

Department for Environment, Food and Rural Affairs

Marine Conservation Zones: Consultation on proposals for designation in 2013

Annex A1 – Part 5. – Net Gain - Sites proposed for designation in 2013

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

Further Information

SNCB Advice

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

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

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

Impact Assessment

For additional information on the Consultation Impact Assessment please use the following link:

www.defra.gov.uk/environment/marine/protect/mpa/mcz/

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

Net Gain

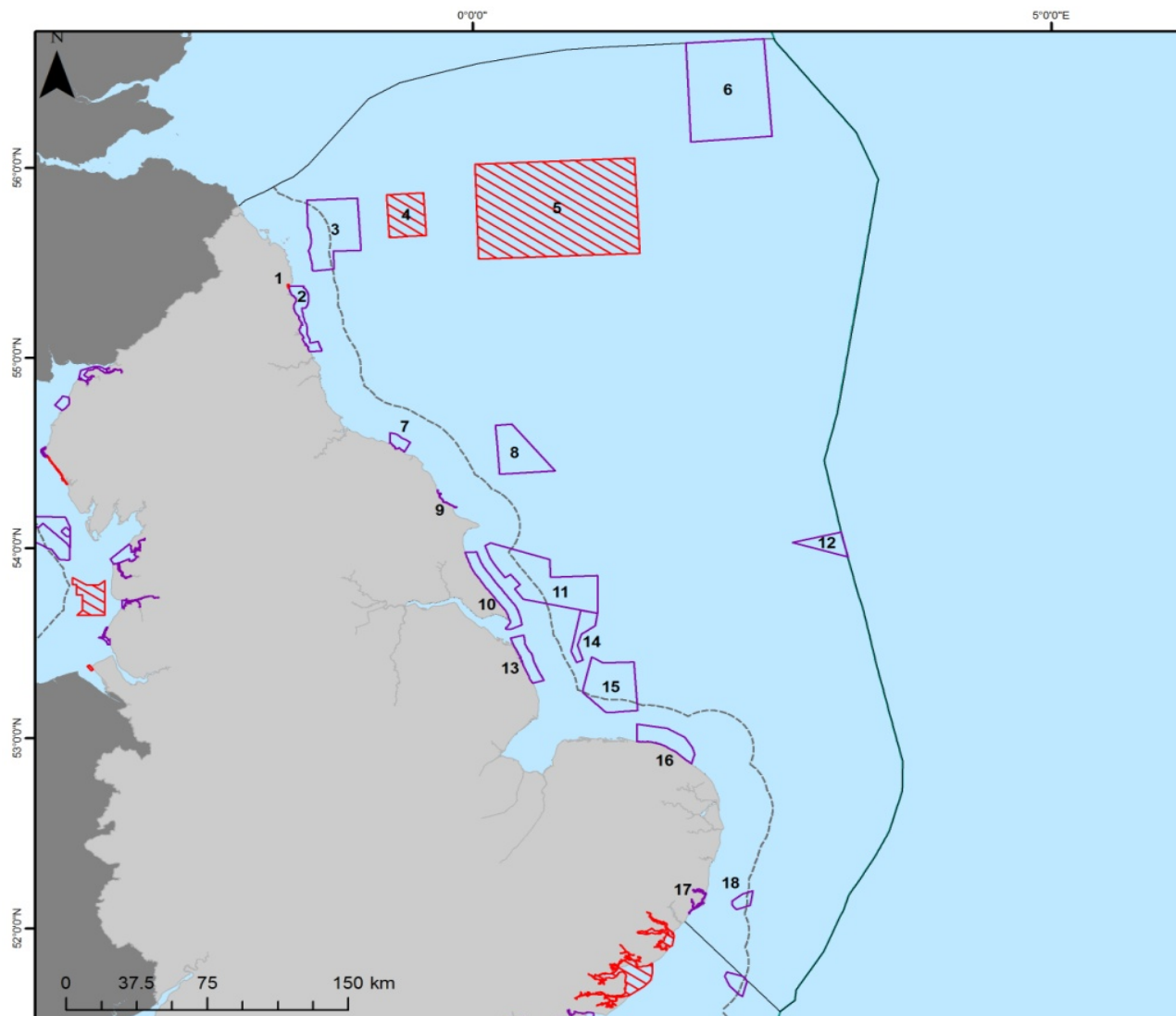
For additional information on the proposed first tranche sites in the Net Gain region please use the following link –

