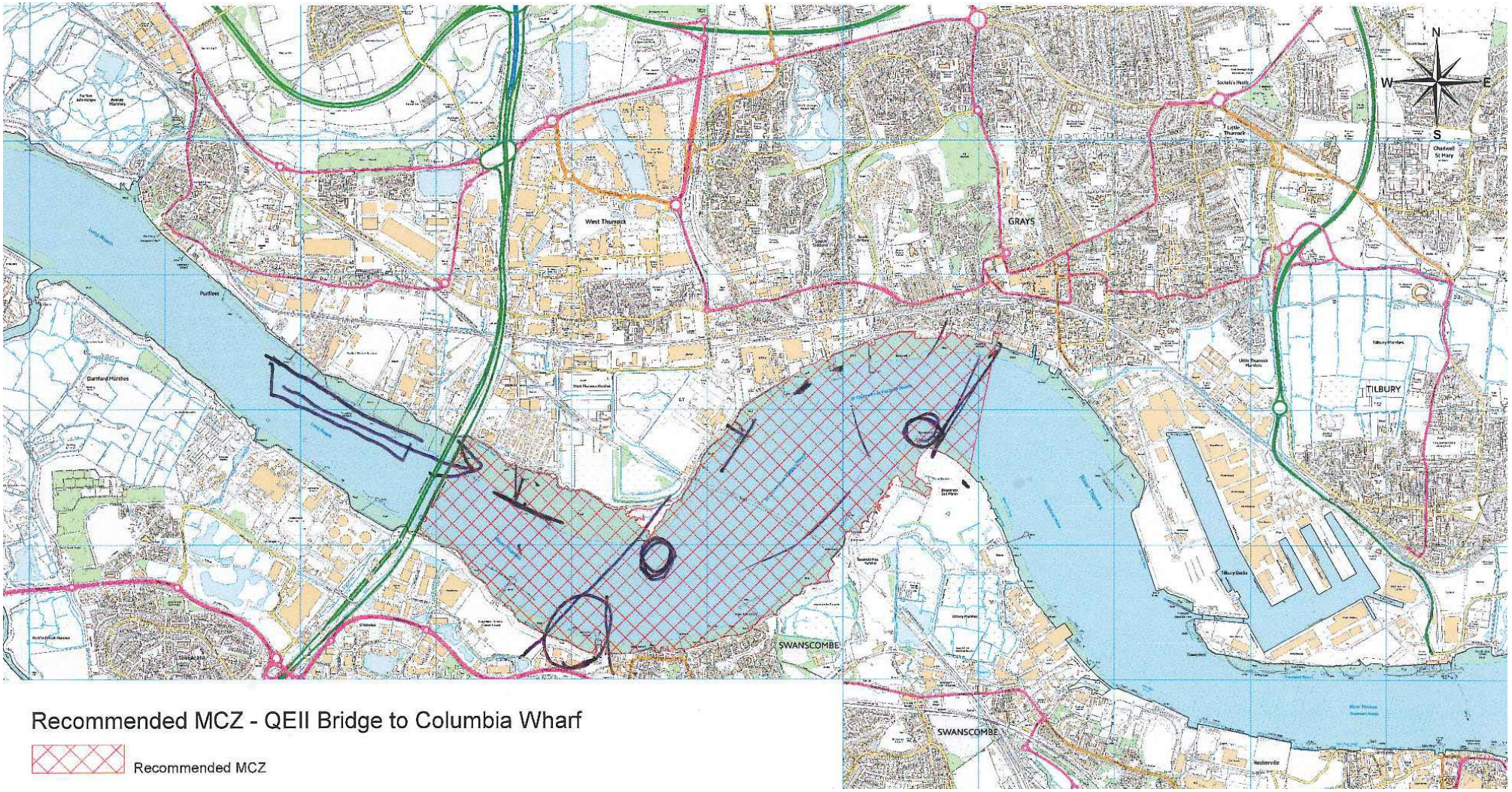


Figure 68 Potential amendment to the Swanscombe rMCZ – received from the PLA via Defra

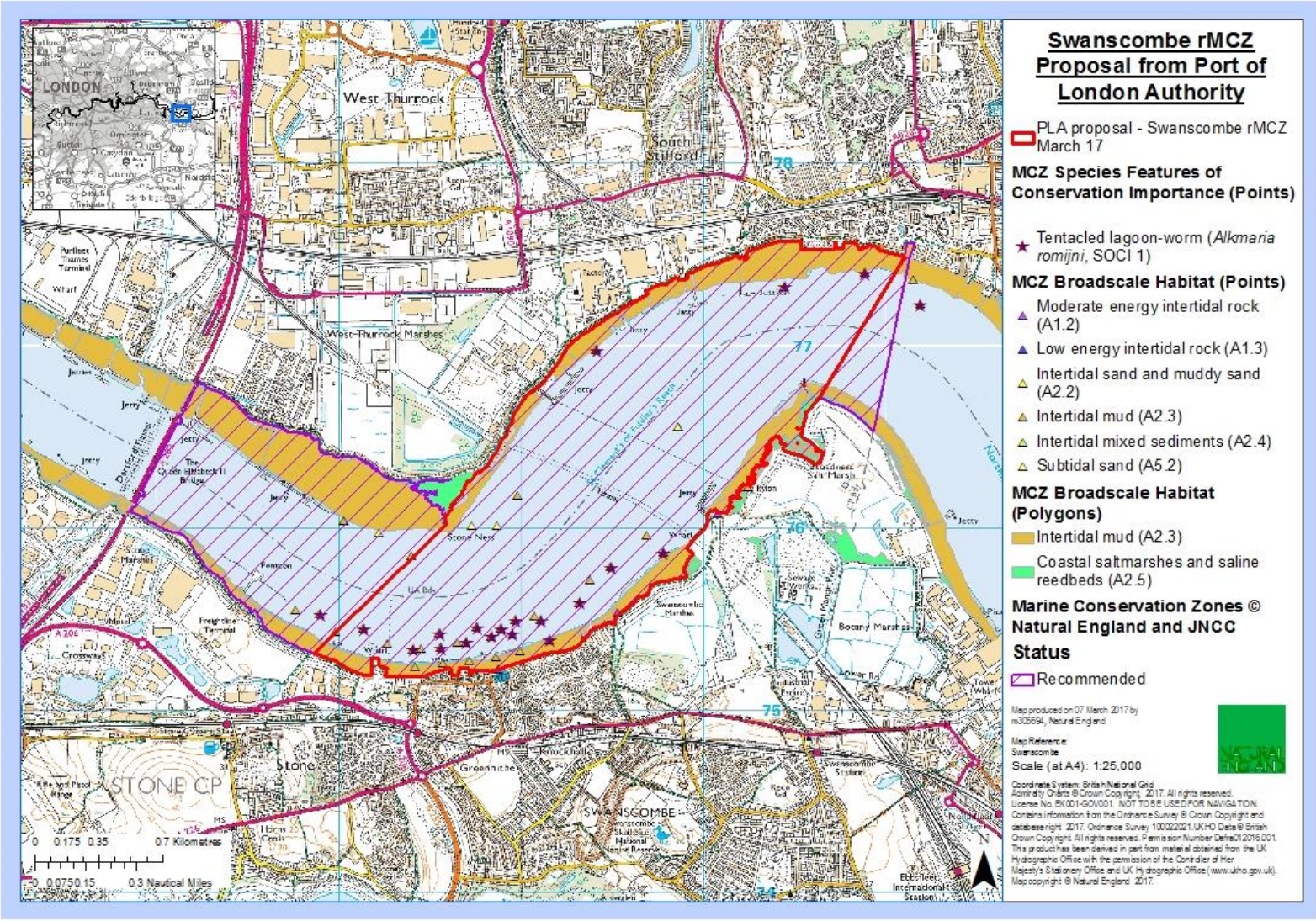


Figure 69 Potential amendment to the Swanscombe rMCZ – Natural England's interpretation of Figure 68. This option was developed for Defra after the provision of Natural England's qualitative (pre-consultation) advice on the joint Thames Estuary rMCZ.

Implications for rMCZ features:

Table 24 outlines Natural England's qualitative advice on the impact of the proposed boundary amendment on the three features of the site which Natural England has advised are suitable for designation. All three features are affected by the boundary amendment proposed by the PLA.

Table 24 Features affected by the potential boundary amendment

Feature	Approximate loss of known extent from rMCZ with revised boundary	Implications for confidence in feature presence and extent
Tentacled lagoon-worm (*Alkmaria romijni*) SOCI 1	1 point record out of 19 for the site	Pre-consultation advice on confidence in feature presence/extent: Moderate/Moderate Loss of records will not affect this confidence assessment, based on expert judgement.
Intertidal mud A2.3	5 point records and 21 polygons	Pre-consultation advice on confidence in feature presence/extent: High/Moderate Loss of records will not affect this confidence assessment, based on expert judgement.
Subtidal sand A5.2	1 point record out of the 6 for the site	Pre-consultation advice on confidence in feature presence/extent: Moderate/Moderate Loss of records will not affect this confidence assessment, based on expert judgement.

Implications for Natural England's advice on the General Management Approach (GMA):

Natural England's GMA advice indicates the likely condition of the features based on their vulnerability (exposure x sensitivity) to the activities that occur within the site, rather than direct evidence on the condition of the features. Table 25**Table 25** outlines Natural England's pre-consultation GMA and risk advice for the three features. The proposed boundary amendment will not result in any change to the advised GMAs. Defra should also note that the activities listed below that have the potential to exert pressures on the proposed features of this site may need to be considered whether the activity occurs within or outside the site.

Table 25 GMA and risk for features affected by the potential boundary amendment

Feature	Natural England's pre-consultation advice on the GMA	Risk assessment and implications for GMA
Tentacled lagoon-worm (*Alkmaria romijni*) SOCI 1	Maintain	The proposed boundary amendment would not affect this GMA advice at the current time, which is based on the feature having low vulnerability to activities that are currently known to be occurring. However, there are activities (i.e. dredging, jetty construction, increased vessel movement) which have the potential to exert pressures to which the feature is sensitive. This could mean future risks that may need to be taken into consideration by the appropriate regulators should the site become material a consideration or be designated. This feature currently has some protection under Schedule 5 of the Wildlife and Countryside Act, and so developers would need to consider this species regardless of its location in relation to the MCZ boundary.
Intertidal mud A2.3	Maintain	The proposed boundary amendment would not affect this GMA advice at the current time, which is based on the feature having low vulnerability to activities that are currently known to be occurring. However, there are activities (i.e. dredging, jetty construction, increased vessel movement) which have the potential to exert pressures to which the feature is sensitive. This could mean future risks that may need to be taken into consideration by the appropriate regulators should the site become a material consideration or be designated.
Subtidal sand A5.2	Maintain	The proposed boundary amendment would not affect this GMA advice at the current time, which is based on the feature having low vulnerability to activities that are currently known to be occurring. However, there are activities (i.e. dredging, jetty construction, increased vessel movement) which have the potential to exert pressures to which the feature is sensitive. This could mean future risks that may need to be taken into consideration by the appropriate regulators should the site become material a consideration or be designated.

24 Taw Torridge Estuary rMCZ (FS 42)

24.1 Site description

The site consists of two separate parts, the upper Taw Estuary and the upper Torridge Estuary. In the Torridge, the rMCZ boundary follows the OS Boundary Line mean high water mark as far inland as the normal tidal limit at Weare Giffard, and the lower boundary is drawn across the estuary at the old bridge (Bideford Long Bridge) at Bideford. The upper Taw Estuary is included up to mean high water and the normal tidal limit at Tawstock, upstream of Barnstaple. The lower boundary is drawn across the estuary at Allen's Rock (Fremington) and Chivenor, downstream of Barnstaple. The estuary contains mudflats and sediment that are home to a wide variety of invertebrates, including worms and amphipods, which are an important food source for wading birds. The upper Torridge and Taw also act as a nursery area for commercial fish species such as sea bass.

24.2 Site images

Image 24 Taw Torridge Estuary © Mel Parker, Natural England

Image 25 Taw Torridge Estuary © Mel Parker, Natural England

Site maps

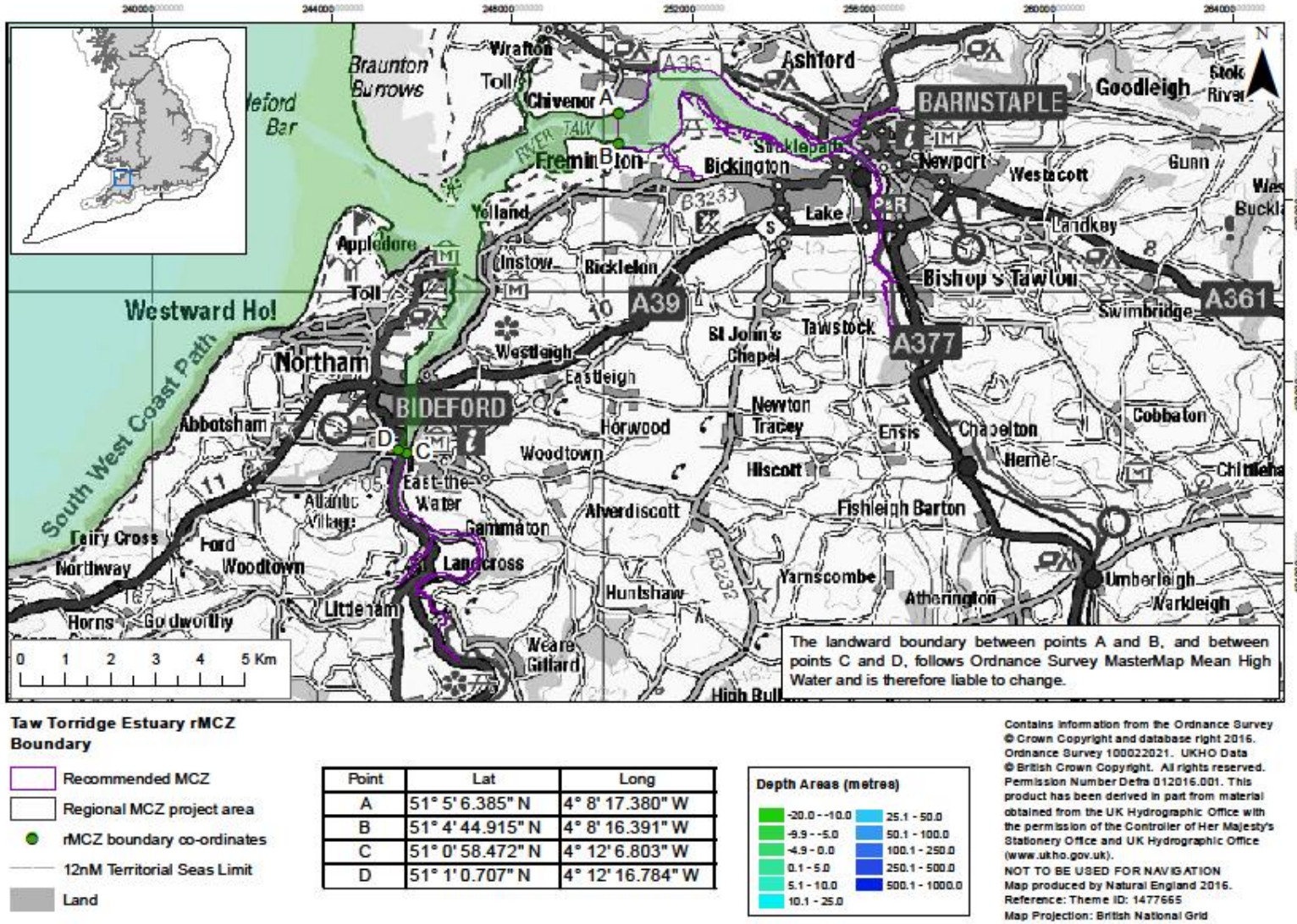


Figure 70 Taw Torridge Estuary rMCZ site boundary

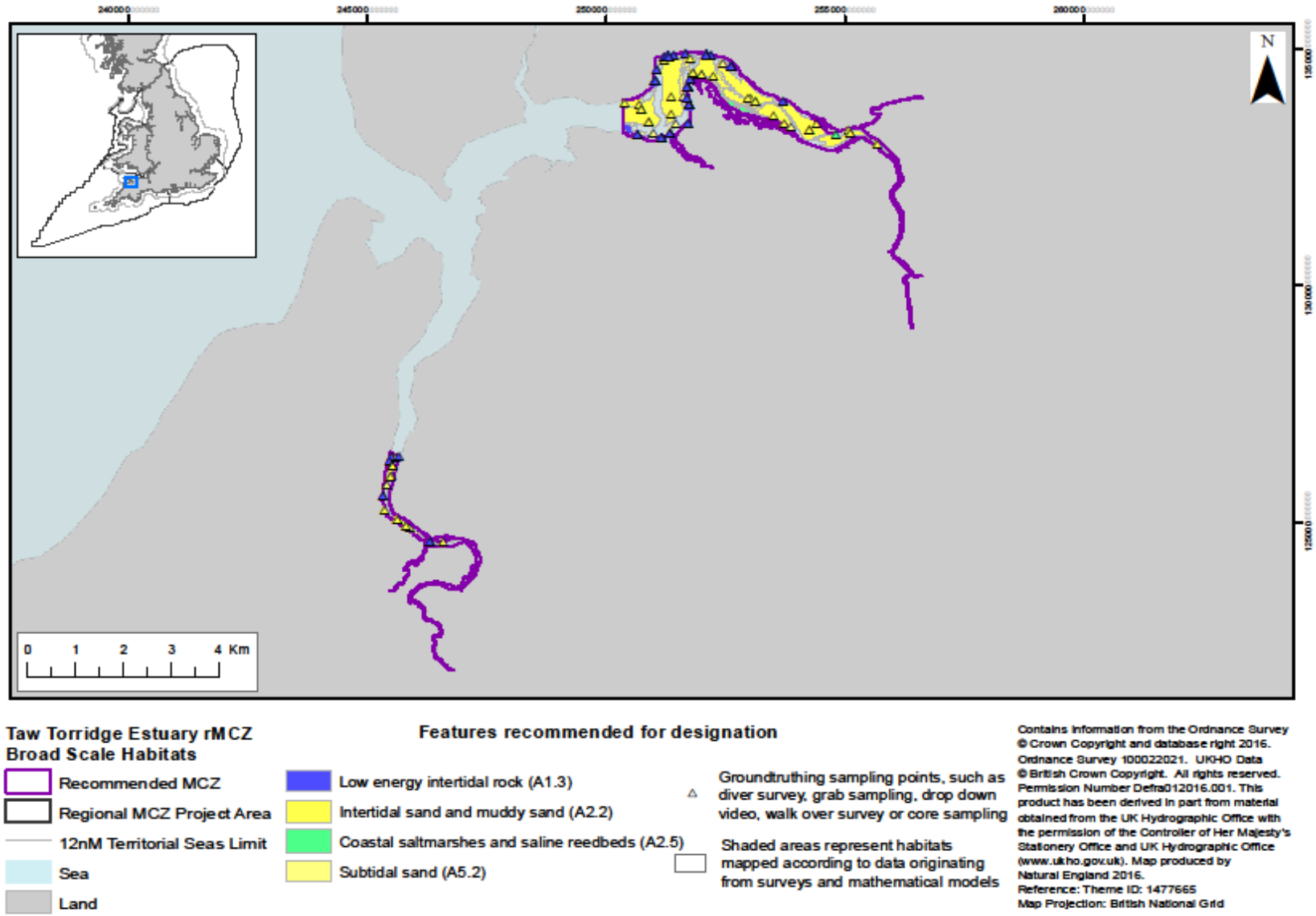


Figure 71 Location of mapped broad-scale habitats in Taw Torridge Estuary rMCZ

24.3 Summary of Natural England's advice

Table 26 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Taw Torridge rMCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Coastal saltmarshes and saline reedbeds	High	High	Favourable	Maintain	No change
Intertidal coarse sediment	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Intertidal sand and muddy sand	High	High	Favourable	Maintain	No change
Low energy intertidal rock	High	High	Favourable	Maintain	No change
Subtidal mud	Low	Low	Favourable	Maintain	No change
Subtidal sand	High	Moderate	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

24.4 Additional advice

24.4.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

24.4.2 Advice on boundaries

No additional advice given to Defra on boundaries for this site.