<http://publications.naturalengland.org.uk/publication/1466980>






For site specific information please see

Within this link there are a series of documents providing additional information on Finding Sanctuary recommended site. For site specific information please open the Net Gain Final Report Version 1.2 and go to the page stated in the site summary (Example: AIn Estuary - Final Report Version 1.2 Page 448)

Regional MCZ Map – East Coast (Net Gain)



Sites overview

-  rMCZs put forward for designation in 2013
-  Recommended MCZ
-  Net Gain regional project area
-  12nM Territorial Seas Limit
-  UK Continental Shelf designated area

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 Natural England/JNCC 2012. The exact limits of
 the UK Continental Shelf designated area (UKCS)
 are set out in orders under section 1(7) of the
 Continental Shelf Act 1964. The regional MCZ
 project area follows the UKCS in English waters.
 Map Projection: BNG

Map Label	Site Name	Regional Project Number	Map Label	Site Name	Regional Project Number
1	Aln Estuary	NG 13a	10	Holderness Inshore	NG 8
2	Coquet to St Mary's	NG 13	11	Holderness Offshore	NG 9
3	Farnes East	NG 14	12	Markham's Triangle	NG 7
4	Rock Unique	NG 15	13	Lincs Belt	NG 5
5	Swallow Sand	NG 16	14	Silver Pit	NG 6
6	Fulmar	NG 17	15	Wash Approach	NG 4
7	Runswick Bay	NG 11	16	Cromer Shoal Chalk Beds	NG 2
8	Compass Rose	NG 12	17	Alde Ore Estuary	NG 1c
9	Castle Ground	NG 10	18	Orford Inshore	NG 1b

Consultation Site Summary: Aln Estuary

Additional information for this site can be found in the SNCB Advice (page 611), Impact Assessment (Annex I2 Option 2, Page 416) and Regional Project recommendations (Final Report Version 1.2, Page 448).

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

Regional Project: Net Gain		Site surface area: 0.4km ²	Biogeographic Region: JNCC : Northern North Sea OSPAR Region: Region II Greater North Sea
Site Location: 55° 23' 19" N, 1° 37' 03" W Inshore/Offshore: Inshore			
Feature type	Feature name	Area/no. of records	Conservation Objective
Broad Scale Habitat	Intertidal mud	0.1 km ²	Maintain
Broad Scale Habitat	Coastal salt marshes and saline reed beds	0.1 km ²	Maintain
Broad Scale Habitat	High energy infralittoral rock	0.03km ²	Maintain
Habitat FOCI	Estuarine rocky habitat	2 points	Maintain
Habitat FOCI	Sheltered muddy gravels	1 point	Maintain

Habitat FOCI	Subtidal sands and gravels	0.1 km ²	Maintain
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Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	Best Estimate Costs (£ per year)
Ports, Harbours and Commercial Shipping	<1000
Archaeology	Unquantified
	Best Estimate Total Cost =£ <1000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche
Rationale for Decision: Site Advantages <p>The Aln Estuary recommended Marine Conservation Zone (rMCZ) is an inshore site measuring 0.4km². Within this rMCZ there are Broad Scale Habitat features including Intertidal mud, Coastal salt marshes and High energy infralittoral rock. It also includes Estuarine rocky habitats, Sheltered muddy gravels, and Subtidal sand and gravels which are all Habitat FOCI. This site contributes more than 50% of the total area of Intertidal mud and Coastal salt marshes in recommended MCZs. Intertidal mud is a highly productive ecosystem and plays a crucial role in primary biomass production through the biofilm made up of microscopic plants on the surface of the mud. Intertidal mudflats are desirable areas for carbon storage due to the higher settling rates of sediments and plant and animal matter than some other habitats such as freshwater wetlands. Salt marshes are considered to be one of the most productive ecosystems in the world. The economic value of productivity of marshes has been estimated in 1997 at £9,900/ha/yr.</p>	

Many birds, juvenile fish, crustaceans and molluscs use marshes as nurseries. Salt marshes are important for climate change, and are known to accumulate sediment and organic matter at a rate that may keep up with sea level rise, as well as providing carbon storage at approximately 10 times the rate observed in temperate forests.