25 Upper Thames Estuary rMCZ (BS 05a)

25.1 Site description

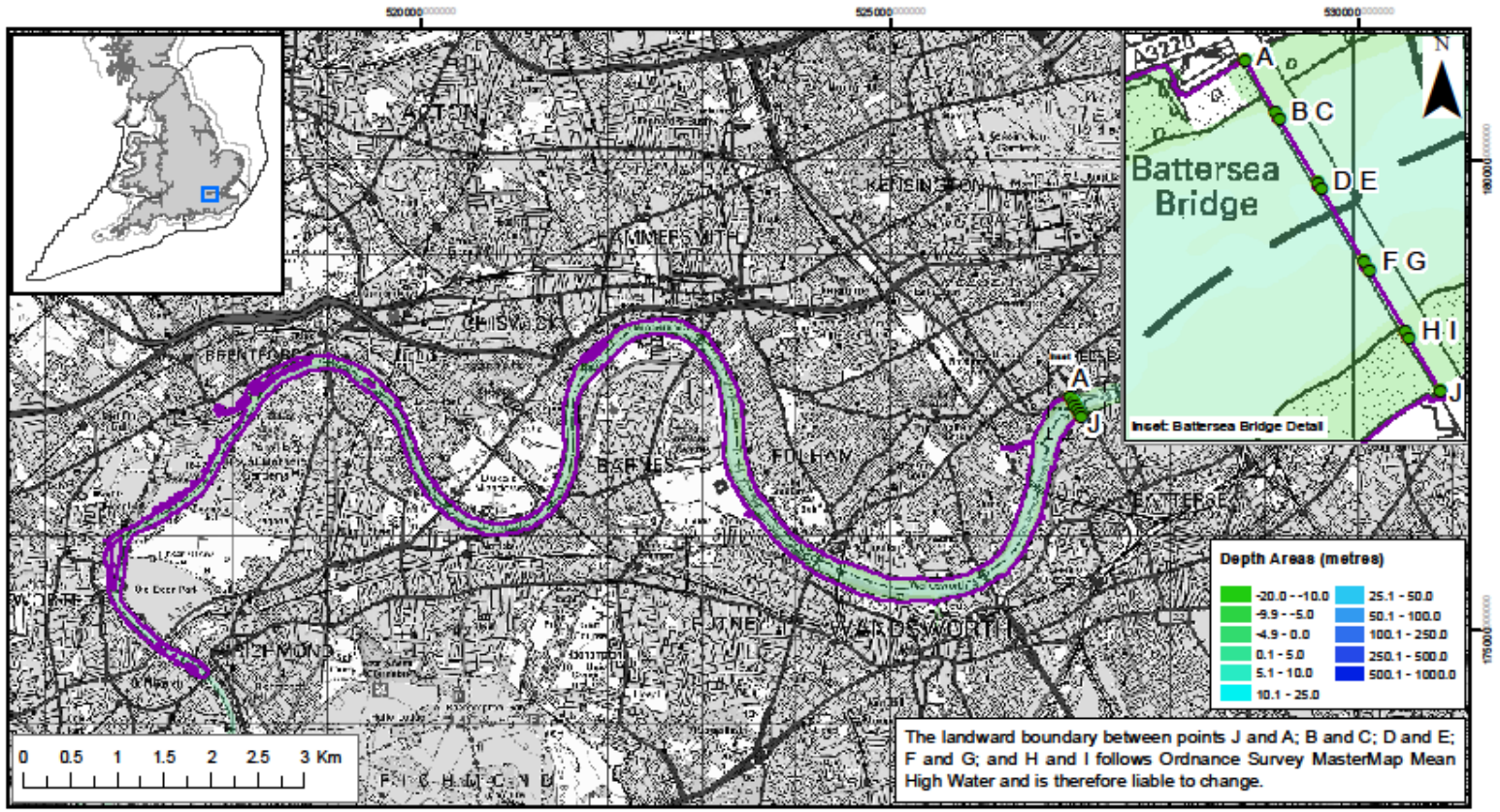
The Upper Thames Estuary rMCZ was originally proposed during the Regional Projects as part of a larger Thames Estuary rMCZ, along with what is now the Swanscombe rMCZ. For more information on the division of the Thames Estuary into two separate sites, please refer to Section 25.5.2.1.

The Upper Thames Estuary rMCZ stretches along part of the upper River Thames from Richmond Bridge to Battersea Bridge. As a whole, the site is considered to be an important spawning and nursery ground for various fish species, particularly smelt (*Osmerus eperlanus*). The site is aimed at providing the protection required for seasonal seaward migrations of smelt, primarily through the existing mitigation measures and codes of good practice currently in place and monitored by the Environment Agency.

25.2 Site image

Image 26 Upper Thames Estuary © Alex Blishen

25.3 Site maps



Upper Thames Estuary rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	51° 28' 55.034" N	0° 10' 24.194" W	F	51° 28' 51.192" N	0° 10' 20.737" W
B	51° 28' 54.031" N	0° 10' 23.294" W	G	51° 28' 51.043" N	0° 10' 20.600" W
C	51° 28' 53.901" N	0° 10' 23.174" W	H	51° 28' 49.866" N	0° 10' 19.559" W
D	51° 28' 52.708" N	0° 10' 22.100" W	I	51° 28' 49.723" N	0° 10' 19.429" W
E	51° 28' 52.580" N	0° 10' 21.980" W	J	51° 28' 48.730" N	0° 10' 18.536" W

Figure 72 Upper Thames Estuary rMCZ site boundary

25.4 Summary of Natural England's advice

Full details of Natural England's advice on smelt (*Osmerus eperlanus*) and the evidence that has informed this advice can be found in Chapter 8 of **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**.

25.5 Additional advice

25.5.1 Advice on specific features

No additional advice given to Defra on specific features for this site.

25.5.2 Advice on the site boundary

25.5.2.1 Upper Thames Estuary and Swanscombe rMCZ

The Thames Estuary rMCZ has been split by Defra into two separate sites, one encompassing the upstream 'Smelt box' (site named Upper Thames Estuary) and the other incorporating the area downstream where the tentacled lagoon-worm and other features are located (named Swanscombe).

The boundary change at the upper end of the Thames Estuary rMCZ was to incorporate the area for which there are records of smelt (*Osmerus eperlanus*), although the lower portion of the estuary is also likely to be important for larval development and for providing important wider nursery and feeding functions.

The boundary was amended in the lower part of the site (now Swanscombe rMCZ) to fit more closely around new records of the tentacled lagoon-worm (*Alkmaria romijni*) for which there is currently considered to be a gap in the ecological network.

26 Wyre-Lune rMCZ (ISCZ 16)

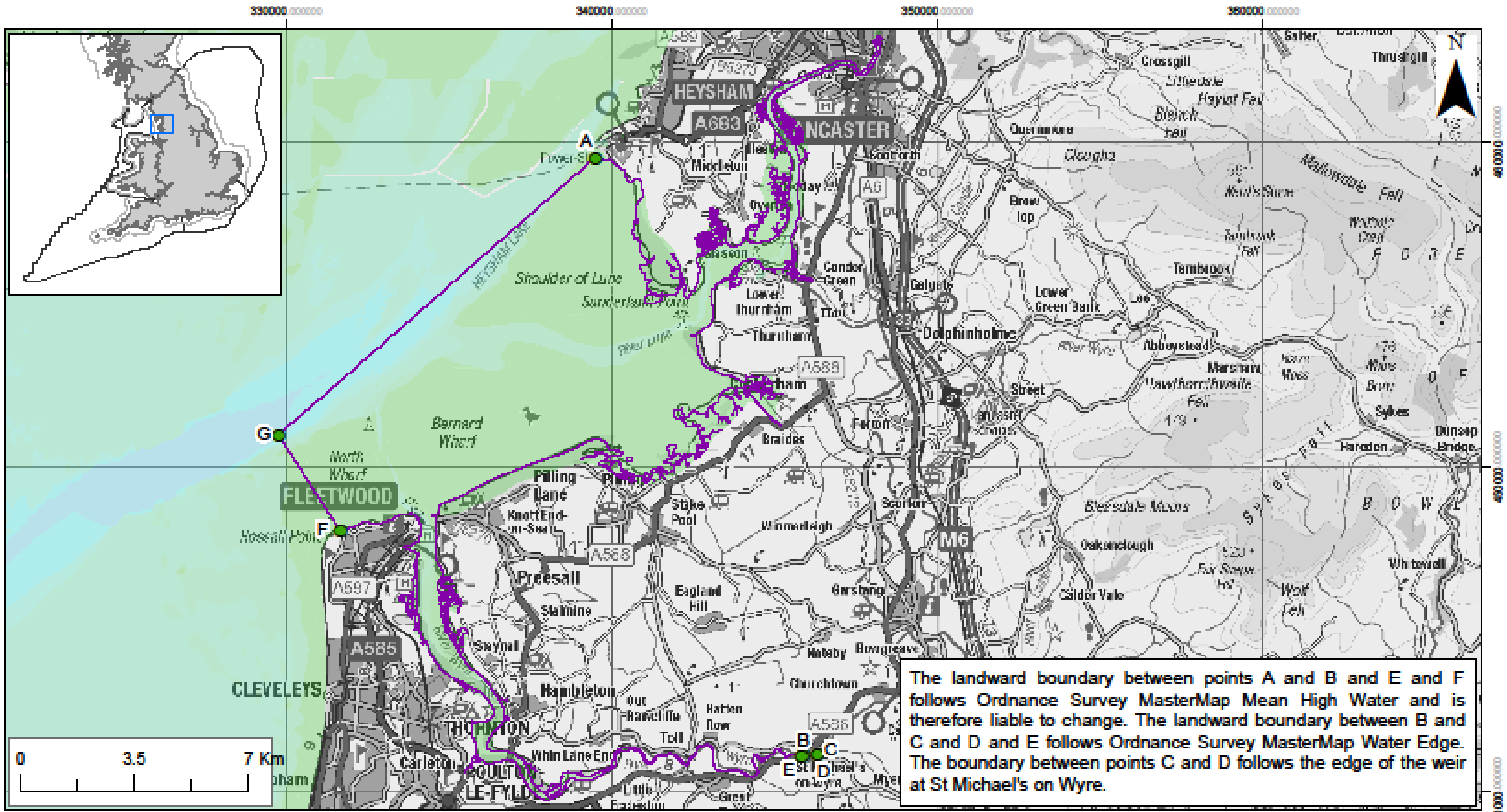
26.1 Site description

This rMCZ is comprised of two estuaries situated within the southern part of Morecambe Bay, the Wyre and the Lune. The site covers an area of 92 km^2 and extends from the tidal limit of each estuary at St Michael's on Wyre and Lancaster to the outer sea boundary. Natural England is providing advice on the Wyre-Lune rMCZ for the highly mobile species smelt (*Osmerus eperlanus*). Both estuaries have extensive saltmarsh habitats which are important fish nursery grounds for a range of species. The outer Lune Estuary falls within the Morecambe Bay Special Area of Conservation (SAC), which provides protection to the saltmarsh and benthic habitats. The Wyre Estuary is not protected by the SAC; however the saltmarsh in the outer estuary is protected by the Wyre Estuary Site of Special Scientific Interest (SSSI). There is an actively recruiting smelt population in the Wyre Estuary and it is thought that smelt within the Morecambe Bay estuary complex are part of an interconnected population.

26.2 Site image

Image 27 Wyre-Lune rMCZ Lune Estuary Skerton Weir © Emily Hardman, Natural England

26.3 Site maps



Wyre-Lune rMCZ Boundary

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

Point	Lat	Long
A	54° 1' 40.957" N	2° 55' 31.309" W
B	53° 51' 48.314" N	2° 49' 28.864" W
C	53° 51' 49.178" N	2° 49' 3.694" W
D	53° 51' 48.971" N	2° 49' 4.835" W
E	53° 51' 47.698" N	2° 49' 29.883" W
F	53° 55' 26.291" N	3° 2' 32.571" W
G	53° 57' 0.757" N	3° 4' 17.980" W

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

NOT TO BE USED FOR NAVIGATION
Map produced by Natural England 2017.
Reference: Theme ID: 1475914
Map Projection: British National Grid

Figure 73 Wyre Lune rMCZ site boundary

26.4 Summary of Natural England's advice

Full details of Natural England's advice on smelt (*Osmerus eperlanus*) and the evidence that has informed this advice can be found in Chapter 10 of **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**

26.5 Additional advice

26.5.1 Advice on specific features

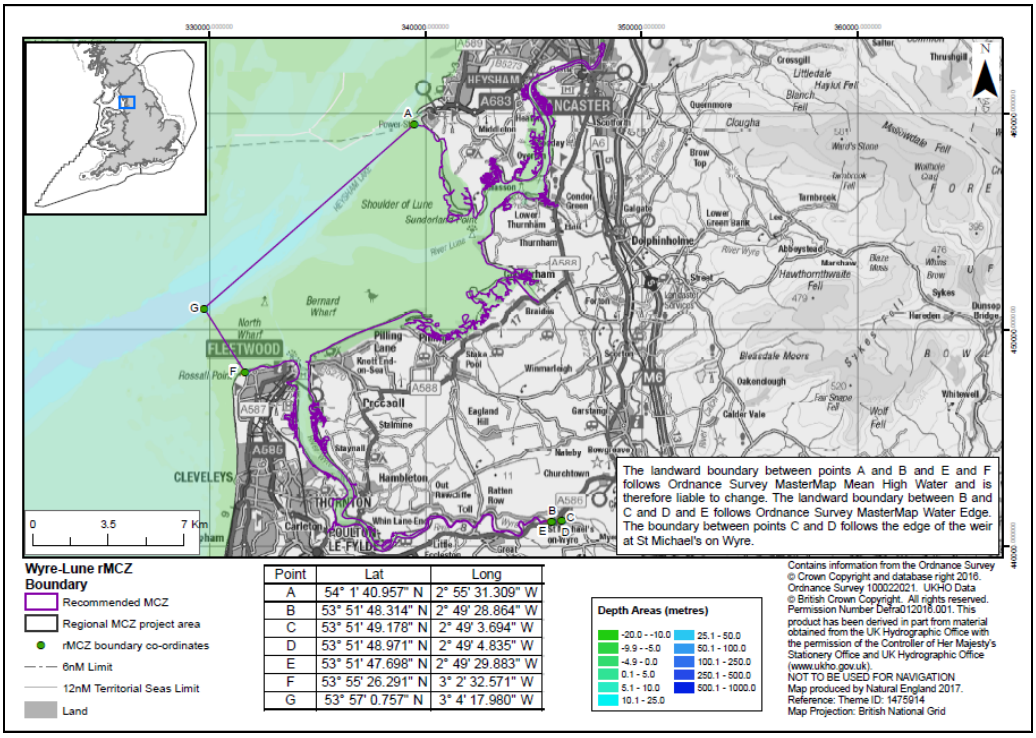
No additional advice given to Defra on specific features for this site.

26.5.2 Advice on boundaries

The original rMCZ boundary as proposed by the Regional Project was based on the OS map tidal limit. However, most stakeholders consider the true tidal limit in the Wyre Estuary to be located upstream of this location at the weir in St Michaels' on Wyre. Anecdotal records from the Environment Agency indicate that 20 years ago smelt spawned in large numbers below this weir (Dent, Environment Agency 2015, pers. comm.) and recent survey work indicates that there is suitable spawning habitat in this location. The upstream limit of the boundary has therefore been extended approximately 500m upstream to the weir so that the site encompasses the true tidal limit.

Status of boundary amendment

The boundary amendment has been agreed with Defra and implemented. Our current advice is based on the amended boundary (Figure 74).



Point	Lat	Long
A	54° 1' 40.957" N	2° 55' 31.309" W
B	53° 51' 48.314" N	2° 49' 28.864" W
C	53° 51' 49.178" N	2° 49' 3.694" W
D	53° 51' 48.971" N	2° 49' 4.835" W
E	53° 51' 47.698" N	2° 49' 29.883" W
F	53° 55' 26.291" N	3° 2' 32.571" W
G	53° 57' 0.757" N	3° 4' 17.980" W

Figure 74 Amendment to the boundary within the Wyre Estuary of the Wyre-Lune rMCZ – site overview

Implications of for rMCZ features

The boundary amendment has not changed our advice on the confidence in presence and extent of smelt in the rMCZ according to Protocol E; this remains as High-High. Our advice on the GMA (Recover) for this feature has not changed. Similarly, our advice on the scores against the four principles considered as being

important in the identification of MCZs for highly mobile species has not changed and remains as: Ecological significance – High; Persistence – High; Size and delineation – Moderate; Appropriateness of management – High.

27 Yarmouth to Cowes rMCZ (BS 23)

27.1 Site description

The Yarmouth to Cowes rMCZ runs along the north-west coast of the Isle of Wight, stretching from Sconce Point west of Yarmouth to the Gurnard headland west of Cowes including Newtown Harbour but stopping short of the Western Yar Estuary. The site was recommended by the Regional Project as a MCZ because it contains a large number of features, including some of the best peat and clay exposures on the south coast as well as habitats such as intertidal underboulder communities and estuarine rocky habitats. Many boulders on the intertidal foreshore host a variety of sponges, anemones, sea squirts, crustaceans and numerous piddocks (*Pholadidae*; a bivalve mollusc specially adapted for boring into rocks). Native oysters (*Ostrea edulis*) are present throughout the Yarmouth to Cowes rMCZ and, together with other sites in the wider Solent, previously sustained the largest oyster fishery in Europe before a significant population decline roughly five years ago.

The site also includes areas of subtidal rock which support anemones, sponges and sea squirts as well as commercially important species such as crab and lobster which shelter in the rocky crevices and a range of fish species such as gobies (*Gobiidae*) and rockling (*Gaidropsarus*) which use the habitat for foraging. Further offshore, the habitats comprise of subtidal mixed and coarse sediments, whilst subtidal mud is present in Newtown Harbour and its approaches.

To the west of Newtown Harbour entrance, Bouldnor Cliff exhibits ancient peats and clays as well as fossilised tree remnants. This geological feature includes a four metre high underwater cliff containing a rich flora and fauna of fossilised mammals, reptiles and birds.

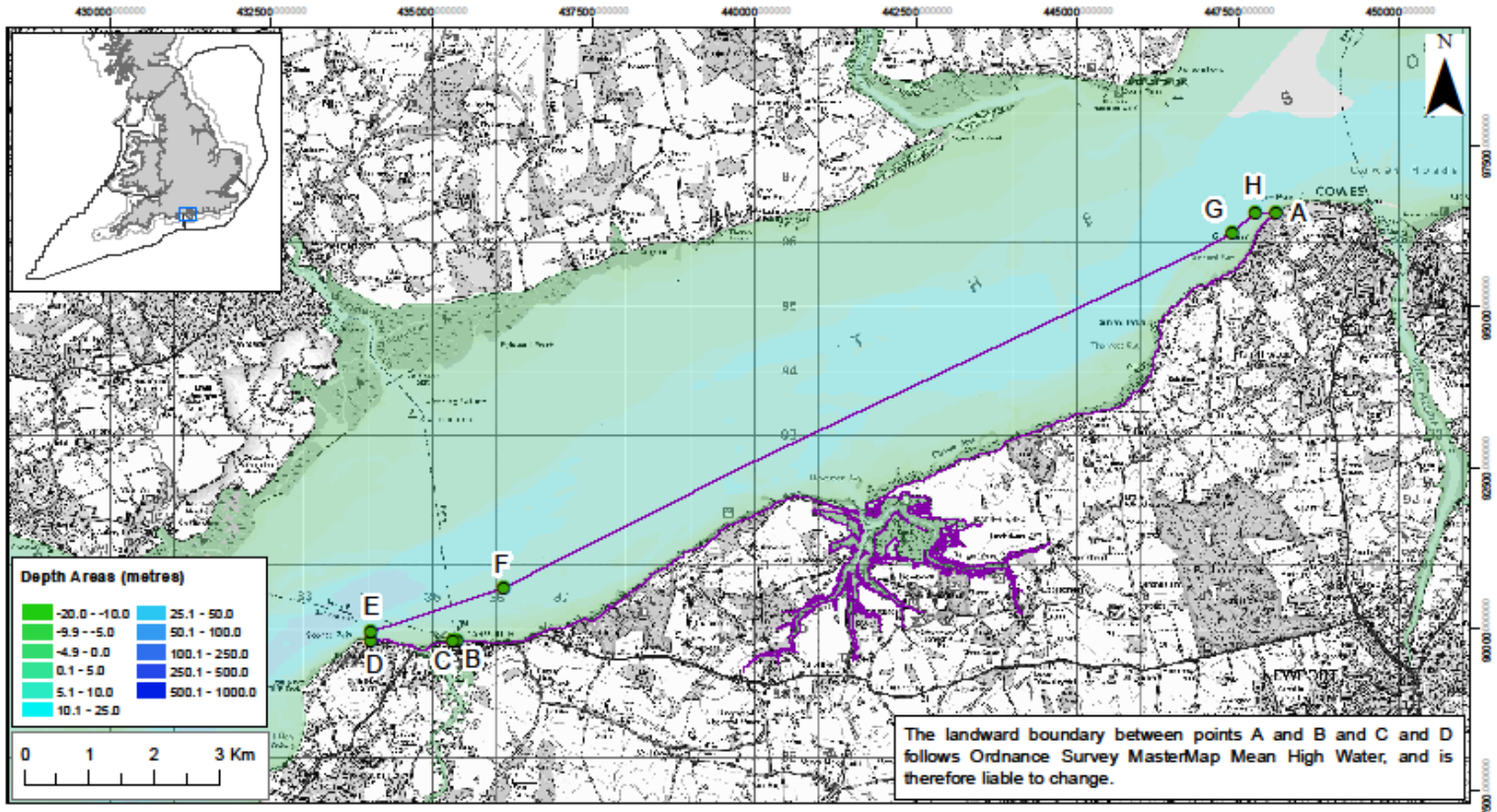
Following feedback received during pre-consultation stakeholder engagement, and at the request of Defra, Natural England has provided advice on two possible boundary options for this site. There is no driver on conservation or evidence grounds to revise the boundary of this rMCZ. These boundary options are the 'original' boundary as proposed by the Regional Project (**Figure 75**, Table 27) and as described above, and the 'revised' boundary, which excludes the very western end of the site so that the rMCZ no longer crosses the mouth of the Yar Estuary (**Figure 76**, Table 28). Further information on the two boundary options is provided in Section 27.5.2.