Socio-Economics

The Aln Estuary recommended MCZ had a high degree of support from stakeholders. The sector that could be impacted by this site is ports, harbours, shipping, and disposal sites. For this sector there is a best estimate cost of £<1000 per year.

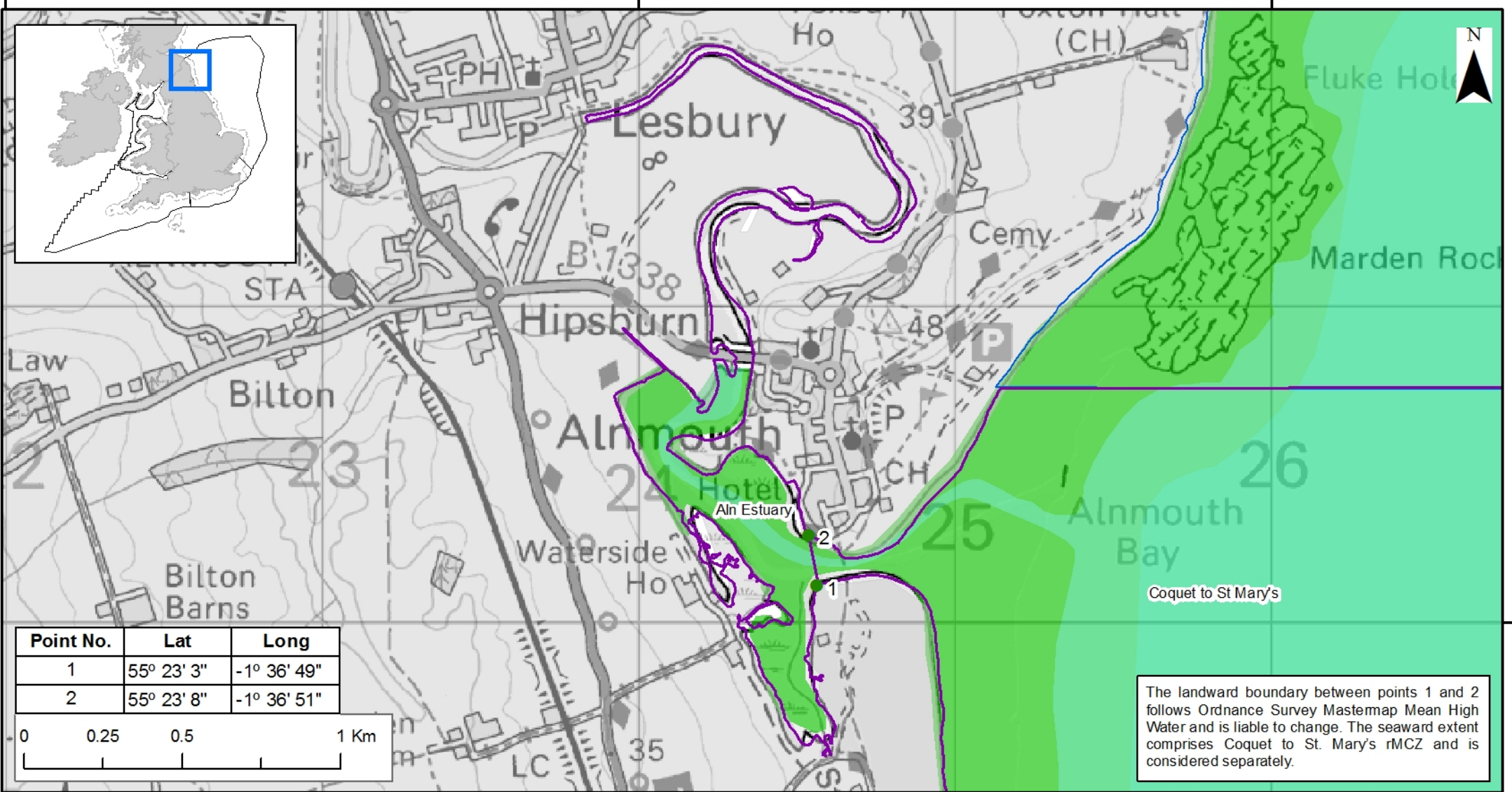
Data Certainty

The Aln Estuary recommended MCZ has acceptable data certainty for three of the features recommended for designation while three features have unacceptable data certainty and will require further work prior to its designation (see table below).