Natural England has provided further advice on the removal of the Newtown Quay Lagoon from the rMCZ

27.2 Site image

Image 28 Diving Bouldnor Cliff, Yarmouth to Cowes rMCZ © Marine Archaeology Trust

27.3 Site maps

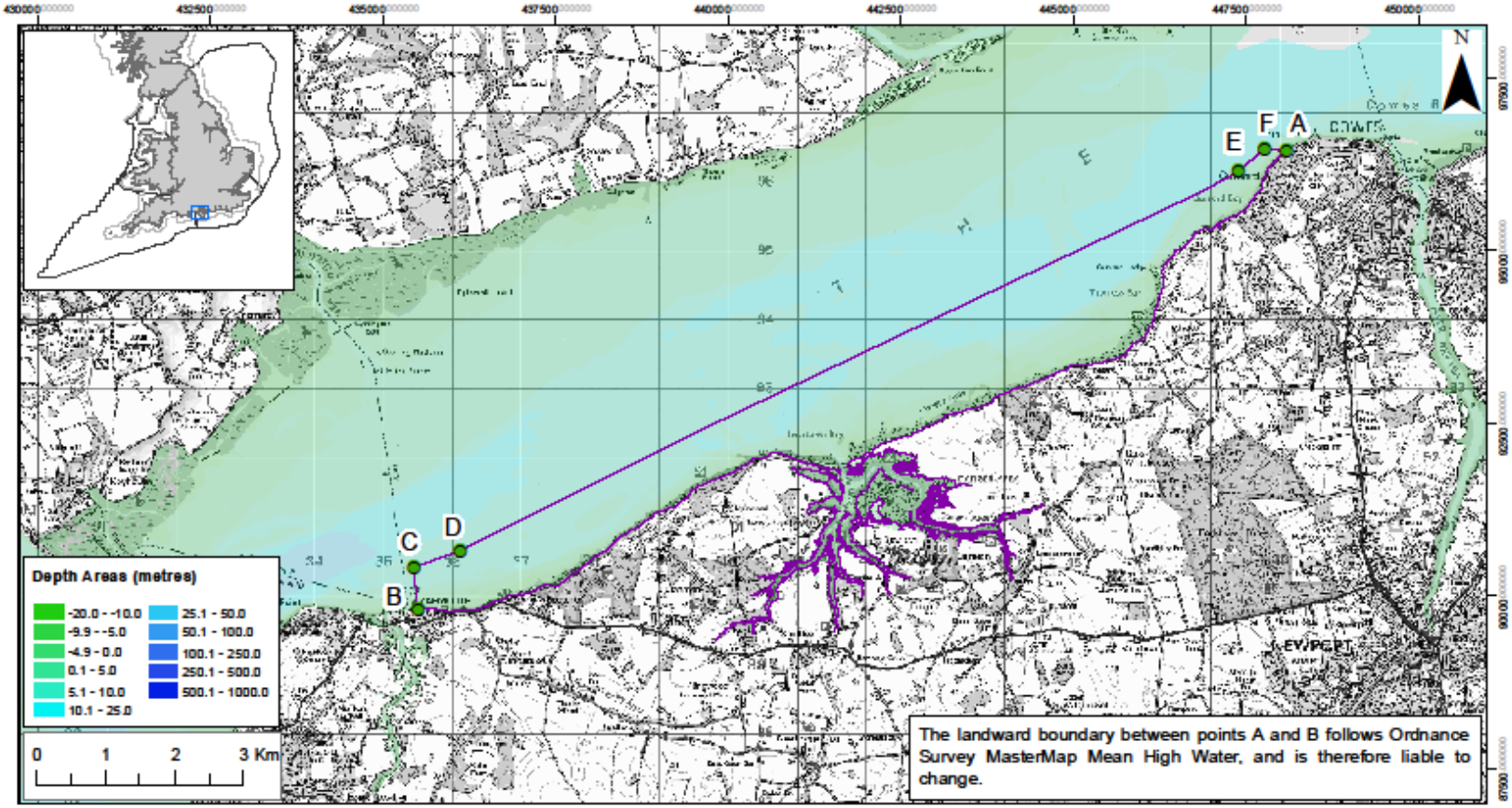


Yarmouth to Cowes Original rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	50° 45' 56.560" N	1° 19' 10.045" W	E	50° 42' 29.897" N	1° 31' 9.556" W
B	50° 42' 25.563" N	1° 30' 0.962" W	F	50° 42' 51.521" N	1° 29' 24.156" W
C	50° 42' 25.435" N	1° 30' 4.563" W	G	50° 45' 46.769" N	1° 19' 45.648" W
D	50° 42' 25.365" N	1° 31' 9.602" W	H	50° 45' 56.842" N	1° 19' 26.286" W

Figure 75 Yarmouth to Cowes rMCZ (original boundary - Regional Project recommended)



Yarmouth to Cowes Revised rMCZ Boundary

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

Point	Lat	Long	Point	Lat	Long
A	50° 45' 56.560" N	1° 19' 10.045" W	D	50° 42' 51.521" N	1° 29' 24.156" W
B	50° 42' 25.591" N	1° 29' 55.500" W	E	50° 45' 46.769" N	1° 19' 45.648" W
C	50° 42' 44.460" N	1° 29' 58.590" W	F	50° 45' 56.842" N	1° 19' 26.286" W

Figure 76 Yarmouth to Cowes rMCZ (revised boundary)

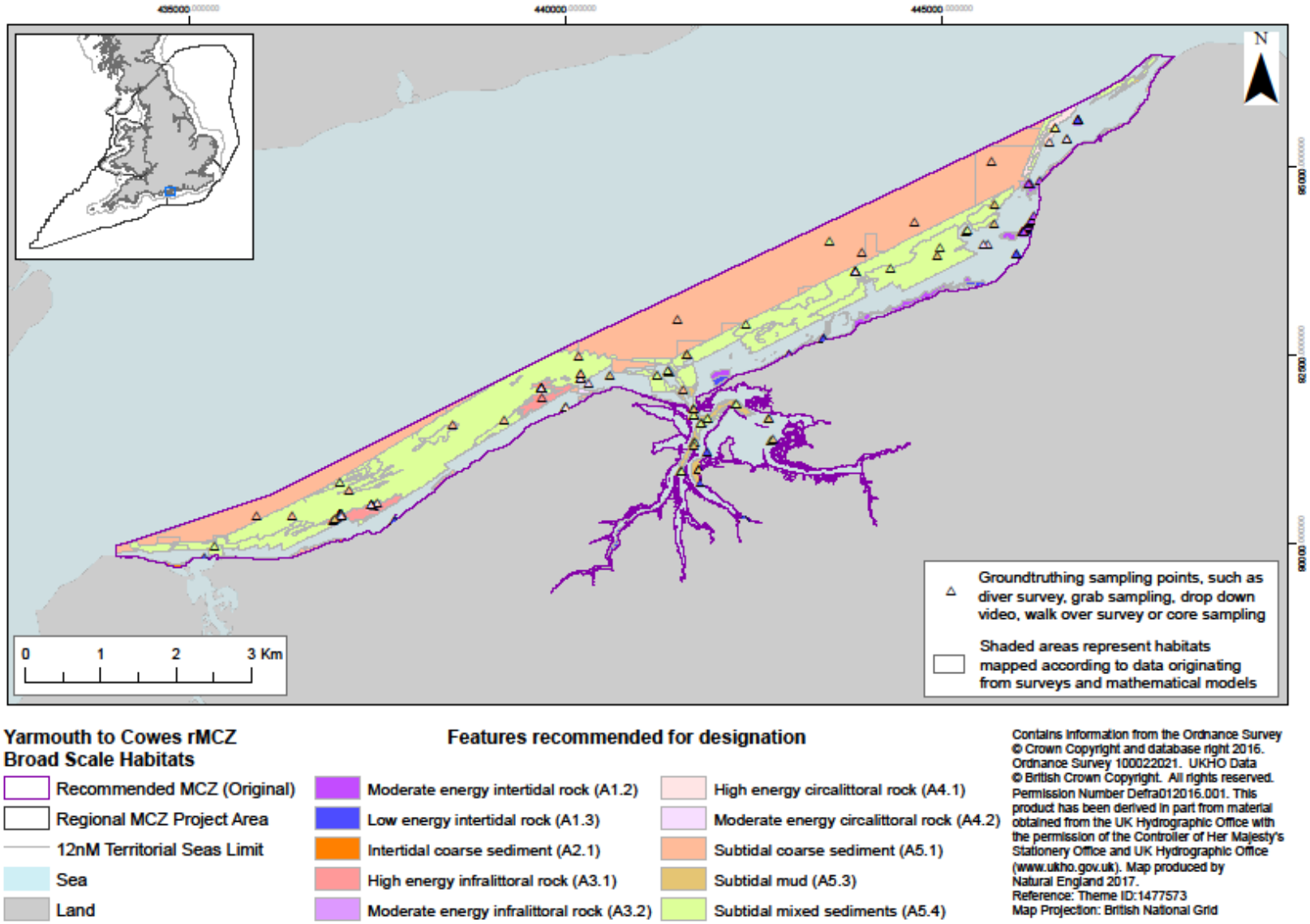


Figure 77 Location of mapped broad-scale habitats in Yarmouth to Cowes rMCZ (original boundary)

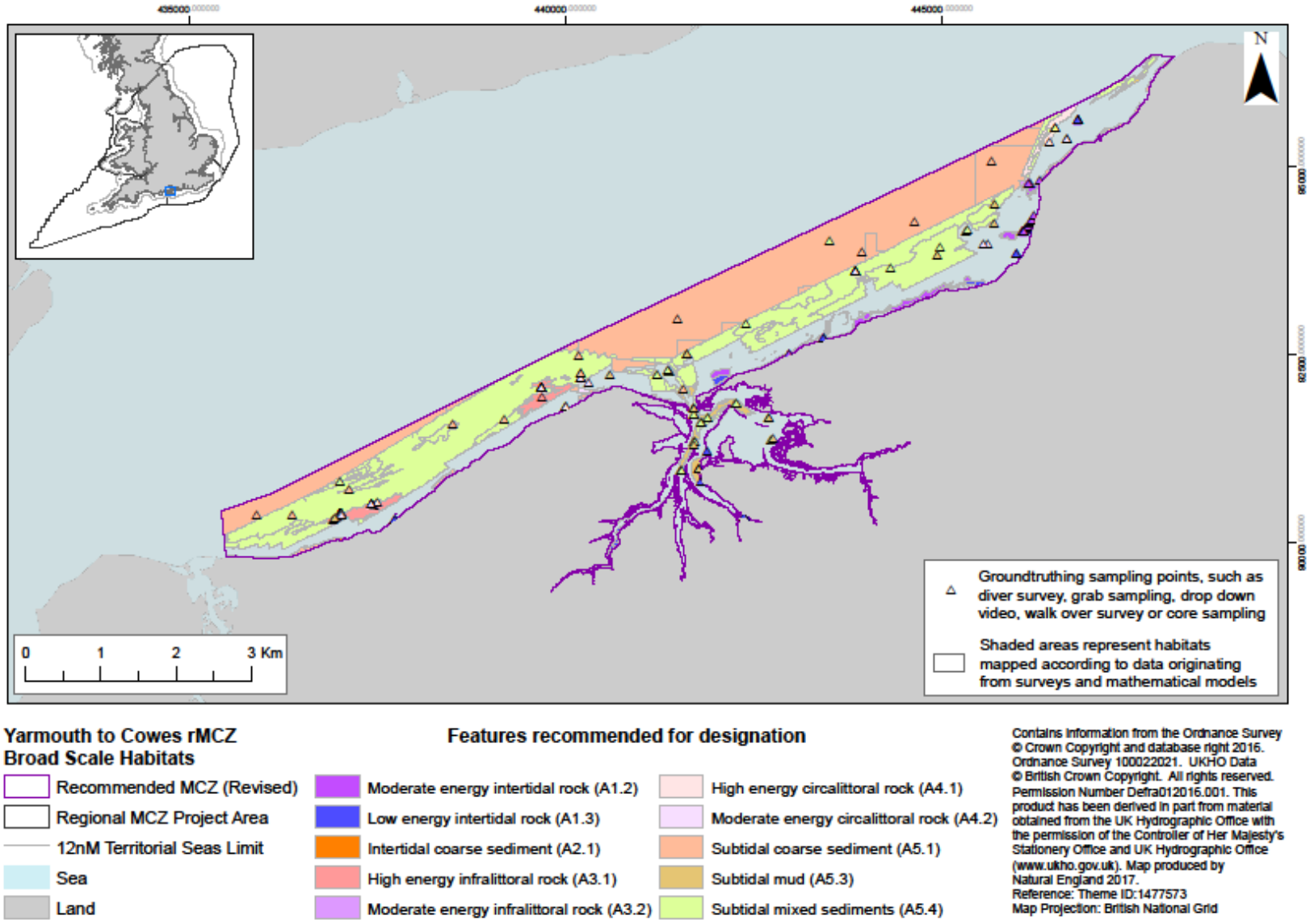


Figure 78 Location of mapped broad-scale habitats in Yarmouth to Cowes rMCZ (revised boundary)

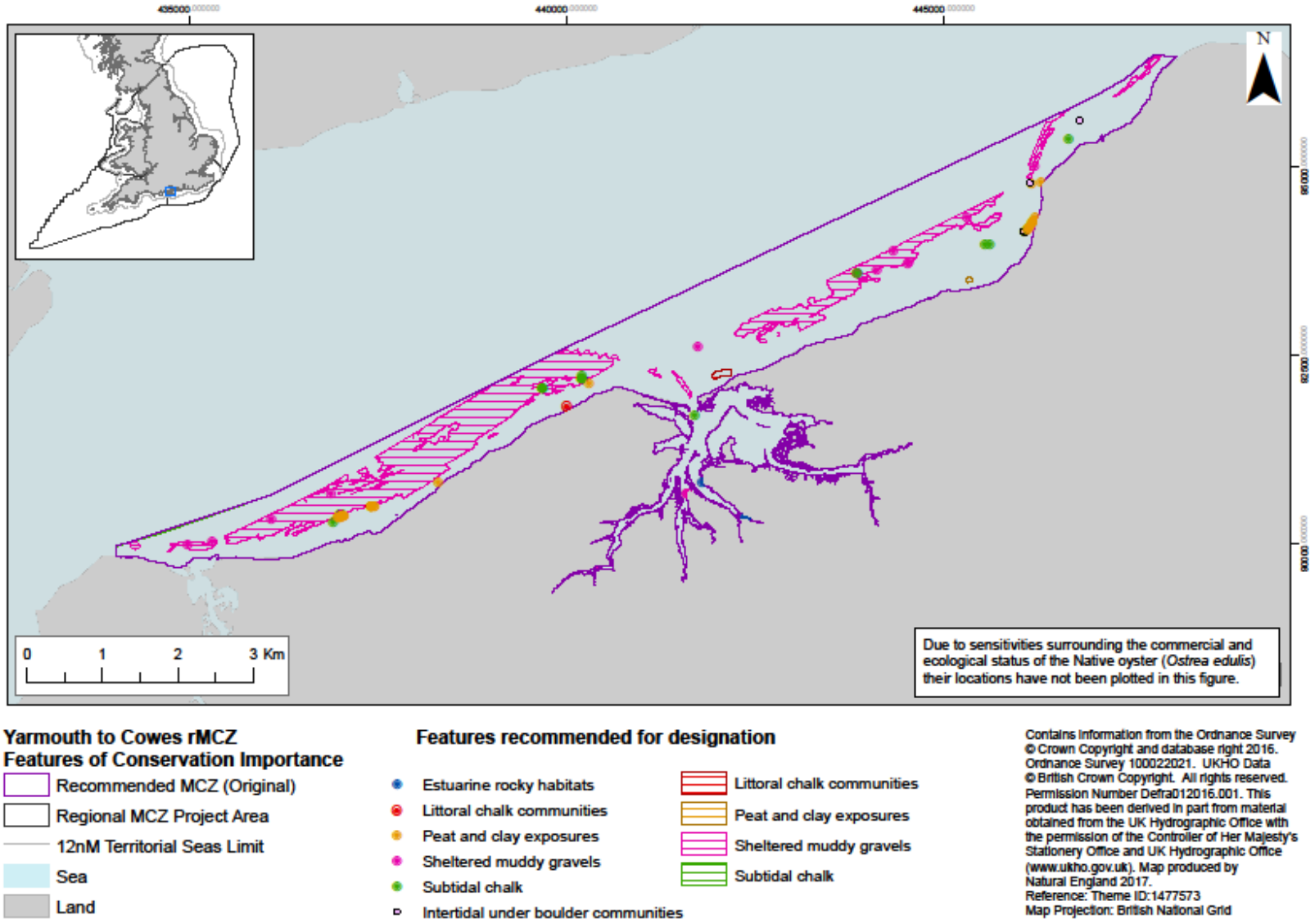


Figure 79 Location of mapped features of conservation importance in Yarmouth to Cowes rMCZ (original boundary)

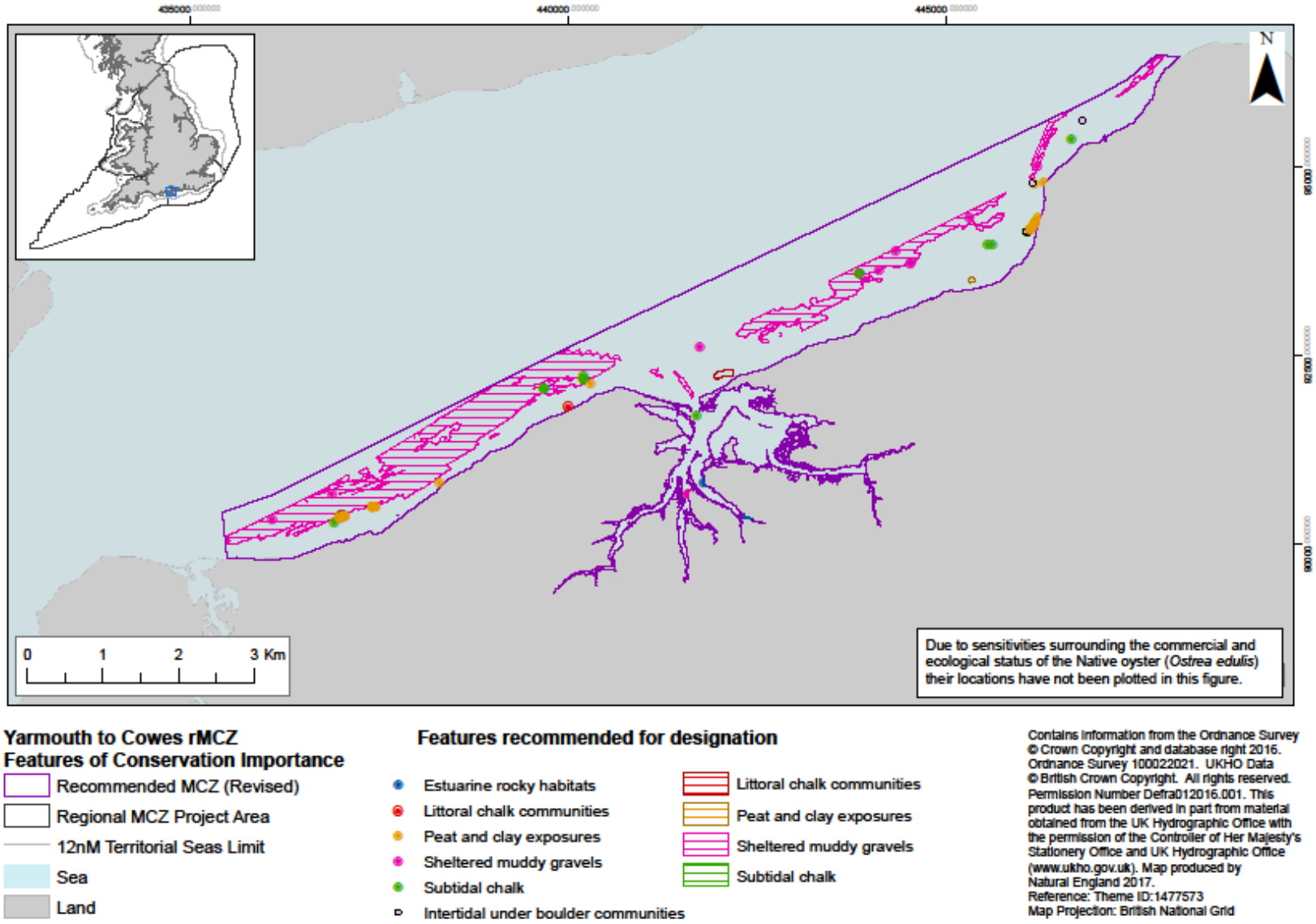


Figure 80 Location of mapped features of conservation importance in Yarmouth to Cowes rMCZ (revised boundary)

27.4 Summary of Natural England's advice

Table 27 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Yarmouth to Cowes rMCZ (**original boundary**).