Conclusion

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

Features for designation in 2013	Features requiring improvement in data certainty prior to designation
Coastal saltmarshes and saline reedbeds	High energy infralittoral rock
Intertidal mud	Sheltered muddy gravels
Estuarine rocky habitats	Subtidal sand gravels



Aln Estuary

Recommended MCZ

Recommended MCZ

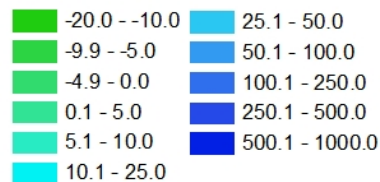
rMCZ boundary co-ordinates

SAC with Marine Components

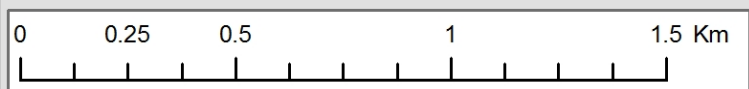
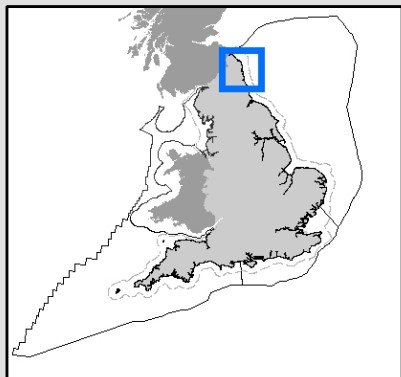
England 12nM Territorial Seas Limit

MCZ Regional Projects boundaries

Depth Areas (m)



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Reference: Theme ID 1477587,
Map Projection: British National Grid



Alyn Estuary rMCZ

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

Features proposed for 2013 designation

- Estuarine rocky habitats
- Intertidal Mud (A2.3)
- Coastal saltmarsh and saline reedbed (A2.5)

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 Reference: Theme ID: 1477587
 Map Projection: British National Grid

Consultation Site Summary: Swallow Sand

Additional information for this site can be found in the SNCB Advice (page 595), Impact Assessment (Annex I2 Option 2, Page 436) and Regional Project recommendations (Final Report Version 1.2, Page 522).

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

Regional Project: Net Gain		Site surface area: 4,746km ²	Biogeographic Region: JNCC: Northern North Sea OSPAR Region: Region II Greater North Sea
Site Location: 55° 45' 00" N, 0° 39' 41" E Inshore/Offshore: Offshore			
Feature type	Feature name	Area/no. of records	Conservation Objective
Broad Scale Habitat	Subtidal coarse sediment	293 km ²	Maintain
Broad Scale Habitat	Subtidal sand	4,452 km ²	Recover ¹
Habitat FOCI	Subtidal sands and gravels (modelled) Subtidal sands and gravels,	4, 497 km ² 3 points	Recover ¹
Geological feature	North Sea glacial tunnel valleys (Swallow Hole)	18 km ²	Maintain

¹ Following advice from SNCBs, the Conservation Objective for this feature has been changed from the original Regional Project recommendation

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	Best Estimate Costs (£ per year)
National Defence	Non-site specific cost
UK Commercial Fishing	9,000
Non-UK Commercial Fishing	Unquantified
Cables (Power and Telecommunications Cables excluding cables for renewable developments)	Non-site specific cost
Oil and gas exploration and production, gas interconnectors and gas storage (including carbon capture and storage)	Non-site-specific cost
	Best Estimate Total Cost = £9,000

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche
<p>Rationale for Decision:</p> <p>Site Advantages</p> <p>The Swallow Sand recommended Marine Conservation Zone (rMCZ) is an offshore site measuring 4,746 km². Within this rMCZ there are broad-scale habitat features including subtidal coarse sediments. It also includes Subtidal sand and gravels which are Habitat FOCIs. Out of all of the rMCZs in the whole MCZ project area, this site contributes the largest area of subtidal sands . It also contributes the second largest area of subtidal coarse sediment in the whole MCZ project area. This site also includes a glacial process features, North Sea glacial tunnel valleys (Swallow Hole) and hosts some secondary geomorphological features such as the East Bank Ridges tidal bank, and some transverse bedform features. The site falls within the foraging radii for seabird species such as the Atlantic puffin during winter, common tern and black-legged kittiwake. There are also nursery spawning</p>	

grounds for a number of fish species within the local area

Socio-Economics

The Swallow Sand recommended MCZ had wide support from stakeholders but NFFO has raised concerns. The sector that could be impacted by this site is UK and non-UK commercial fishing sectors. For the UK commercial fishing sector a best estimate cost of £9,000 per year has been calculated. It was not possible to quantify the cost for the non-UK commercial fishery sector.

Data Certainty

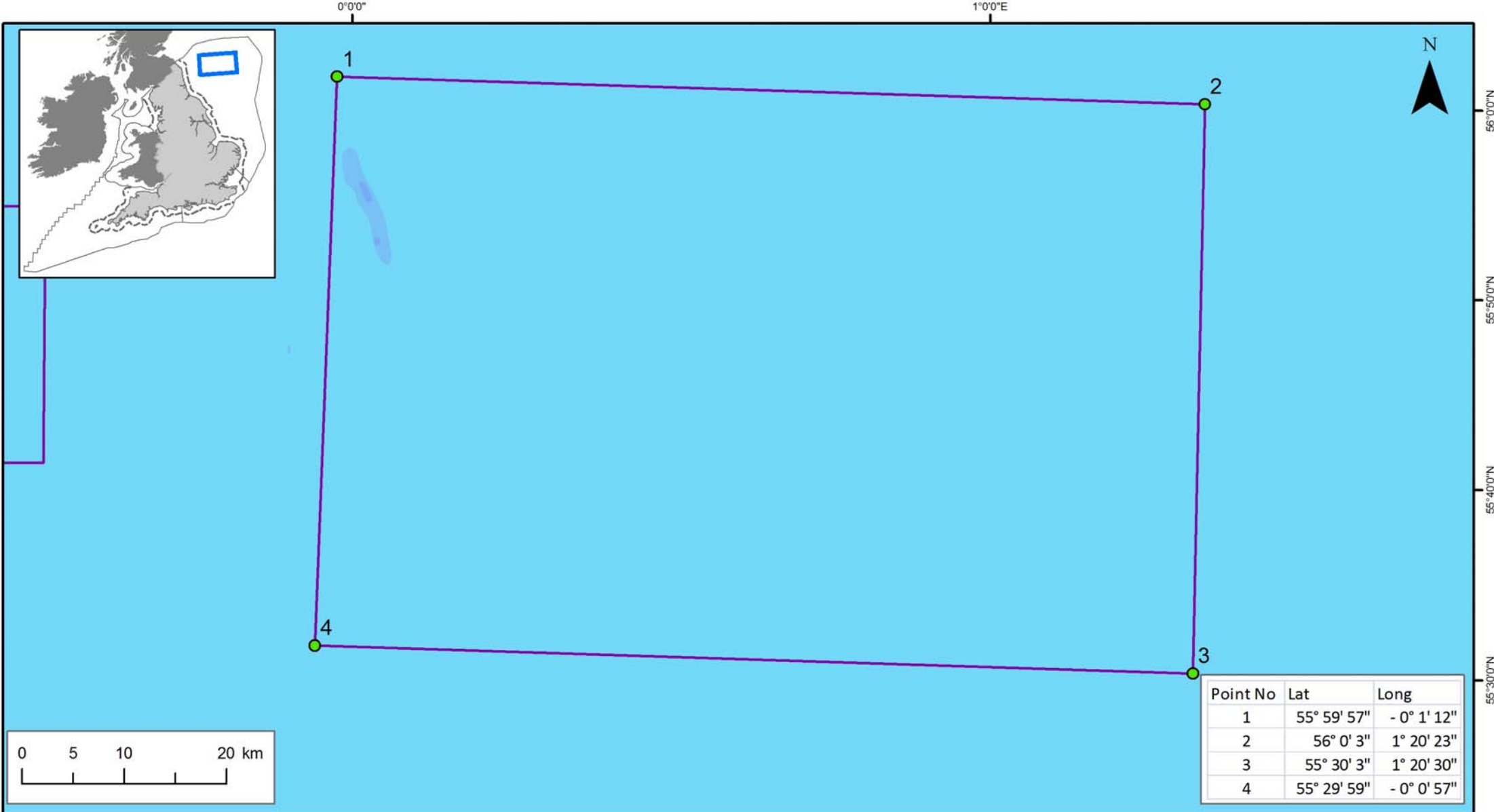
The Swallow Sand recommended MCZ has acceptable data certainty for two of the features recommended for designation while two features have unacceptable data certainty and will require further work prior to its designation (see table below).