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed (since the last advice provided for the feature)
Bouldnor Cliff geological feature	High	High	Favourable	Maintain	No change
Estuarine rocky habitats	Moderate	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to recreational sailing and powerboating. However, the most recent feature mapping and knowledge of mooring / anchoring activities within Newtown Harbour indicates that these activities do not overlap with the feature. Therefore, the vulnerability of estuarine rocky habitat to recreational boating has been changed to low, resulting in a Maintain GMA for this feature.
Fragile sponge & anthozoan communities on subtidal rocky habitats	Low	Low	Unfavourable	Recover	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
High energy circalittoral rock	High	High	Unfavourable	Recover	No change
High energy infralittoral rock	Moderate	Low	Unfavourable	Recover	No change
Intertidal coarse sediment	High	High	Favourable	Maintain	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed (since the last advice provided for the feature)
Intertidal under boulder communities	High	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). However, in practice, bottom towed fishing gear is unlikely to be used over intertidal rock habitats in this site due to the location, depth, substrate and lack of target species in this area. Therefore, the vulnerability of intertidal rocky features to fishing has been changed to low, resulting in a Maintain GMA for this feature.
Lagoon sand shrimp (*Gammarus insensibili*s)	Low	Low	Favourable	Maintain	The previous Recover GMA was triggered due to recreational sailing and powerboating. However, better knowledge of mooring / anchoring activities within Newtown Harbour indicates that these activities do not overlap with the feature. Therefore, the vulnerability of lagoon sand shrimp to recreational boating has been changed to low, resulting in a Maintain GMA for this feature.
Littoral chalk communities	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). However, in practice, bottom towed fishing gear is unlikely to be used over intertidal rock habitats in this site due to the location, depth, substrate and lack of target species in this area. Therefore, the vulnerability of intertidal rocky features to fishing has been changed to low, resulting in a Maintain GMA for this feature.
Low energy intertidal rock	High	High	Favourable	Maintain	No change
Moderate energy circalittoral rock	High	Moderate	Unfavourable	Recover	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed (since the last advice provided for the feature)
Moderate energy infralittoral rock	Moderate	Low	Unfavourable	Recover	No change
Moderate energy intertidal rock	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). However, in practice, bottom towed fishing gear is unlikely to be used over intertidal rock habitats in this site due to the location, depth, substrate and lack of target species in this area. Therefore, the vulnerability of intertidal rocky features to fishing has been changed to low, resulting in a Maintain GMA for this feature.
Native oyster (*Ostrea edulis*)	High	High	Unfavourable	Recover	No change
Native oyster beds *(Ostrea edulis*)	Low	Low	Unfavourable	Recover	No previous GMA advised for this feature. Feature previously assessed as no confidence in 2014.
Peat and clay exposures	High	High	Unfavourable	Recover	No change
Ross worm reefs (Sabellaria spinulosa)	No confidence	No confidence	Not assessed	Not assessed	No confidence in feature
Sheltered muddy gravels	High	High	Unfavourable	Recover	No change

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed (since the last advice provided for the feature)
Subtidal biogenic reefs	Low	Low	Unfavourable	Recover	No change
Subtidal chalk	High	Moderate	Unfavourable	Recover	No change
Subtidal coarse sediment	High	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls), maintenance of coastal and harbour infrastructure and recreational sailing and powerboating. However, following review of available survey samples, the sensitivity of this feature has been assessed using the site-specific biotopes identified. Using worst-case scenarios the most sensitive biotope present (and by proxy the feature) is considered to have low sensitivity to the pressures exerted by these activities. Therefore the vulnerability of this feature to the activities listed has been changed to low, resulting in a Maintain GMA.
Subtidal mixed sediments	High	High	Unfavourable	Recover	No change
Subtidal mud	High	High	Unfavourable	Recover	No change

Table 28 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Yarmouth to Cowes rMCZ (**revised boundary**).

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Bouldnor Cliff geological feature	High	High	Favourable	Maintain	No change
Estuarine rocky habitats	Moderate	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to recreational sailing and powerboating. However, the most recent feature mapping and knowledge of mooring / anchoring activities within Newtown Harbour indicates that these activities do not overlap with the feature. Therefore, the vulnerability of estuarine rocky habitat to recreational boating has been changed to low, resulting in a Maintain GMA for this feature.
Fragile sponge & anthozoan communities on subtidal rocky habitats	Low	Low	Unfavourable	Recover	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
High energy circalittoral rock	High	High	Unfavourable	Recover	No change
High energy infralittoral rock	Moderate	Low	Unfavourable	Recover	No change
Intertidal coarse sediment	High	High	Favourable	Maintain	No change
Intertidal under boulder communities	High	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). However, in practice, bottom towed fishing gear is unlikely to be used over intertidal rock habitats in this site due to the location, depth, substrate and lack of target species in this area. Therefore, the vulnerability of intertidal rocky features to fishing has been changed to low, resulting in a Maintain GMA for this feature.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Lagoon sand shrimp (*Gammarus insensibilis*)	Low	Low	Favourable	Maintain	The previous Recover GMA was triggered due to recreational sailing and powerboating. However, better knowledge of mooring / anchoring activities within Newtown Harbour indicates that these activities do not overlap with the feature. Therefore, the vulnerability of lagoon sand shrimp to recreational boating has been changed to low, resulting in a Maintain GMA for this feature.
Littoral chalk communities	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). However, in practice, bottom towed fishing gear is unlikely to be used over intertidal rock habitats in this site due to the location, depth, substrate and lack of target species in this area. Therefore, the vulnerability of intertidal rocky features to fishing has been changed to low, resulting in a Maintain GMA for this feature.
Low energy intertidal rock	High	High	Favourable	Maintain	No change
Moderate energy circalittoral rock	High	Moderate	Unfavourable	Recover	No change
Moderate energy infralittoral rock	Moderate	Low	Unfavourable	Recover	No change
Moderate energy intertidal rock	High	High	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). However, in practice, bottom towed fishing gear is unlikely to be used over intertidal rock habitats in this site due to the location, depth, substrate and lack of target species in this area. Therefore, the vulnerability of intertidal rocky features to fishing has been changed to low, resulting in a Maintain

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					GMA for this feature.
Native oyster (*Ostrea edulis*)	High	High	Unfavourable	Recover	No change
Native oyster beds (*Ostrea edulis*)	Low	Low	Unfavourable	Recover	No previous GMA advised for this feature. Feature previously assessed as no confidence in 2014.
Peat and clay exposures	High	High	Unfavourable	Recover	No change
Ross worm reefs (Sabellaria spinulosa)	No Confidence	No Confidence	Not assessed	Not assessed	No confidence in feature
Sheltered muddy gravels	High	High	Unfavourable	Recover	No change
Subtidal biogenic reefs	Low	Low	Unfavourable	Recover	No change
Subtidal chalk	High	Moderate	Unfavourable	Recover	No change
Subtidal coarse sediment	High	Moderate	Favourable	Maintain	The previous Recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls), maintenance of coastal and harbour infrastructure and recreational sailing and powerboating. However, following review of available survey samples, the sensitivity of this feature has been assessed using the site-specific biotopes identified. Using worst-case scenarios the most sensitive biotope present (and by proxy the feature) is considered to

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					have low sensitivity to the pressures exerted by these activities. Therefore the vulnerability of this feature to the activities listed has been changed to low, resulting in a Maintain GMA.
Subtidal mixed sediments	High	High	Unfavourable	Recover	No change
Subtidal mud	High	High	Unfavourable	Recover	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

27.5 Additional advice

27.5.1 Advice on specific features

27.5.1.1 High energy infralittoral rock in the Yarmouth to Cowes (original and revised boundaries) rMCZ

The high energy infralittoral rock (A3.1) feature is represented at three other sites within the Eastern Channel region and current assessments have concluded moderate confidence for the presence of high energy infralittoral rock in the Yarmouth to Cowes rMCZ and low confidence for extent.

The extent calculation is based on limited data from the 2006 Natural England Survey of the Subtidal Sediments of the Solent Maritime SAC, which includes polygon data but only one ground truthing data point. This survey found the biotope IR.MIR.SedK.HalXK (*Halidrys siliquosa* and mixed kelps on tide-swept infralittoral rock with coarse sediment) which supports a range of seaweeds and grazers and has a limited distribution in English and UK waters (Stamp & Tyler-Walters 2002). Unfortunately, it was not possible to determine benthic habitat data from the video element of the site verification survey as the underwater visibility conditions were poor. The verification survey therefore only reported habitat data from grab sampling, therefore not providing any evidence for rock habitats present in the site.

The assessed risk level for this feature shows moderate/high vulnerability to fishing activity; therefore, on the basis of risk, the biotope characteristics of the feature and its potentially wider distribution in the site, we would advise the feature should continue to be considered for designation at this site.

27.5.1.2 Moderate energy infralittoral rock in the Yarmouth to Cowes (original and revised boundaries) rMCZ

The moderate energy infralittoral rock (A3.2) feature is represented at five other sites within the Eastern Channel region. Current assessments have calculated moderate confidence for the presence of moderate energy infralittoral rock in the Yarmouth to Cowes rMCZ and low confidence in its extent. The extent calculation of low confidence is based on limited data of three points. Unfortunately it was not possible to determine benthic habitat data from the video element of the site verification survey as the underwater visibility conditions were poor. As a result, the verification survey only reported habitat data from grab sampling, therefore not providing any evidence for rock habitats present in the site.

However, recent dive survey data reviewed since the confidence assessment results were finalised, identified the biotope IR.MIR.KR.Ldig.Pid (*Laminaria digitata* and piddocks on sublittoral fringe soft rock) which is less common around English and UK waters and supports burrowing worms and molluscs, and a variety of seaweeds including varied red algae over soft rock (Tillin & Hill 2016).

The assessed risk level for this feature shows moderate/high vulnerability to fishing activity; therefore on the basis of the assessed risk to the feature, the biotope characteristics of the feature and the potential for a wider distribution of the feature within the site, we would advise the feature should continue to be considered for designation at this site.

27.5.1.3 Native oyster beds in the Yarmouth to Cowes (original and revised boundaries) rMCZ

The native oyster beds (*Ostrea edulis*) feature (HOCI_14) is assessed as low confidence in presence and extent in the Yarmouth to Cowes rMCZ.

The evidence for this feature is based on two points from one survey; the 2006 Natural England Survey of the Subtidal Sediments of the Solent Maritime SAC. The age of these data, the qualitative nature of the survey and the limited number of points do not provide sufficient evidence that functioning viable native oyster beds are present in this site.

This feature may be a gap in the Eastern Channel region if not designated in Tranche 3. However, we do not believe there is sufficient evidence to justify designation and, therefore, we advise this feature is not

taken forward at this site.

Native oyster is also proposed for designation as a species feature (SOCI_22) in this site with high confidence in presence and extent. If designated, this will ensure the species is protected; however, there is insufficient evidence for established viable native oyster beds as a habitat feature at this site.

27.5.1.4 Subtidal biogenic reefs in the Yarmouth to Cowes (original and revised boundaries) rMCZ

The subtidal biogenic reefs (A5.6) feature is assessed as low confidence in presence and extent in the Yarmouth to Cowes rMCZ.

The evidence for this feature is based on one point from one survey; the 2007 Environment Agency Solent Water Framework Directive benthic survey. No information on the type of biogenic reef was reported. The age of these data, lack of further information on the type of biogenic reef and the limited number of points does not provide sufficient evidence that subtidal biogenic reef is present as a Broad Scale Habitat feature within the Yarmouth to Cowes rMCZ.

Additionally, the 2013 CEFAS verification survey did not find any evidence of biogenic reef.

This feature is not a gap in the Eastern Channel region since forms of biogenic reef (*Sabellaria spinulosa*, blue mussel beds) are designated and proposed in other Marine Protected Areas (some overlap with HOCI and SAC sub-features). We do not believe there is sufficient evidence to justify designation and, therefore, advise this feature is not taken forward at this site.

27.5.1.5 Fragile sponge & anthozoan communities in the Yarmouth to Cowes (original and revised boundaries) rMCZ

Fragile sponge & anthozoan communities on subtidal rocky habitats (HOCI_7) is a sensitive habitat FOCI which is found and protected at a range of sites within the Eastern Channel region. We currently have low confidence in the presence of this feature in the Yarmouth to Cowes rMCZ and low confidence in its extent. We do not advise this feature progresses to designation based on the limited evidence available.

This feature is not a gap within the Eastern Channel region because it is represented at three designated sites. The single evidence source for this feature is from a 2012 Hampshire and Isle of Wight SeaSearch survey and is overlapping with the proposed High energy infralittoral rock feature. Based on expert judgement, it is likely that the biotope recorded may be a small area within the wider high energy infralittoral rock feature and therefore we do not advise that HOCI_7 is considered for separate designation.

27.5.1.6 Subtidal mixed sediment in Yarmouth to Cowes (original and revised boundaries) rMCZs

In the Eastern Channel region, the feature subtidal mixed sediment (A5.4) is present in Norris to Ryde and Yarmouth to Cowes rMCZs. If designated, both sites would contribute to the gap identified for this feature in the existing MPA network. This is in line with the current requirement that all inshore site options put forward for designation in Tranche 3 should contribute to outstanding adequacy targets.

Based on the data we have analysed to date, we have high confidence in both presence and extent of this feature in both sites. However, in both instances, these mixed sediments are affected by *Crepidula fornicata,* a non-native marine mollusc. Specifically, we know that this species is associated with the two biotopes:

- SS.SMx.SMxVS.CreMed - *Crepidula fornicata* and *Mediomastus fragilis* in variable salinity infralittoral mixed sediment; and
- SS.SMx.IMx.CreAsAn - *Crepidula fornicata* with ascidians and anemones on infralittoral coarse mixed sediment.

More commonly known as the slipper limpet, this species is well established in parts of the United Kingdom, with high population abundances occurring in some areas, including the Eastern Channel. Classed as 'High Risk' by the Great Britain Non-Native Species Secretariat (GBNNSS) (Sewell and Sweet 2011) and the Environment Agency, it is known to cause a range of environmental issues including spatial competition, trophic competition, alteration of the substratum and nutrient load of the water column.

If designation of subtidal mixed sediments is pursued in this region, selecting these biotopes will be unavoidable. Stakeholders with the view that *C. fornicata* presence is an indicator of low-quality habitat are likely to respond negatively to this decision. Indeed, it is important to acknowledge that eradicating this species from either site will be unfeasible using current known methods and as such, meeting the requirements of a 'recover' management recommendation is not possible. Nonetheless, there are management options that could deliver benefits. For example, restricting activities such as trawling may decrease the spread of *C. fornicata*; an outcome that would benefit the mixed sediments and surrounding sensitive habitats of conservation importance (HOCI) such as seagrass and native oyster beds.

Consequently, we advise that this feature should be considered for designation at these two sites, with a view to implementing appropriate management measures that seek to decrease the impacts of bottom towed fishing gear as well as reduce the spread of *C. fornicata* to reduce overall pressures on this habitat feature.

27.5.2 Advice on the site boundary

This section describes two potential boundary amendments to the Yarmouth to Cowes rMCZ. Natural England has provided pre-consultation advice on two boundary options for the site; the first with the boundary originally recommended by the Regional MCZ Project ('Yarmouth to Cowes – original' above and in **Results tables - Annex 4**) and the second with the boundary amended as described below ('Yarmouth to Cowes – revised' above and in **Results tables - Annex 4**).

For the proposed western boundary amendment (Section 27.5.2.1), there is no driver on conservation or evidence grounds to amend the boundary of this rMCZ. Natural England is providing this advice in response to recent pre-consultation stakeholder engagement and at the request of Defra. Defra may choose to amend the boundary as proposed by the stakeholders if they wish to alleviate stakeholder objection to this rMCZ and reduce socio-economic impacts of the designation.

28 Yarmouth to Cowes rMCZ – potential western boundary amendment

Proposed boundary amendment

To move the western boundary of the site to the east of Yarmouth Pier so that the rMCZ no longer crosses the mouth of the Yar Estuary as shown in Figure 80 and 81.

Rationale for Natural England's advice on this boundary amendment

Through Natural England's informal pre-consultation stakeholder engagement on the Yarmouth to Cowes rMCZ, the Yarmouth Harbour Commissioners (YHC) and the Isle of Wight Council (IoWC) expressed significant concerns about the rMCZ. The area around the Yarmouth Harbour entrance is important for ferry transport links (including Wightlink, Puffin Cruises, Blue Funnel Cruises, Gosport Ferry Company and Solent Rose), tourism, fishing fleet traffic, sea defences (particularly the breakwater), maintenance of the listed pier, angling and recreational sailing (with numerous slipways, racing marks and moorings in this area). The area to the west of the harbour entrance is important for recreation (as a swim area and for boat moorings) and is the location for a consented (but not yet built) renewable energy development. Given the level of activity in this area and its importance to the economy of the Isle of Wight, both YHC and IoWC have concerns about the impact of the inclusion of this area within the rMCZ.

Discussions with these stakeholders identified a potential way to improve their support for the site in the form of an amendment to the original site boundary (Figure 74 and Figure 75). Therefore, as requested by Defra, Natural England provided pre-consultation advice for the site with this potential boundary amendment implemented, alongside advice for the original boundary.

Moving the site boundary so that the rMCZ no longer crosses the mouth of the Yar Estuary and no longer includes Yarmouth Roads anchorage will greatly reduce stakeholder objections to the site. Natural England's opinion is that the environmental gain from securing support for the remainder of this site, thus helping to ensure the site is considered for designation, is likely to outweigh any ecological effects of losing this area of habitat from the rMCZ. The five features affected by the boundary amendment are widespread across the remainder of the site. Furthermore, approximately 50% of the area proposed to be removed from the rMCZ is protected by the existing Solent Maritime SAC designation and will, therefore, remain within the MPA network.

Implications for rMCZ features

Table 29Table 24 contains the five features (out of a total of 23) which are affected by the proposed western boundary amendment. The table qualitatively describes the impacts of the proposed boundary amendment on our advice for these 5 proposed features of the site. For a full comparison of the quantitative effects of the boundary amendment on Natural England's advice on confidence in feature presence and extent and the General Management Approach (GMA), please refer to **Tables 27 and 28**. In summary, there are no changes to our advice on the confidence in feature presence and extent, or GMA, as a result of the boundary amendment.

Table 29 Features affected by the potential western boundary amendment

Feature	**Approximate loss of known extent from rMCZ with revised boundary**	**Implications for the MPA network**
Native oyster (*Ostrea edulis*) SOCI 22	Approximately 5% (Four point records out of 87 for the site)	Feature would still be protected in the remainder of the site.
Sheltered muddy gravels HOCI 19	Less than 2% (Two point records and two polygons)	Approximately 45% of the two small polygon areas of sheltered muddy gravels that will be lost from the rMCZ are within the existing Solent Maritime SAC boundary. Intertidal mixed sediments and subtidal mixed sediments are both sub-features of the existing SAC. There will therefore be minimal impact upon the rMCZ (feature still protected in remainder of the site) and the MPA network as a whole.
A5.1 Subtidal coarse sediment	Less than 25%	Approximately half of the area of this feature that would be lost from the rMCZ is within the existing Solent Maritime SAC boundary. Subtidal coarse sediment is a sub-feature of the SAC and therefore, within the SAC area, this feature will remain protected within the MPA network. The area of the feature affected by the boundary amendment but falling outside of the SAC boundary is <10% of the known feature extent within the rMCZ.
A5.4 Subtidal mixed sediments	Less than 10%	Approximately half of the area of this feature that would be lost from the rMCZ is within the existing Solent Maritime SAC boundary. Subtidal mixed sediments is a sub-feature of the SAC and therefore, within the SAC area, this feature will still be protected. The area of the feature affected by the boundary amendment but falling outside of the SAC boundary is < 5% of the known feature extent within the rMCZ.
A2.1 Intertidal coarse sediment	Less than 25%	In the area that would be lost from the rMCZ by amending the boundary, this habitat is already protected as a sub-feature of the existing Solent Maritime SAC so there would be no loss from the MPA network.

28.1.0.0 Yarmouth to Cowes rMCZ – Newtown Quay Lagoon boundary amendment

Proposed boundary amendment

To remove Newtown Quay Lagoon from the rMCZ (area shown in red in Figure 82 below). This is a separate amendment to the western boundary amendment described in section 27.5.2.1.

Rationale for boundary amendment

The Yarmouth to Cowes rMCZ boundary should follow the Mean High Water (MHW) mark but currently also includes the saline lagoon habitat at Newtown Quay Lagoon (above MHW). The lagoon habitat is already protected by the Solent Maritime SAC and the Newtown Harbour SSSI designations and, furthermore, the rare lagoon fauna (including the lagoon sand shrimp, *Gammarus insensibilis*, SOCI 9) is protected under Schedule 5 of the Wildlife and Countryside Act 1981. Therefore, to avoid duplicate designation, the lagoon should be removed from the rMCZ.

Stakeholder support for the boundary amendment options

This boundary amendment has not been discussed with stakeholders – it is based on Natural England's expert advice and the principle of avoiding duplication and overlapping of designations.

Implications for MCZ features

Removing the lagoon from the rMCZ has resulted in no change in the confidence assessment of the Lagoon Sand Shrimp (*Gammarus insensibilis*) SOCI 9 feature (remains Low confidence for both presence and extent). Therefore, Natural England recommends that the lagoon feature is not taken forward for designation within the rMCZ, regardless of the boundary option that is taken forward.

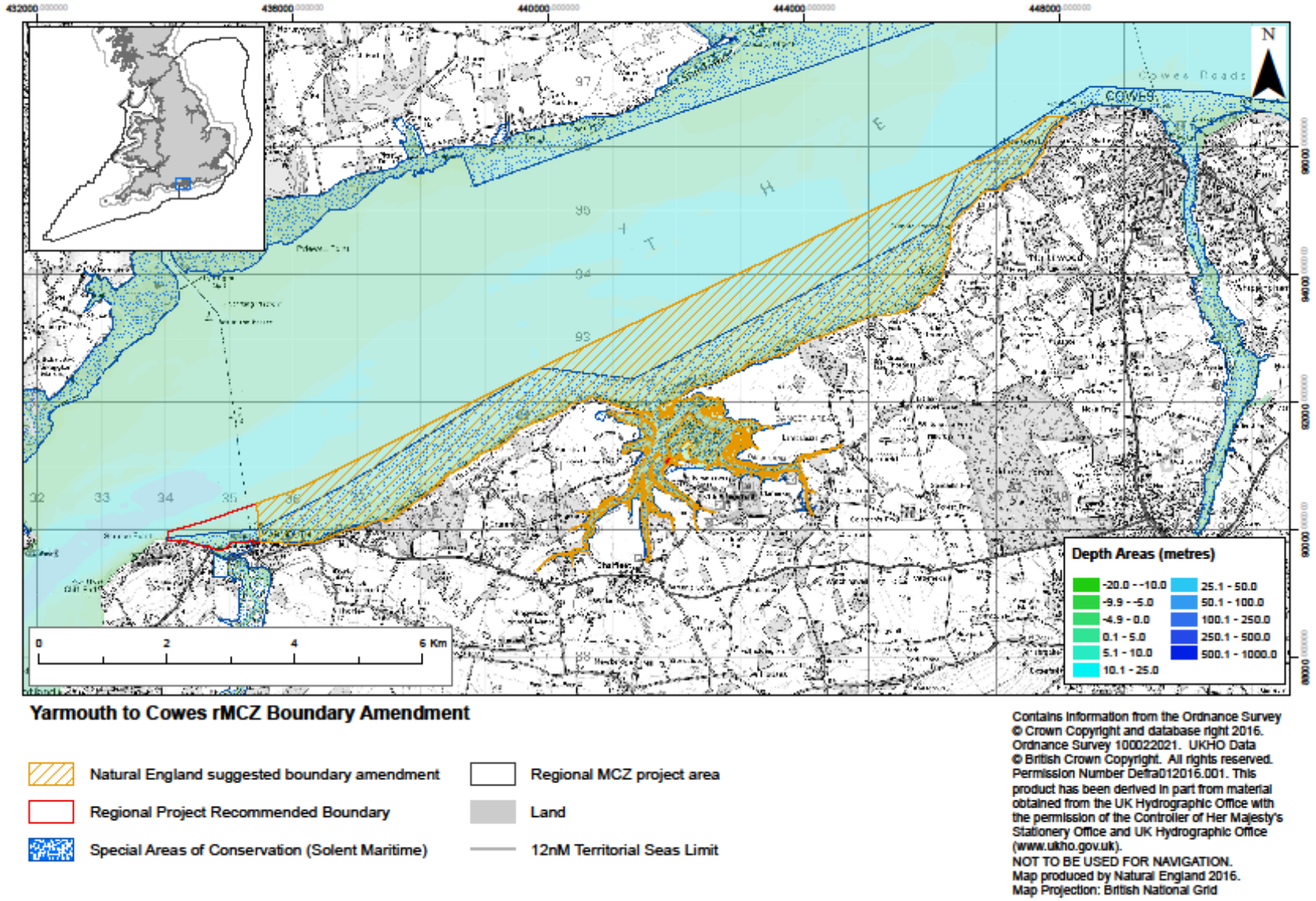
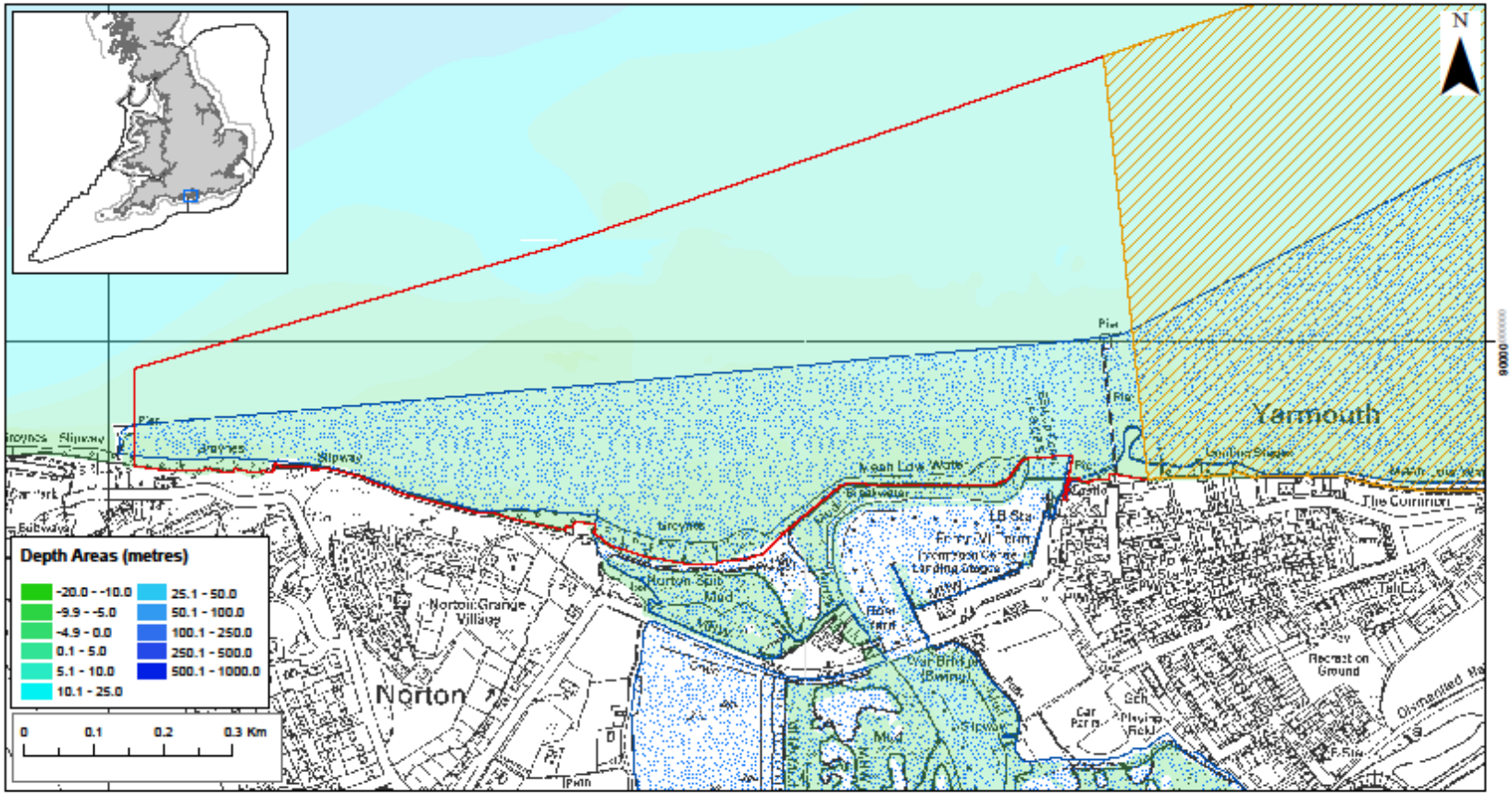


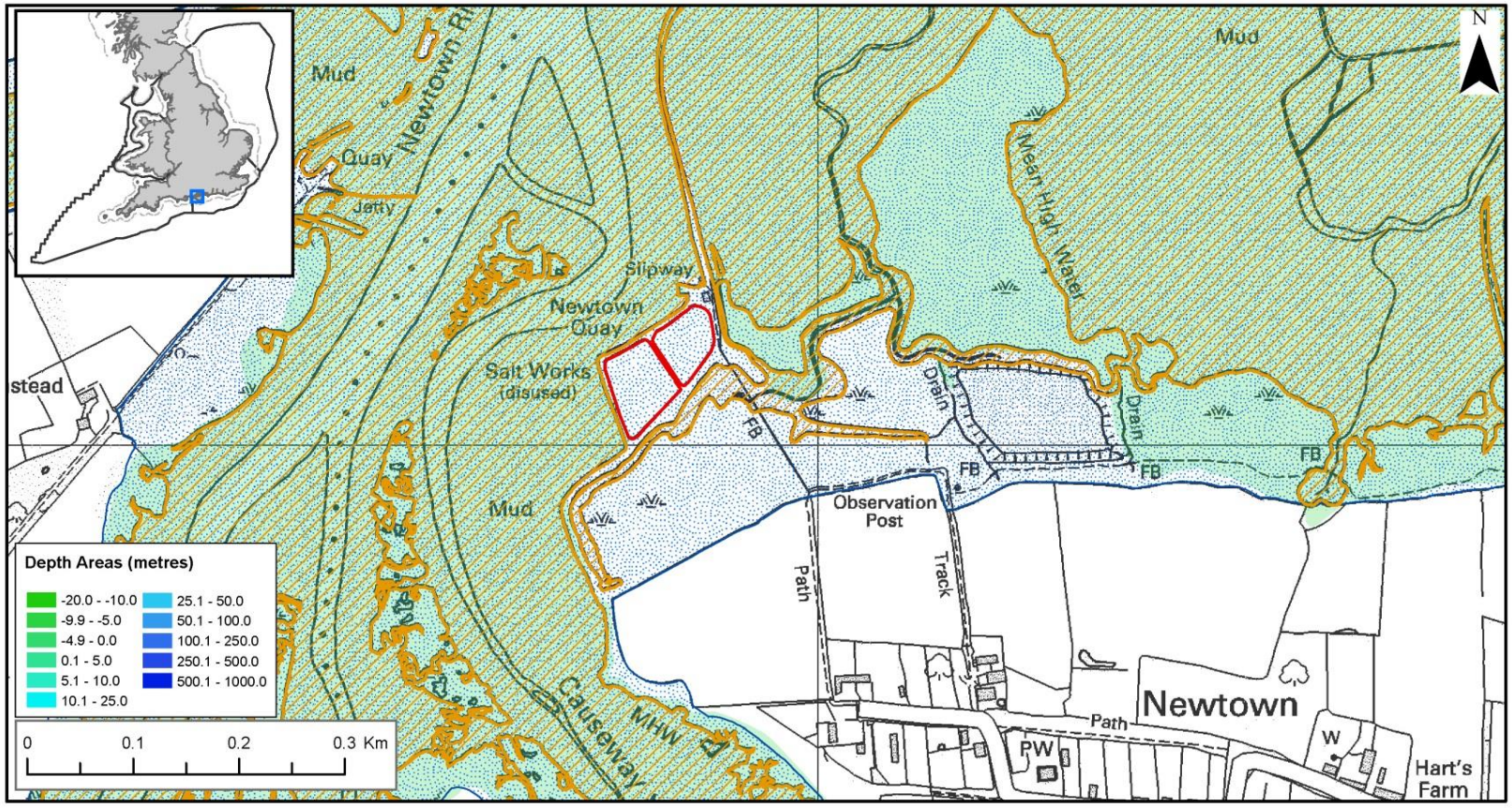
Figure 81 Potential amendment to the western boundary of the Yarmouth to Cowes rMCZ – site overview



Yarmouth to Cowes rMCZ Boundary - Red Regional Project area to be removed

- Natural England suggested boundary amendment
- Regional Project Recommended Boundary
- Special Areas of Conservation (Solent Maritime)
- Regional MCZ project area
- Land
- 12nM Territorial Seas Limit

Figure 82 Detailed map of potential western boundary amendment to the Yarmouth to Cowes rMCZ



Yarmouth to Cowes rMCZ Boundary Amendment at Newtown Quay Lagoon

Natural England Recommended Boundary
Regional Project Recommended Boundary
Special Areas of Conservation (Solent Maritime)
Regional MCZ project area
Land
12nM Territorial Seas Limit

Figure 83 Amendment to the Yarmouth to Cowes rMCZ boundary at Newtown Quay Lagoon

Advice on designated Regional Project MCZs with further features under consideration for consultation in Tranche 3

The following sites have been designated by Defra in previous tranches (Tranche 1 - November 2013 or Tranche 2 - January 2016). Natural England is advising on further features for these sites as part of Tranche 3, where new or improved evidence has become available for the undesignated features(s) (network beneficial options) and/or they may contribute to a shortfall in the MPA network (network critical options) (Natural England & JNCC 2010). Site and feature descriptions are not provided for these sites as this information has been published in the Tranche 1 and Tranche 2 site factsheets.

29 Blackwater, Crouch, Roach and Colne Estuaries MCZ

29.1 Site map

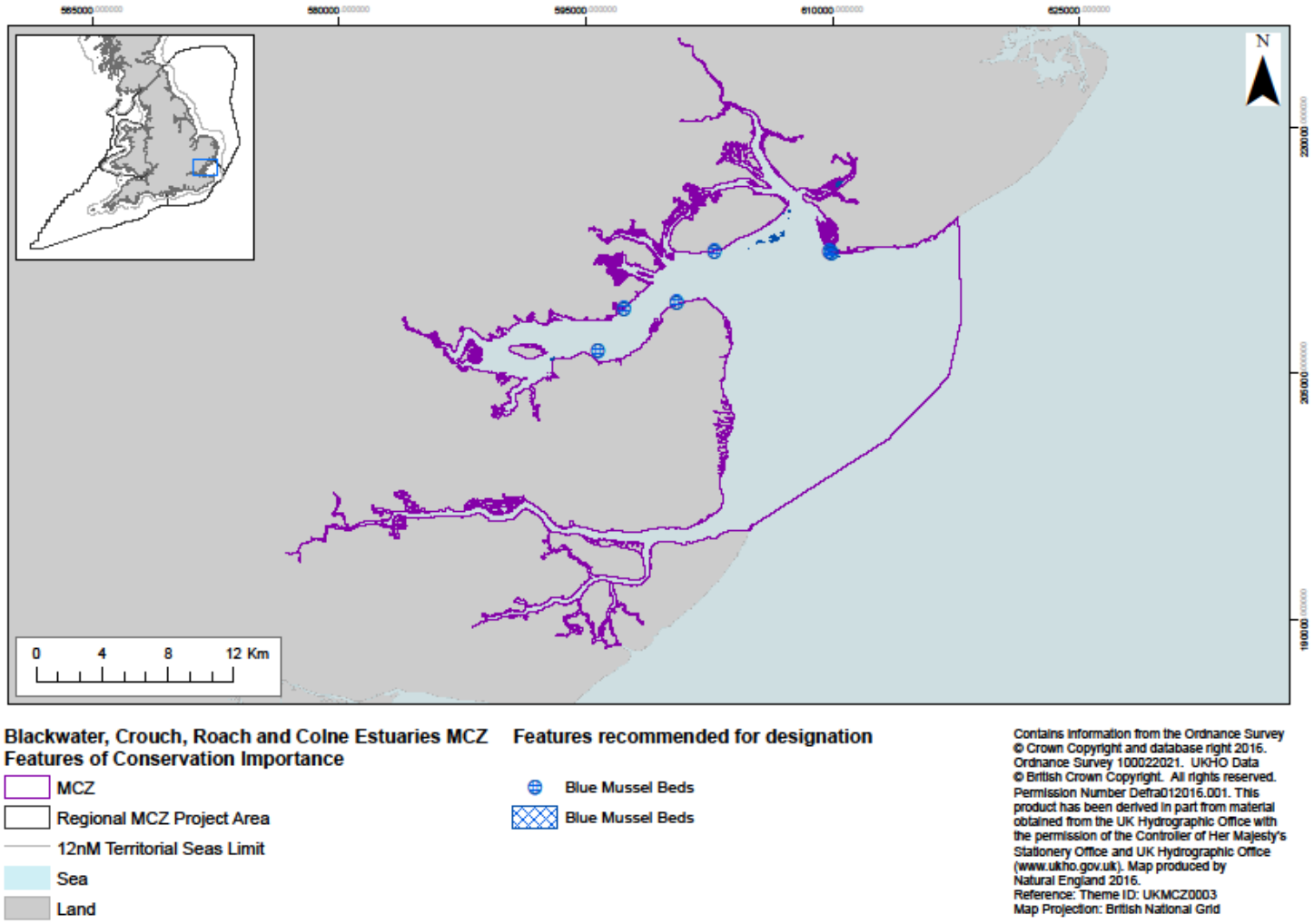


Figure 84 Location of mapped further features of conservation importance for Blackwater, Crouch, Roach and Colne Estuaries MCZ

29.2 Summary of Natural England's advice

Table 30 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Blackwater, Crouch, Roach and Colne Estuaries MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Blue mussel beds	High	High	Unfavourable	Recover	New feature
Smelt (*Osmerus eperlanus*)	Refer to Chapter 4 of Annex 2 for further advice on smelt				

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

Full details of Natural England's advice on smelt and the evidence that has informed this advice can be found in **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**.

30 Chesil Beach and Stennis Ledges MCZ

30.1 Site maps

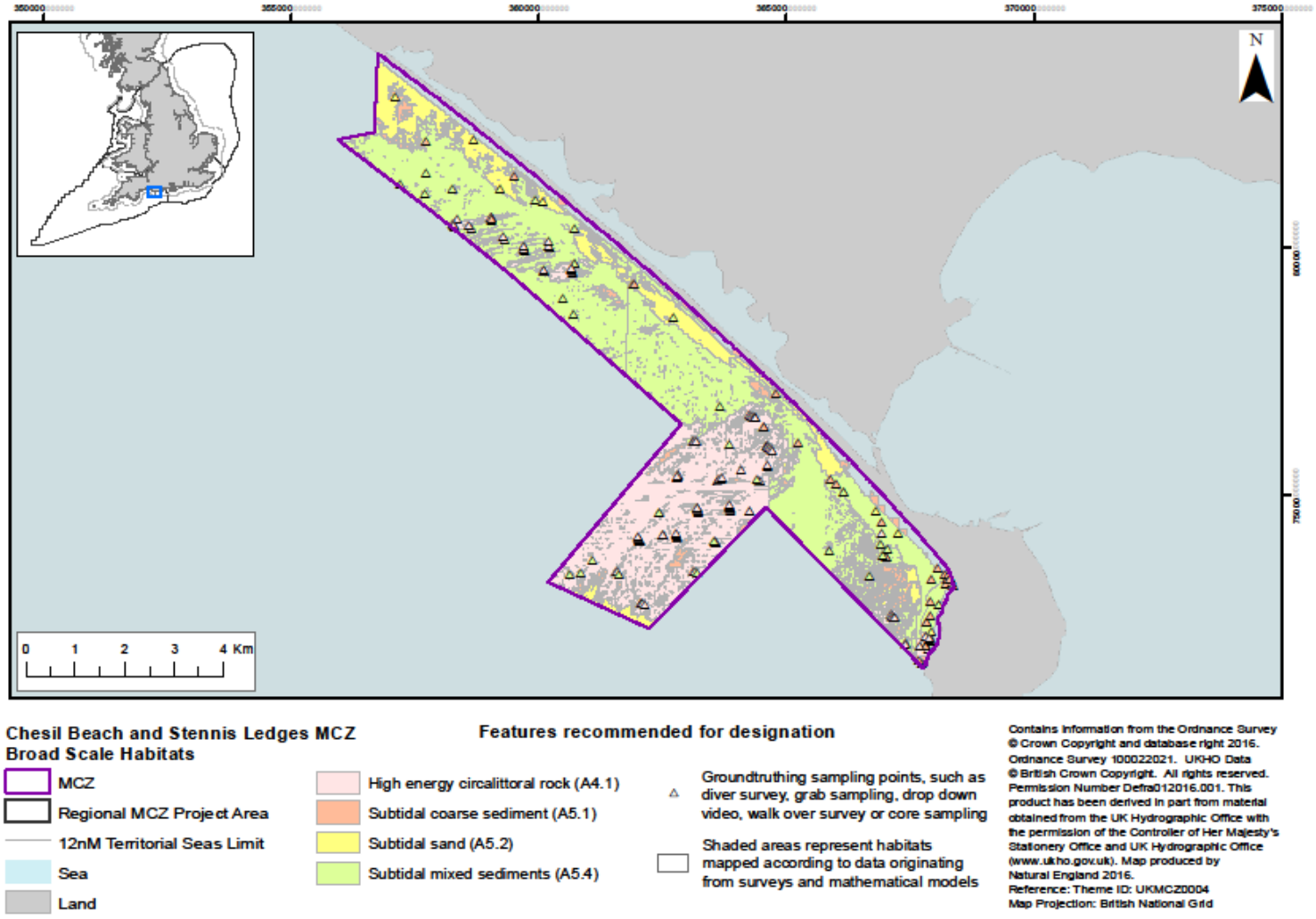


Figure 85 Location of mapped further broad-scale habitats in Chesil Beach and Stennis Ledges MCZ

30.2 Summary of Natural England's advice

Table 31 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Chesil Beach and Stennis Ledges MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
High energy circalittoral rock	High	High	Unfavourable	Recover	New feature
Subtidal coarse sediment	High	High	Favourable	Maintain	The previous recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). Based on the assessment of the verification survey grab sample data, sensitivities of the subtidal coarse sediment feature have been assessed using the site-specific biotopes identified at the site. Pressures primarily associated with dredging and trawling are: abrasion/disturbance of the surface of the substratum or seabed; penetration or disturbance of the substratum subsurface; siltation rate changes, including smothering (light); and removal of non-target species. Using worst-case scenarios the most sensitive biotope present (and by proxy the feature) is considered to have low sensitivity to these activities, therefore a current GMA of maintain is advised. Changing the sensitivity of the feature from high (automated) to low based on assessing the sensitivity of site-specific biotopes therefore changes the vulnerability assessment from high to low, resulting in a Maintain GMA for this feature.
Subtidal mixed sediments	High	High	Favourable	Maintain	New feature
Subtidal sand	High	High	Favourable	Maintain	The previous recover GMA was triggered due to moderate/high vulnerability to fishing (dredges and demersal trawls). Based on the assessment of the verification survey grab sample data, sensitivities of the subtidal sand feature have been assessed using the site-specific biotopes identified at the site. Pressures primarily