Conclusion

The advantages for this site justify the socio-economic costs and data certainty is acceptable for sufficient features. This site has therefore been proposed for designation in 2013 for the relevant features listed in the table below. Further work will be required to improve the data certainty for features not proposed for designation in 2013 for inclusion in future designations.

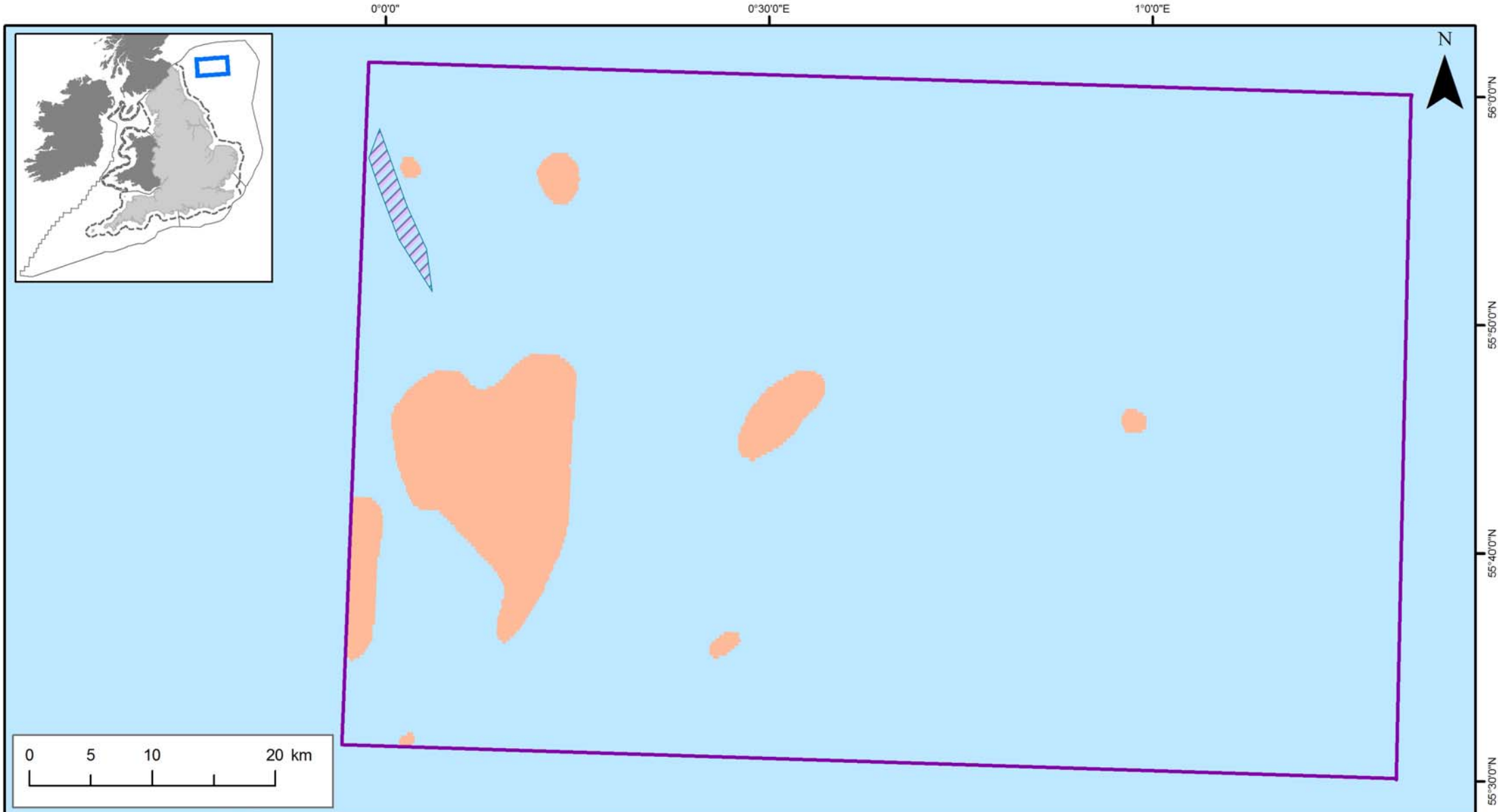
Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	Features requiring improvement in data certainty prior to designation
Subtidal coarse sediment	Subtidal sand
North Sea glacial tunnel valleys (Swallow Hole)	Subtidal sands and gravels