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
					associated with dredging and trawling are: abrasion/disturbance of the surface of the substratum or seabed; penetration or disturbance of the substratum subsurface; siltation rate changes, including smothering (light); and removal of non-target species. Using worst-case scenarios the most sensitive biotope present (and by proxy the feature) is considered to have low sensitivity to these activities, therefore a current GMA of maintain is advised. Changing the sensitivity of the feature from high (automated) to low based on assessing the sensitivity of site-specific biotopes therefore changes the vulnerability assessment from high to low, resulting in a Maintain GMA for this feature.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

31 Dover to Deal MCZ

31.1 Site maps

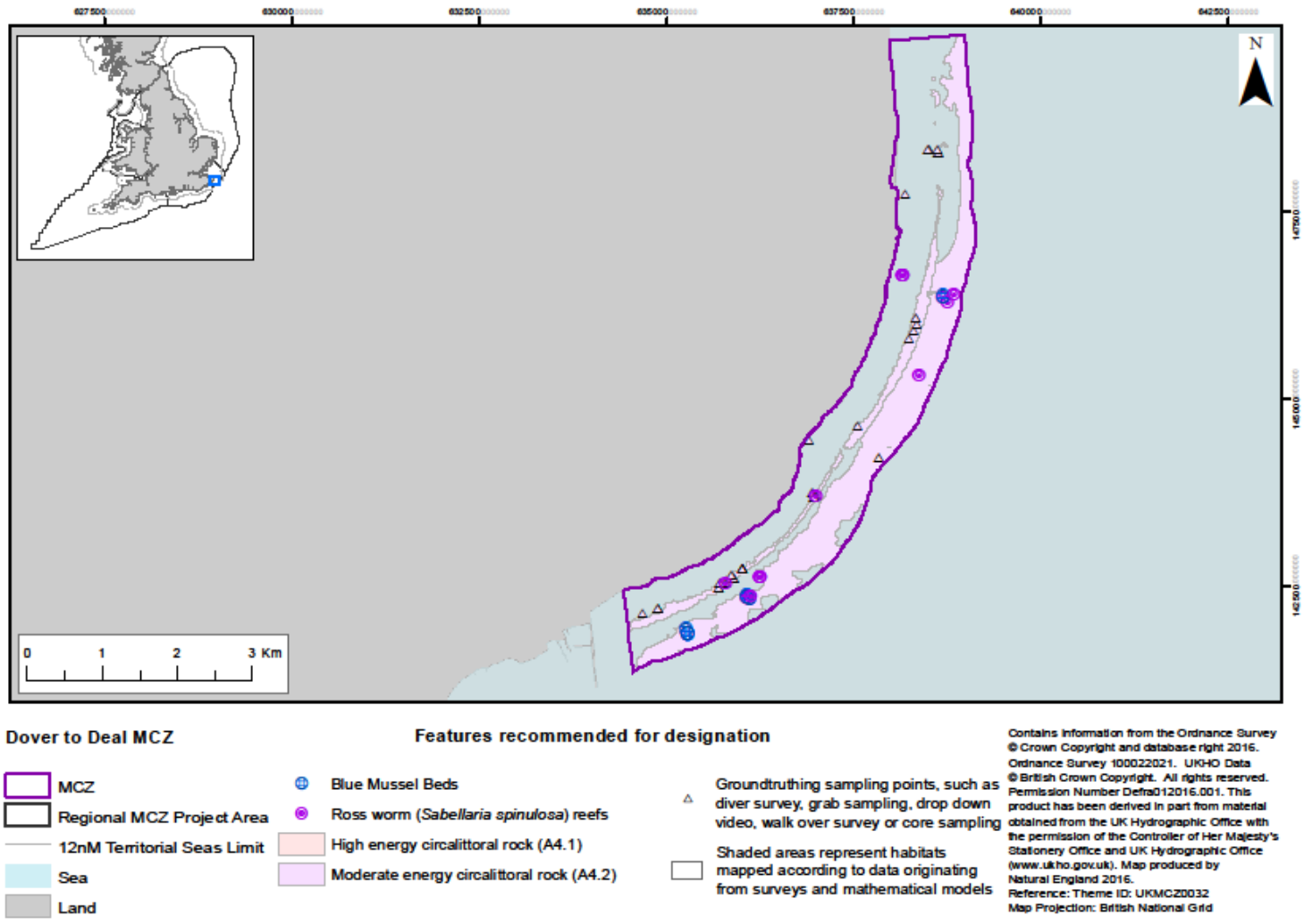


Figure 86 Location of mapped further features of conservation importance and broad-scale habitats in Dover to Deal MCZ

31.2 Summary of Natural England's advice

Table 32 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Dover to Deal MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Blue mussel beds	High	Moderate	Unfavourable	Recover	No change
High energy circalittoral rock	Moderate	Moderate	Unfavourable	Recover	No change
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	No change
Ross worm reefs (*Sabellaria spinulosa*)	High	Moderate	Unfavourable	Recover	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

32 Dover to Folkestone MCZ

32.1 Site maps

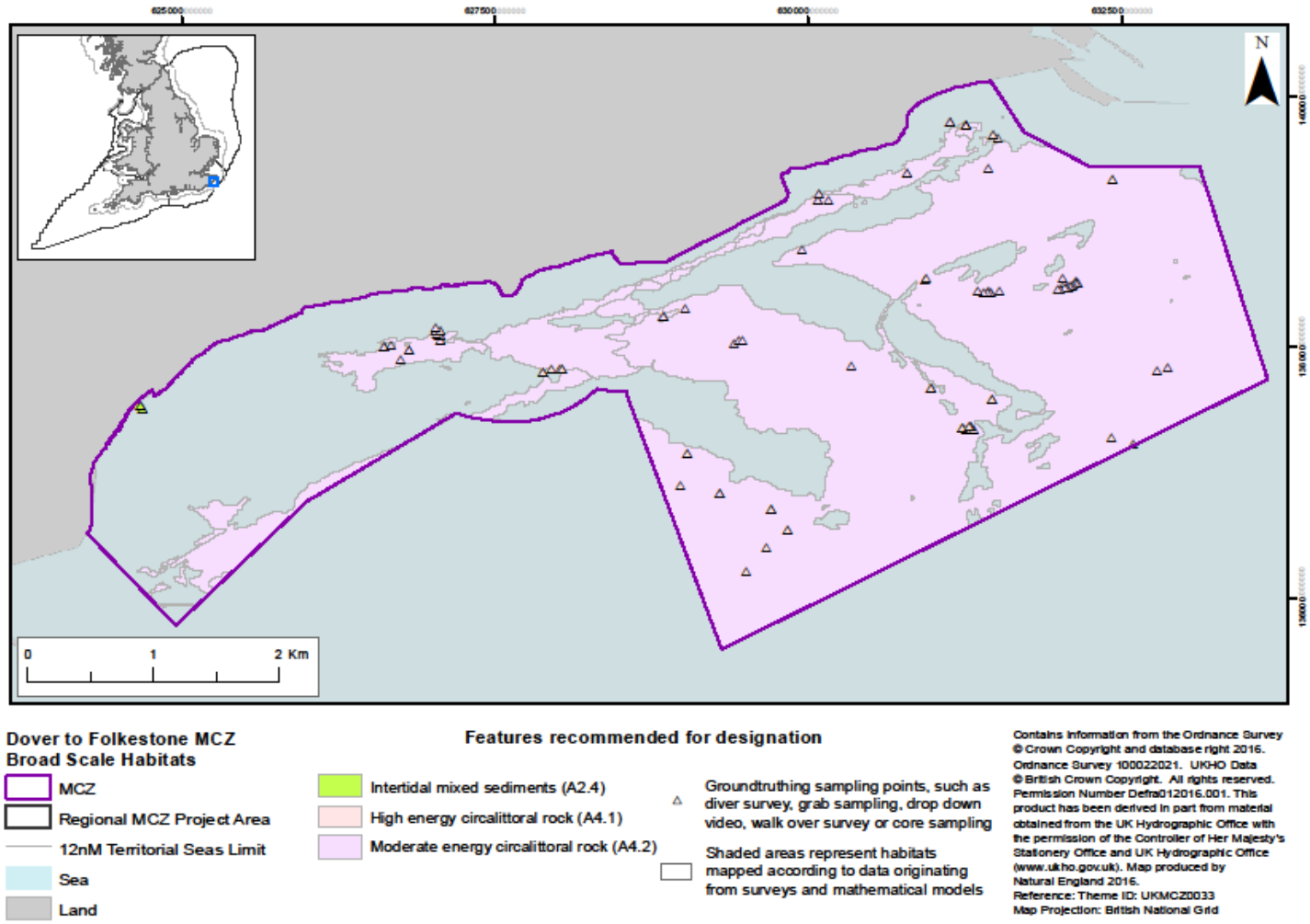


Figure 87 Location of mapped further broad-scale habitats in Dover to Folkestone MCZ

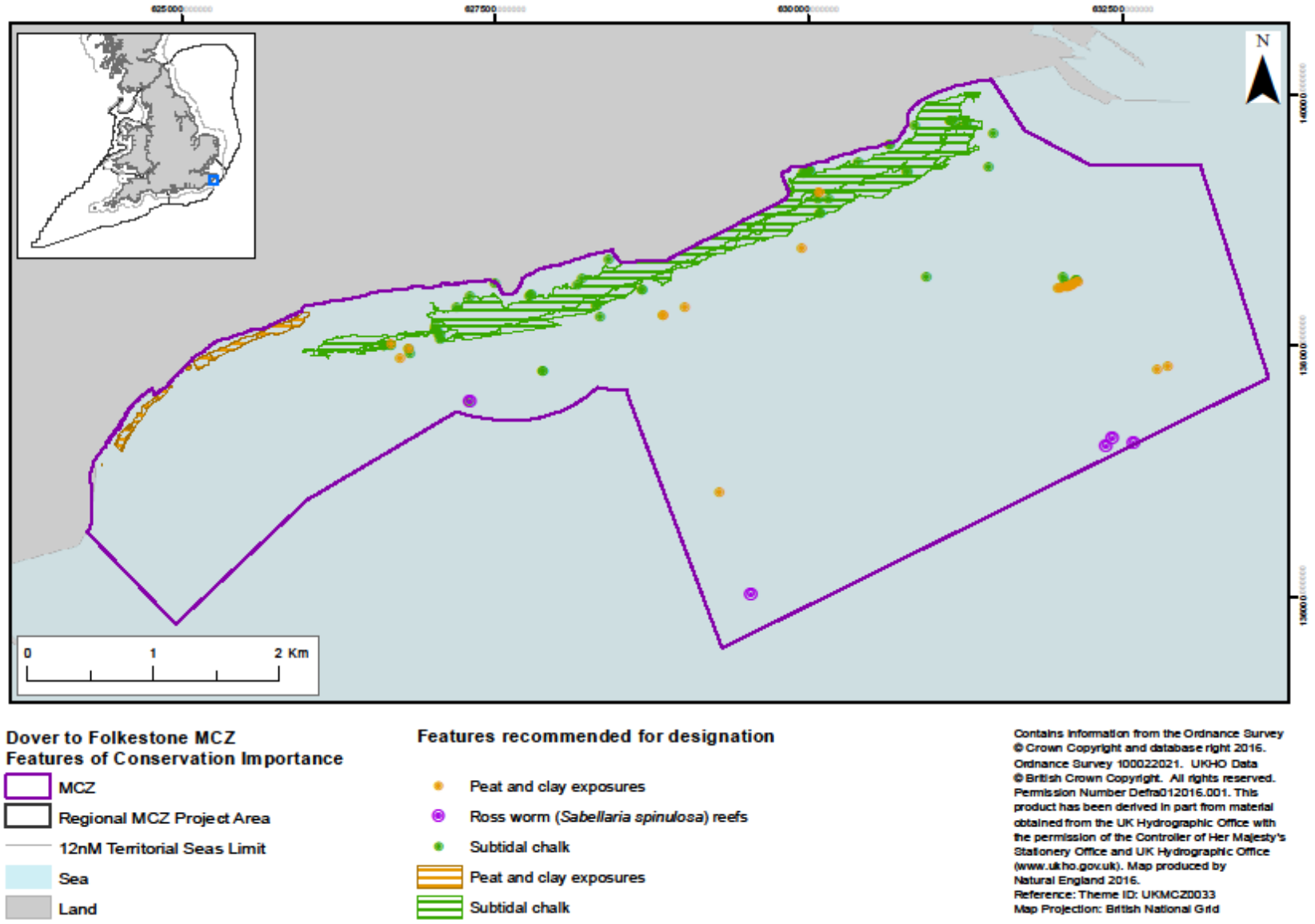


Figure 88 Location of mapped further features of conservation importance in Dover to Folkestone MCZ

32.2 Summary of Natural England's advice

Table 33 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Dover to Folkestone MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
High energy circalittoral rock	Moderate	Moderate	Unfavourable	Recover	No change
Intertidal mixed sediments	Moderate	Moderate	Favourable	Maintain	GMA not previously advised for this feature
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	No change
Peat and clay exposures	High	High	Unfavourable	Recover	No change
Ross worm reef (Sabellaria spinulosa)	Moderate	Moderate	Unfavourable	Recover	No change
Subtidal chalk	High	High	Unfavourable	Recover	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

33 Isles of Scilly Sites – Bristows to the Stones MCZ

33.1 Site maps

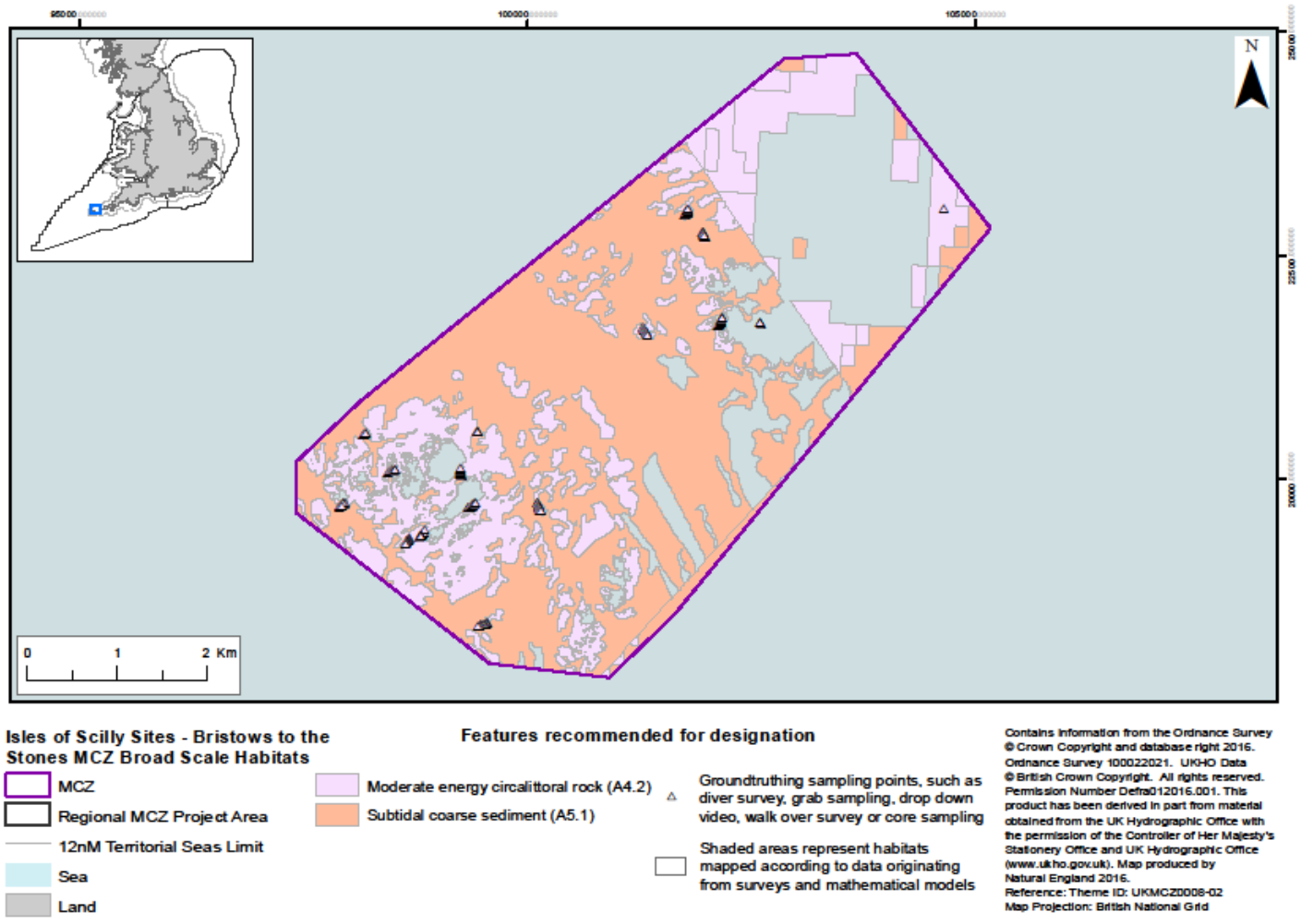


Figure 89 Location of mapped further broad-scale habitats in Isles of Scilly Sites – Bristows to the Stones MCZ

33.2 Summary of Natural England's advice

Table 34 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Isles of Scilly Sites – Bristows to the Stones MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	No change
Subtidal coarse sediment	Moderate	Moderate	Unfavourable	Recover	The recover GMA has been triggered due to evidence of dredging and demersal trawling occurring within the site. The site sits across the six nautical mile boundary from the Isles of Scilly, with a bylaw restricting scallop dredging and trawling within the district, but not beyond the 6nm boundary. As such roughly half the site is exposed to these activities. Given the current evidence on exposure and sensitivity, the GMA for this feature has been assessed as recover instead of the previous maintain GMA generated in 2012.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

34 Isles of Scilly Sites – Peninnis to Dry Ledge MCZ

34.1 Site maps

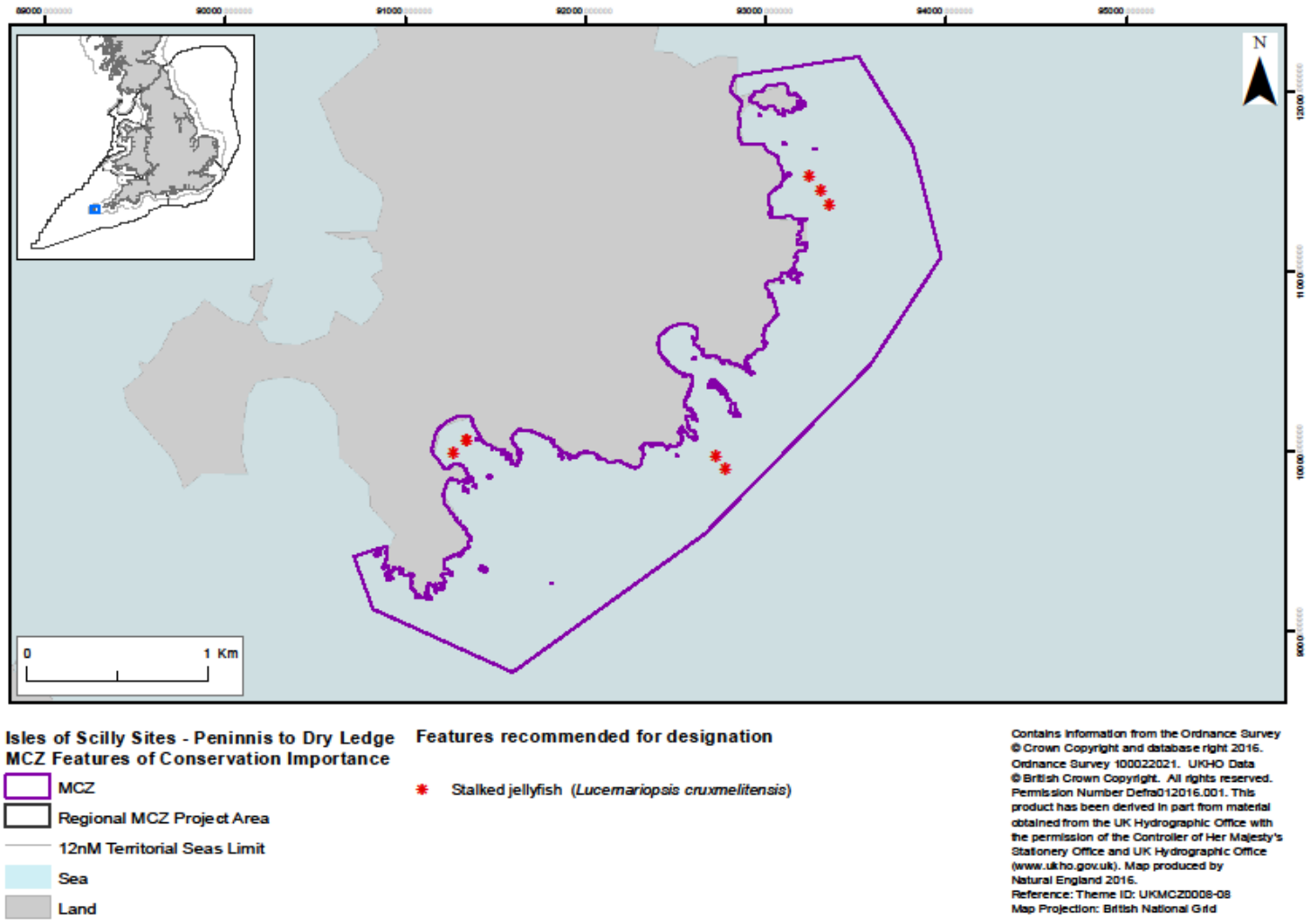


Figure 90 Location of mapped further features of conservation importance in Isles of Scilly Sites – Peninnis to Dry Ledge MCZ

34.2 Summary of Natural England's advice

Table 35 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Isles of Scilly Sites – Peninnis to Dry Ledge MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Stalked jellyfish (*Calvadosia cruxmelitensis*[13])	High	High	Favourable	Maintain	New Feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

[13] Previously classified as *Lucernariopsis cruxmelitensis*

35 Isles of Scilly Sites – Men a Vaur to White Island MCZ

35.1 Site maps

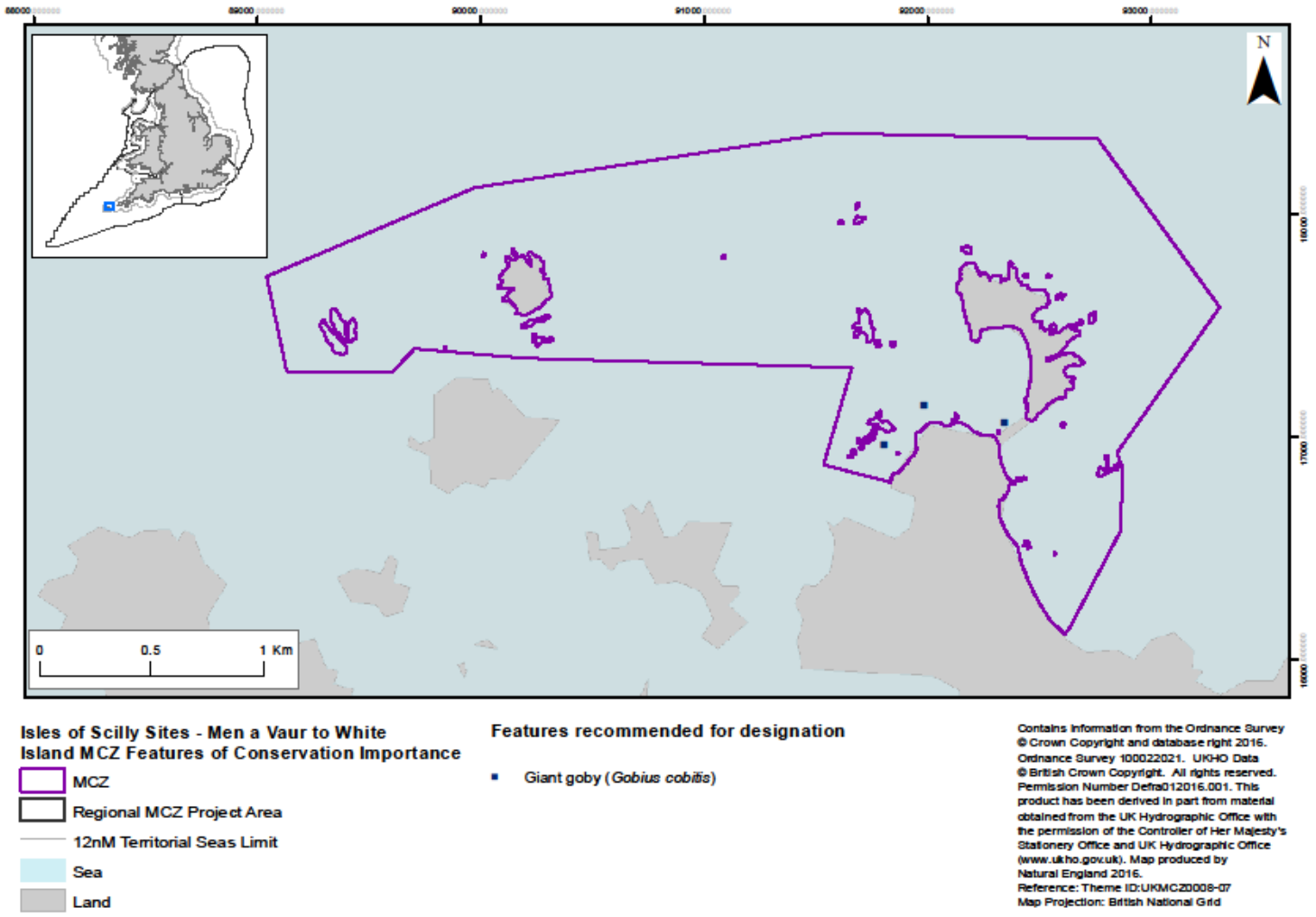


Figure 91 Location of mapped further features of conservation importance in Isles of Scilly Sites – Men a Vaur to White Island MCZ

35.2 Summary of Natural England's advice

Table 36 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Isles of Scilly Sites – Men a Vaur to White Island MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Giant goby (*Gobius cobitis*)	Moderate	Moderate	Favourable	Maintain	New feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

36 Isles of Scilly Sites – Higher Town MCZ

36.1 Site maps

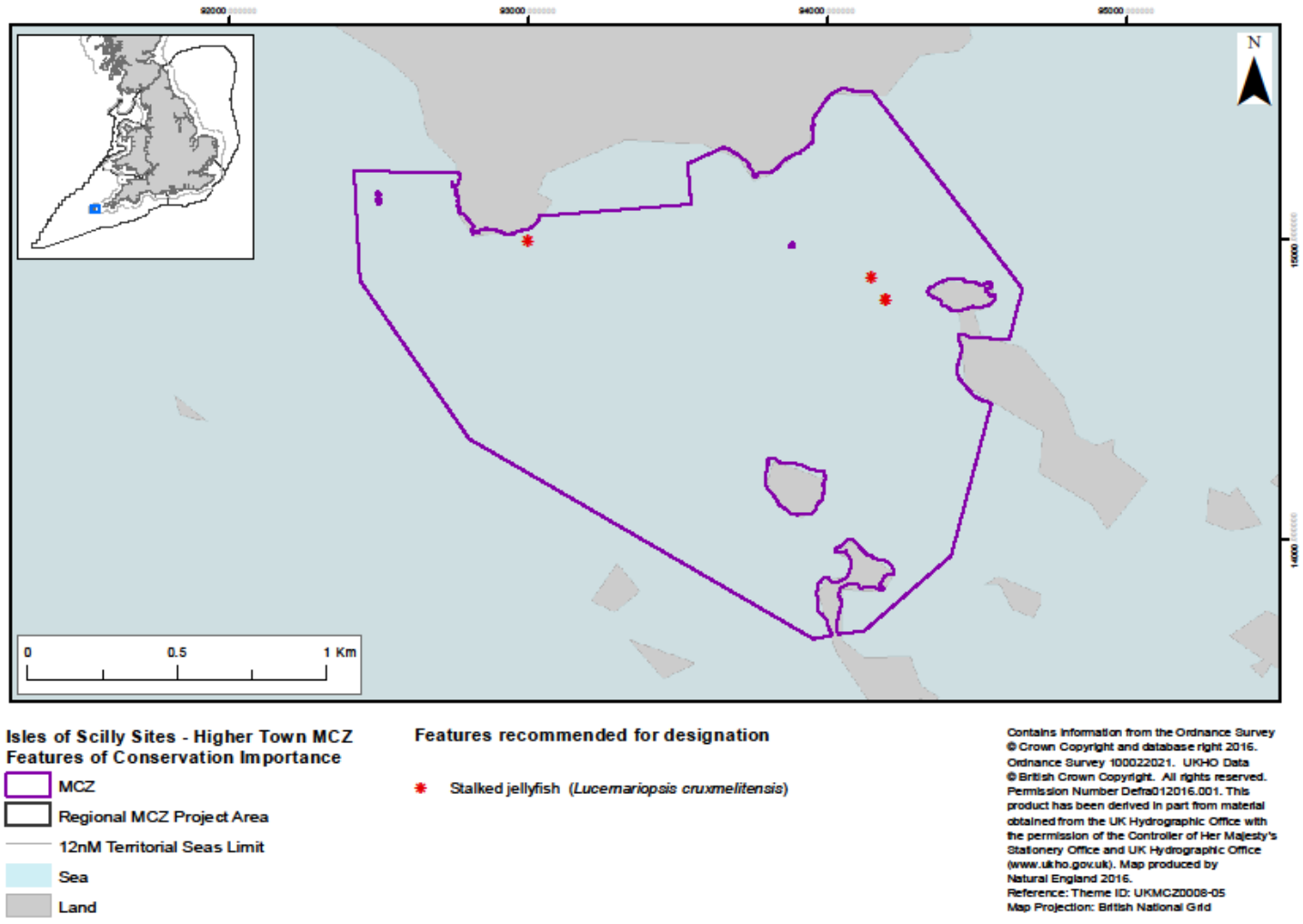


Figure 92 Location of mapped further features of conservation importance in Isles of Scilly Sites – Higher Town MCZ

36.2 Summary of Natural England's advice

Table 37 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Isles of Scilly Sites – Higher Town MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Stalked jellyfish (*Calvadosia cruxmelitensis*[14])	Moderate	Moderate	Favourable	Maintain	New feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

[14] Previously classified as *Lucernariopsis cruxmelitensis*

37 Kingmere MCZ

37.1 Site maps

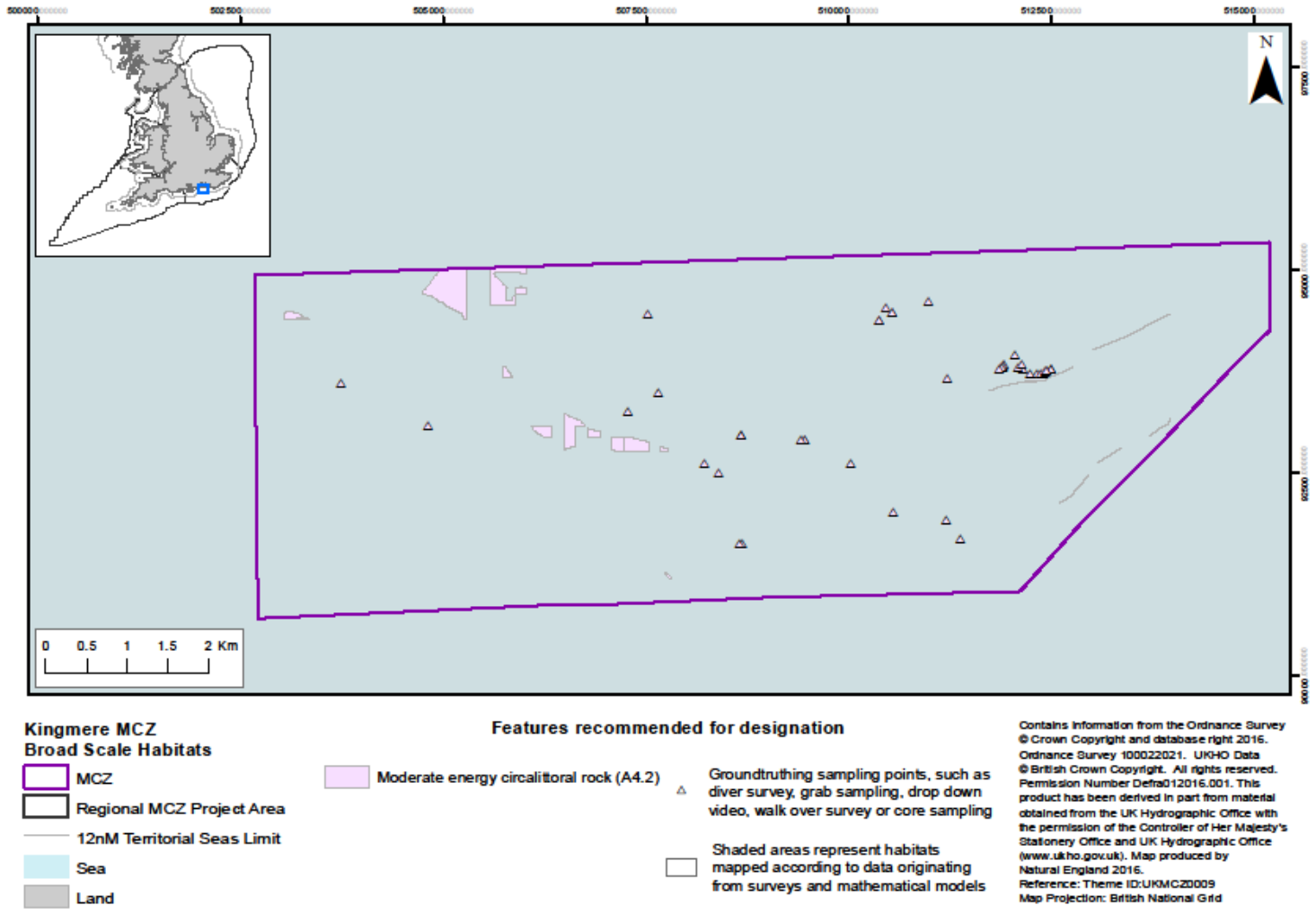


Figure 93 Location of mapped further broad-scale habitats in Kingmere MCZ

37.2 Summary of Natural England's advice

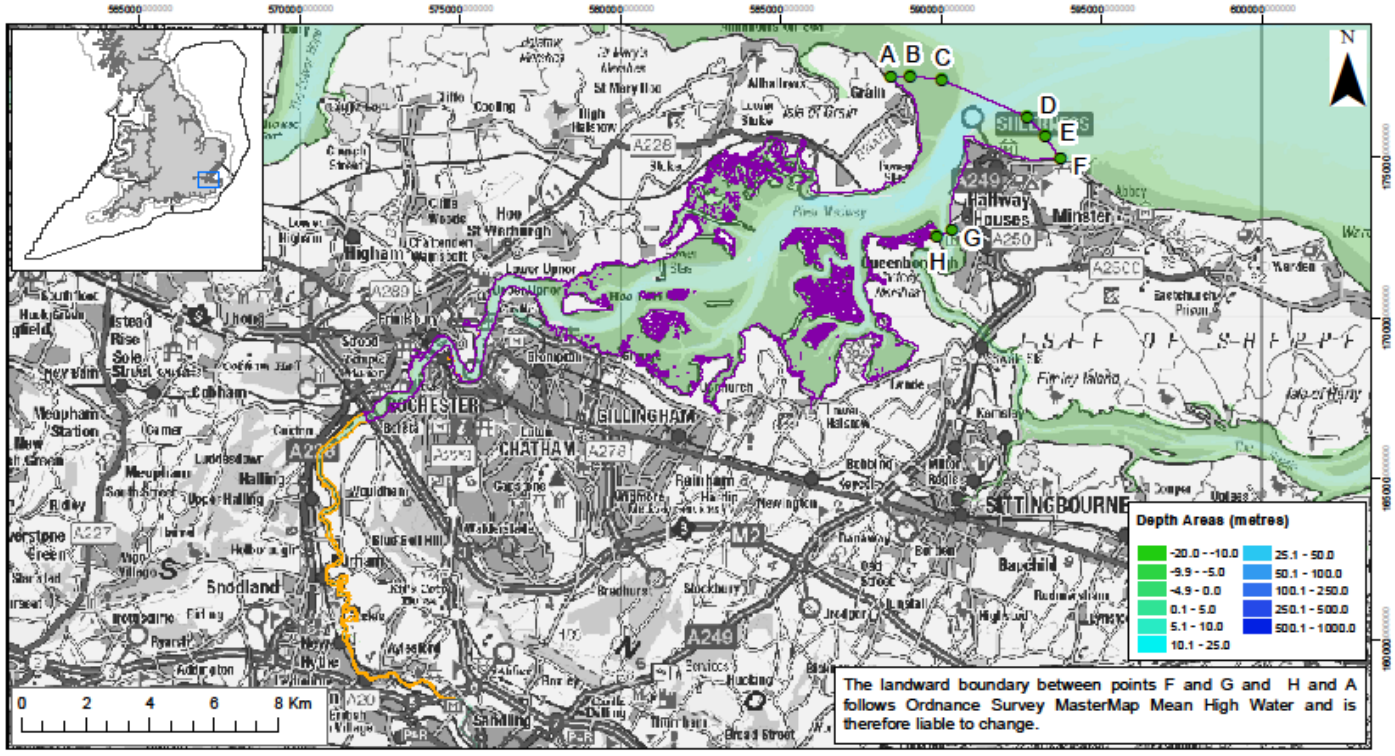
Table 38 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Kingmere MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Moderate energy circalittoral rock	High	Moderate	Unfavourable	Recover	New feature

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

38 Medway Estuary MCZ

38.1 Site maps



Medway Estuary MCZ Boundary

- Designated MCZ
- Boundary amendment for Smelt
- Regional MCZ project area
- rMCZ boundary co-ordinates
- 12nM Territorial Seas Limit
- Land

Point	Lat	Long	Point	Lat	Long
A	51° 27' 53.918" N	0° 42' 40.298" E	E	51° 26' 49.387" N	0° 46' 45.288" E
B	51° 27' 55.057" N	0° 43' 11.997" E	F	51° 26' 25.093" N	0° 47' 9.604" E
C	51° 27' 48.916" N	0° 44' 2.509" E	G	51° 25' 17.459" N	0° 44' 9.694" E
D	51° 27' 9.619" N	0° 46' 17.378" E	H	51° 25' 11.564" N	0° 43' 45.081" E

Figure 94 Medway Estuary MCZ: boundary map. The original designated site boundary is shown in purple and the extension for smelt is shown in orange. Refer to Annex 2 – Advice on smelt as a feature of Regional Project rMCZs for further information.

38.2 Summary of Natural England's advice

Full details of Natural England's advice on smelt (*Osmerus eperlanus*) and the evidence that has informed this advice can be found in Chapter 5 of **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs**.

38.2.1 Advice on the site boundary

The upstream limit of the boundary has been extended to include the location smelt are known to spawn (shown in orange in Figure 93). As agreed with Defra, full (quantitative) pre-consultation advice has been provided on the amended boundary.

39 South Dorset MCZ

39.1 Site maps

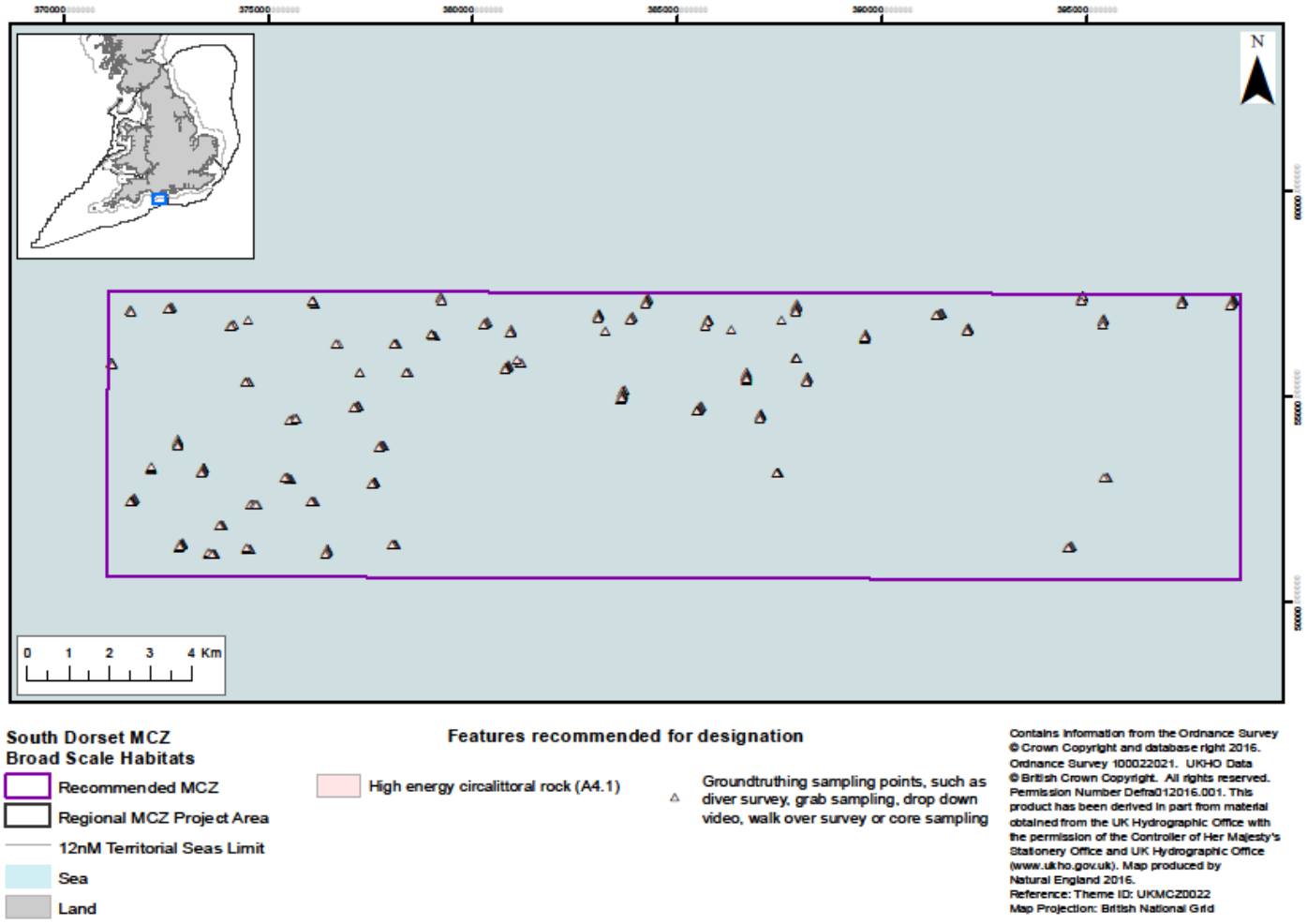


Figure 95 Location of mapped further broad-scale habitats in South Dorset MCZ

39.2 Summary of Natural England's advice

Table 39 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the South Dorset MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
High energy circalittoral rock	High	High	Unfavourable	Recover	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

40 Thanet Coast MCZ

40.1 Site maps

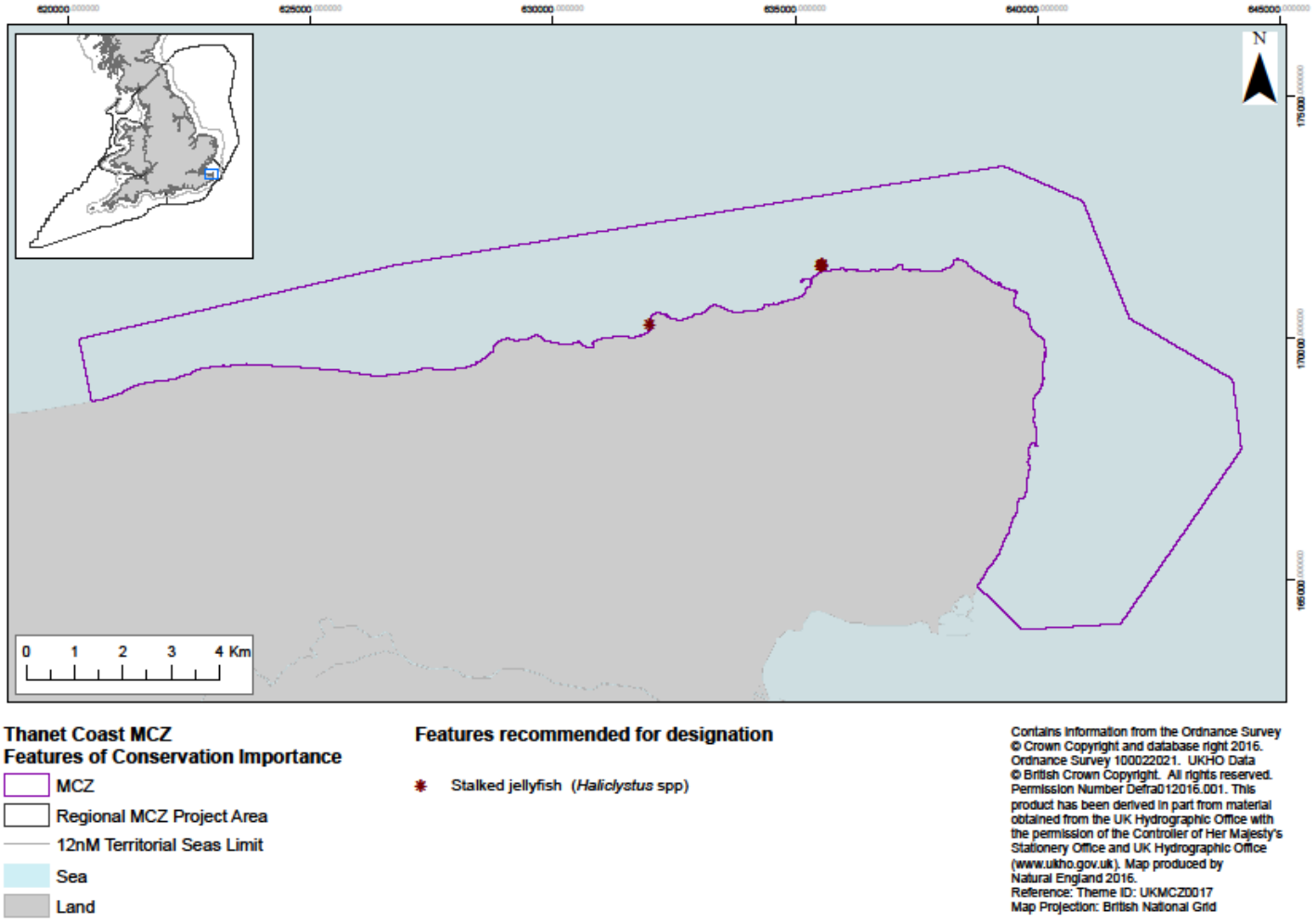


Figure 96 Location of mapped further features of conservation importance in Thanet Coast MCZ

40.2 Summary of Natural England's advice

Table 40 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Thanet Coast MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Stalked jellyfish (*Haliclystus species*)	High	High	Favourable	Maintain	No change

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

41 The Swale Estuary MCZ

41.1 Site maps

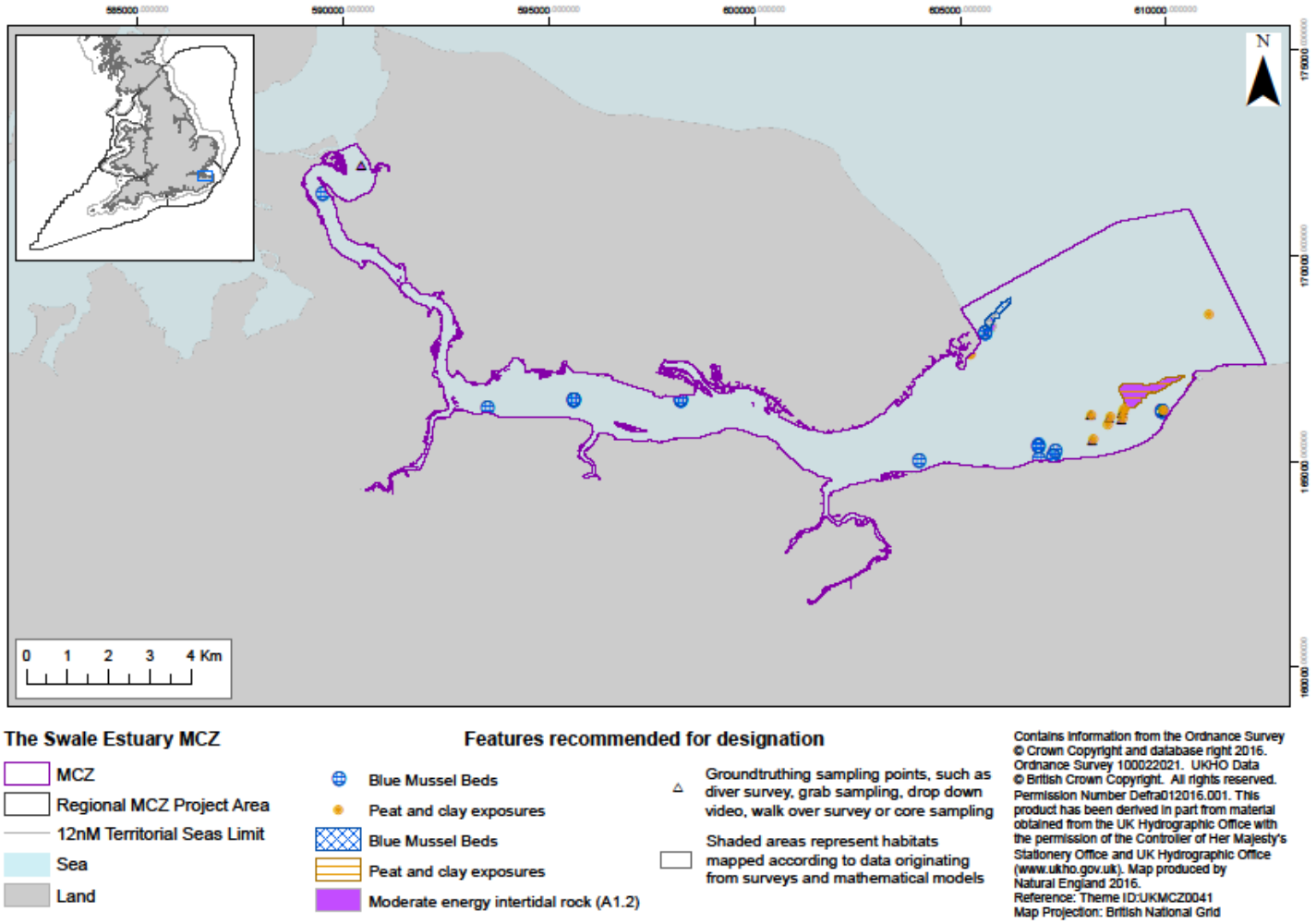


Figure 97 Location of mapped further broad-scale habitats and features of conservation importance in The Swale Estuary MCZ

41.2 Summary of Natural England's advice

Table 41 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of The Swale Estuary MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Blue mussel beds	High	High	Unfavourable	Recover	No change
Moderate energy intertidal rock	High	High	Unfavourable	Recover	No change
Peat and clay exposures	High	Moderate	Unfavourable	Recover	No change
Smelt (*Osmerus eperlanus*)	Refer to Chapter 9 of Annex 2 for further advice on smelt.				

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

Full details of Natural England's advice on smelt and the evidence that has informed this advice can be found in **Annex 2 – Advice on Smelt as a feature of Regional Project rMCZs_published advice**.

42 Torbay MCZ

42.1 Site maps

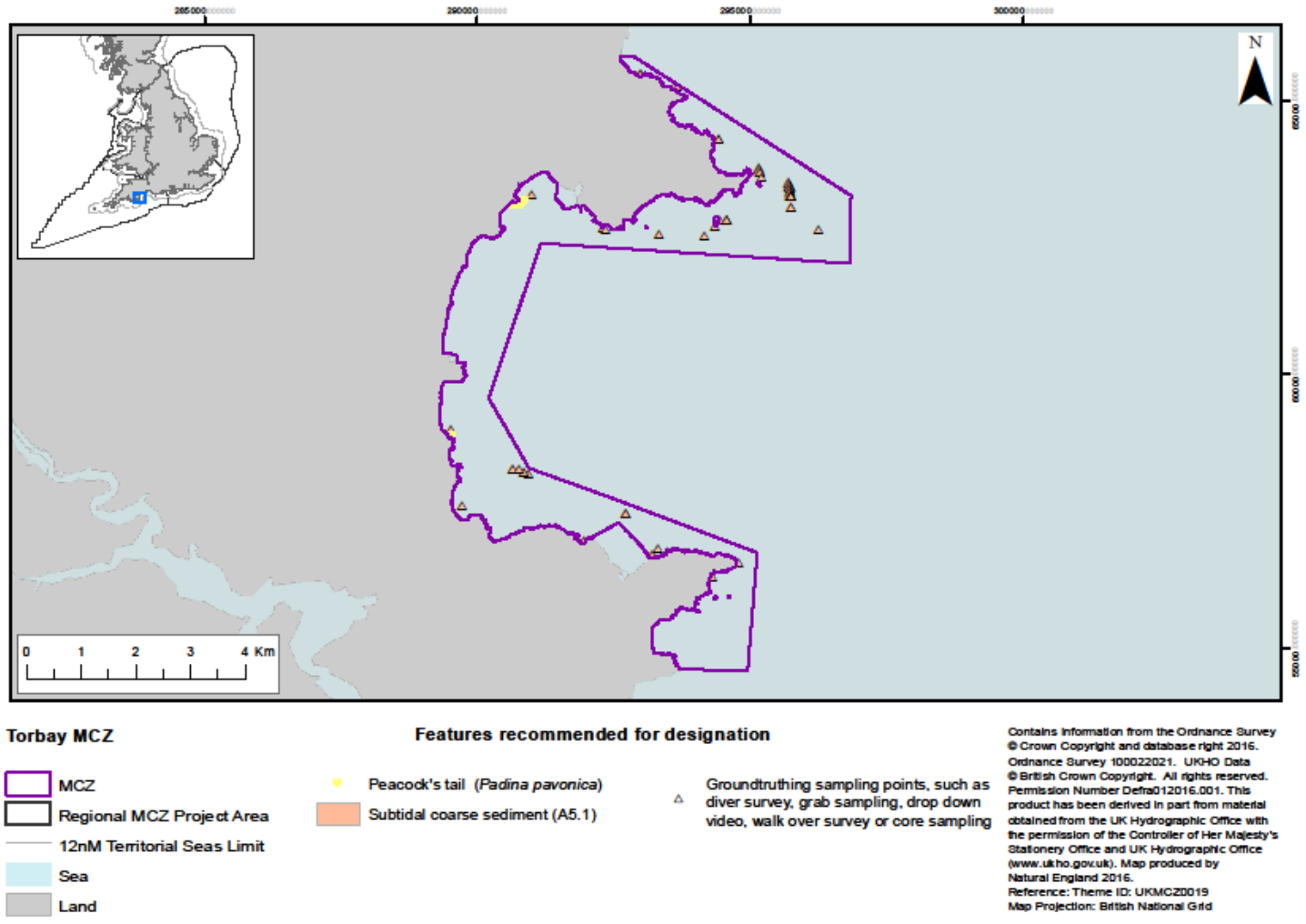


Figure 98 Location of mapped further broad-scale habitats and features of conservation importance in Torbay MCZ

42.2 Summary of Natural England's advice

Table 42 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Torbay MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Peacock's tail (*Padina pavonica*)	Moderate	Moderate	Favourable	Maintain	No change
Subtidal coarse sediment	High	Moderate	Unfavourable	Recover	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New site options**. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

43 Whitsand and Looe Bay MCZ

43.1 Site maps

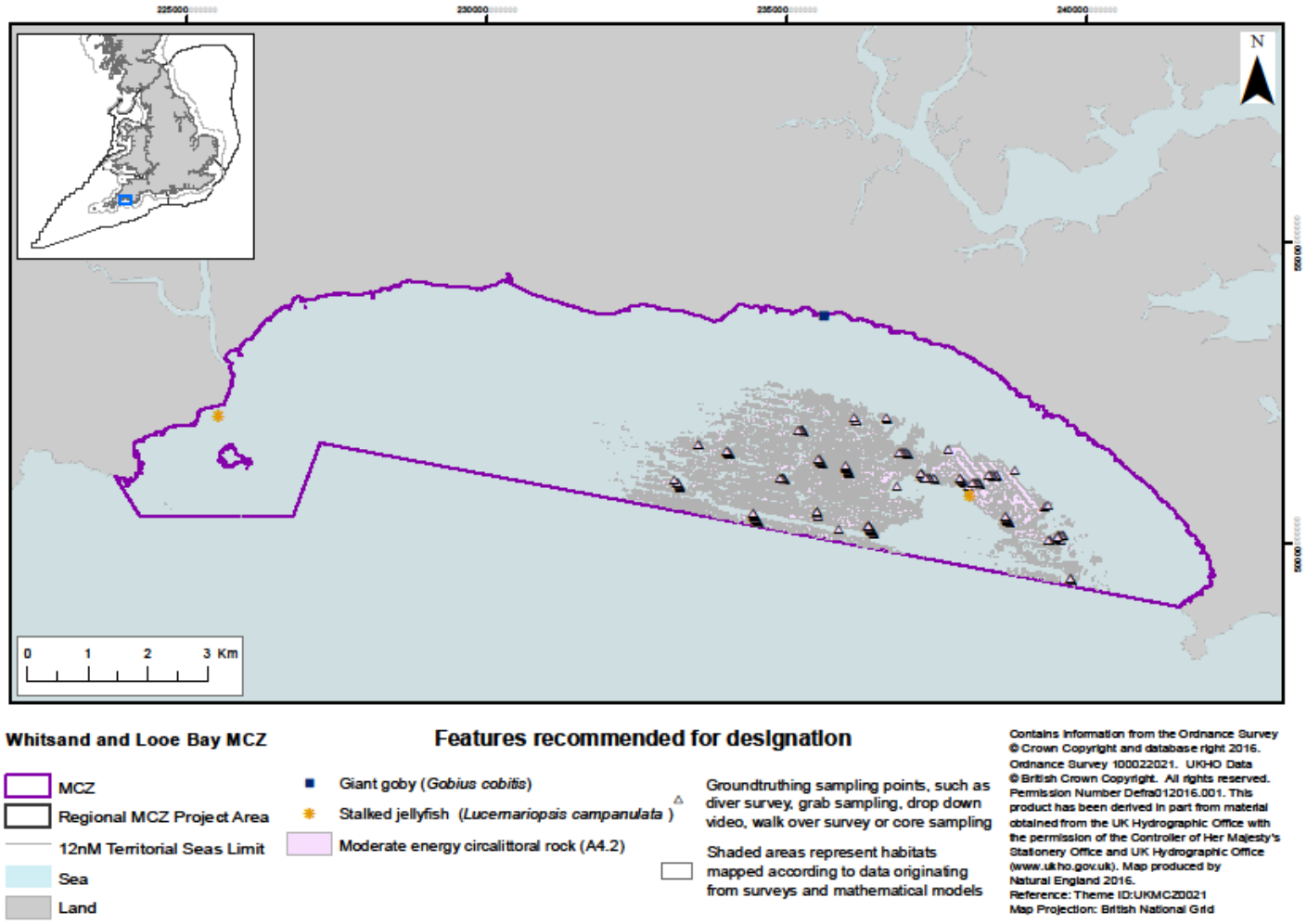


Figure 99 Location of mapped further broad-scale habitat and features of conservation importance in Whitsand and Looe Bay MCZ

43.2 Summary of Natural England's advice

Table 43 Summary of Natural England's Tranche 3 pre-consultation advice on confidence in presence and extent, likely condition and general management approach (GMA) for each proposed feature of the Whitsand and Looe Bay MCZ.

Feature name	Confidence in feature Presence	Confidence in feature Extent	Current likely condition of feature	Advice on the General Management Approach (GMA)	Rationale where the advised GMA has changed since the last advice provided for the feature
Giant goby (*Gobius cobitis*)	High	High	Favourable	Maintain	No change
Moderate energy circalittoral rock	High	High	Unfavourable	Recover	The recover GMA has been triggered due to current evidence suggesting that low levels of demersal trawling occur within the site (Cornwall IFCA 2016 pers. comm.). A byelaw to exclude or restrict towed gear within the site is currently under discussion. Given the current evidence on exposure and sensitivity, the GMA for this feature has been assessed as recover instead of the previous maintain GMA generated in 2012. This aligns the GMA with already designated MCZ features that are found in this habitat (pink seafan and pink seafan anemone).
Stalked jellyfish (*Calvadosia campanulata*[15])	Moderate	Low	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.
Stalked jellyfish (*Calvadosia cruxmelitensis*[16])	Low	Low	Favourable	Maintain	No previous GMA advised for this feature. A previous confidence assessment was completed in 2014 but due to low confidence the feature was not considered further in Tranche 2.

Full details of Natural England's advice on confidence in presence and extent (including the evidence that has informed the advice, as well as that which could not be used at the current time), likely condition and the GMA, as well as advice on risk to the feature and the scientific basis to support feature/site designation (for sites/features where applicable) can be found in **Annex 4 – Results tables for advice on Regional Project recommended MCZs and New**

[15] Previously classified as *Lucernariopsis campanulata*

[16] Previously classified as *Lucernariopsis cruxmelitensis*

site options. The filter function can be used to select the relevant site on each tab. For more detailed information on how this advice has been developed, and how to use **Annex 4**, please refer to the **Advice Overview document**, as well as the 'READ ME' tab (Tab 1) of Annex 4.

43.3 Additional advice

43.3.1 Advice on specific features

43.3.1.1 Stalked Jellyfish *Calvadosia campanulata*[17] & *Calvadosia cruxmelitensis*[18] in Whitsand and Looe Bay MCZ

The stalked jellyfish *Calvadosia campanulata*, if designated in Whitsand and Looe Bay MCZ, would fill a gap in the MPA network as it is the only viable site option for the species/feature in the Western Channel and Celtic Sea region. We currently have moderate confidence for *C. campanulata's* presence in the site and low confidence in its extent.

Similarly, the stalked jellyfish, *Calvadosia cruxmelitensis*, if designated in Whitsand and Looe Bay MCZ, would also fill a gap in the MPA network. This is not the only site option in the region for *C. cruxmelitensis* but at least two of the three site options are required to fill the replication gap.

The confidence in *C. campanulata* is currently based on two survey quality 2 records, one historic (1906) and one recent (2014). However, we also hold a further three survey quality 2 records that lie just outside the site. These three records, two historic and one more recent (1957, 1979 & 2003), are above the MHW boundary and were presumably provided with inaccurate/low precision coordinates resulting in them being located on land and therefore outside of the site.

When the current confidence assessment was run we had no evidence for *C. cruxmelitensis* within the MCZ boundary. However, since the confidence assessment a number of surveys have taken place throughout the Whitsand and Looe Bay MCZ and we have received a large number of survey quality 3 records for both *C. campanulata* and *C. cruxmelitensis* species.

The addition of this new evidence will increase our confidence in both species within the MCZ to High for presence and High for extent.

As these two species in Whitsand and Looe Bay MCZ are required to fill gaps in the MPA network, and given the new evidence received significantly increases our confidence in both their presence and extent, we advise that these two species of stalked jellyfish, *C. campanulata* and *C. cruxmelitensis*, remain priority features for designation in this site.

[17] Previously classified as *Lucernariopsis campanulata*

[18] Previously classified as *Lucernariopsis cruxmelitensis*

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