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Map Projection: WGS84UTM31N, Inset: BNG



Swallow Sands rMCZ

- | | | |
|--|-----------------------------|---|
|  | Recommended MCZ | Features proposed for 2013 designation |
|  | Regional MCZ project area |  Subtidal coarse sediment (A5.1) |
|  | 12nM Territorial Seas Limit |  North Sea glacial tunnel valleys (Swallow hole) |
|  | Land | |

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Map Projection:[WGS84UTM31N] Inset: BNG

Consultation Site Summary: Rock Unique

Additional information for this site can be found in the SNCB Advice (page 591), Impact Assessment (Annex I2 Option 2, Page 427) and Regional Project recommendations (Final Report Version 1.2, Page 503).

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

Regional Project: Net Gain		Site surface area: : 492 km ²	Biogeographic Region: JNCC: Northern North Sea OSPAR Region: Region II Greater North Sea
Site Location: 55° 45' 25'' N, 0° 36' 48'' W Inshore/Offshore: Offshore			
Feature type	Feature name	Area/no. of records	Conservation Objective
Broad-scale habitat	Low energy circalittoral rock	20 km ²	Maintain
Broad-scale habitat	Subtidal coarse sediment	161 km ²	Maintain
Broad-scale habitat	Subtidal sand	309 km ²	Maintain
Habitat FOCI	Subtidal sands and gravels (modelled) Subtidal sands and gravels,	323 km ² 1 point	Maintain

Table 2. Sector Impacts and Associated Best Estimate Costs

Sectors Impacted	Best Estimate Costs (£ per year)
Non-UK Commercial Fishing	Unquantified
National Defence	Non-site specific cost
	Best Estimate Total Cost = Unquantified

Table 3. Designation Status of Site and Rationale

Decision	Designation in 2013 tranche
<p>Rationale for Decision:</p> <p>Site Advantages</p> <p>The Rock Unique recommended Marine Conservation Zone (rMCZ) is an offshore site measuring 492 km². Within the site there broad-scale habitats such as Low energy circalittoral rock and Subtidal sand. The site also includes Subtidal sand and gravels which is a Habitat FOCI. This site contributes the only area of Low energy circalittoral rock in this region. This feature is not protected in existing marine protected areas in the Net Gain region and has limited distribution in the whole MCZ project area. However, further analysis of data gathered by recent survey work indicated that Low energy circalittoral rock may not be present within this site and will need further consideration before being suitable for designation.</p> <p>This area has also been highlighted as important for cetaceans all year round including dolphins, minke and humpback whales, and as an important foraging area for grey seals. It also falls within the foraging radii for certain seabird species (e.g. northern gannet and northern fulmar)</p> <p>Socio-Economics</p> <p>The Rock Unique recommended MCZ had support from The Wildlife Trusts, Northumberland IFCA, and others. The sector that could</p>	

be impacted by this site is the non-UK commercial fishing sector. However, it was not possible to estimate the cost for that sector.

Data Certainty

The Rock Unique recommended MCZ has acceptable data certainty for three of the features recommended for designation while one feature has unacceptable data certainty and will require further work prior to its designation. The feature with unacceptable data certainty is Low energy circalittoral rock.²

Conclusion

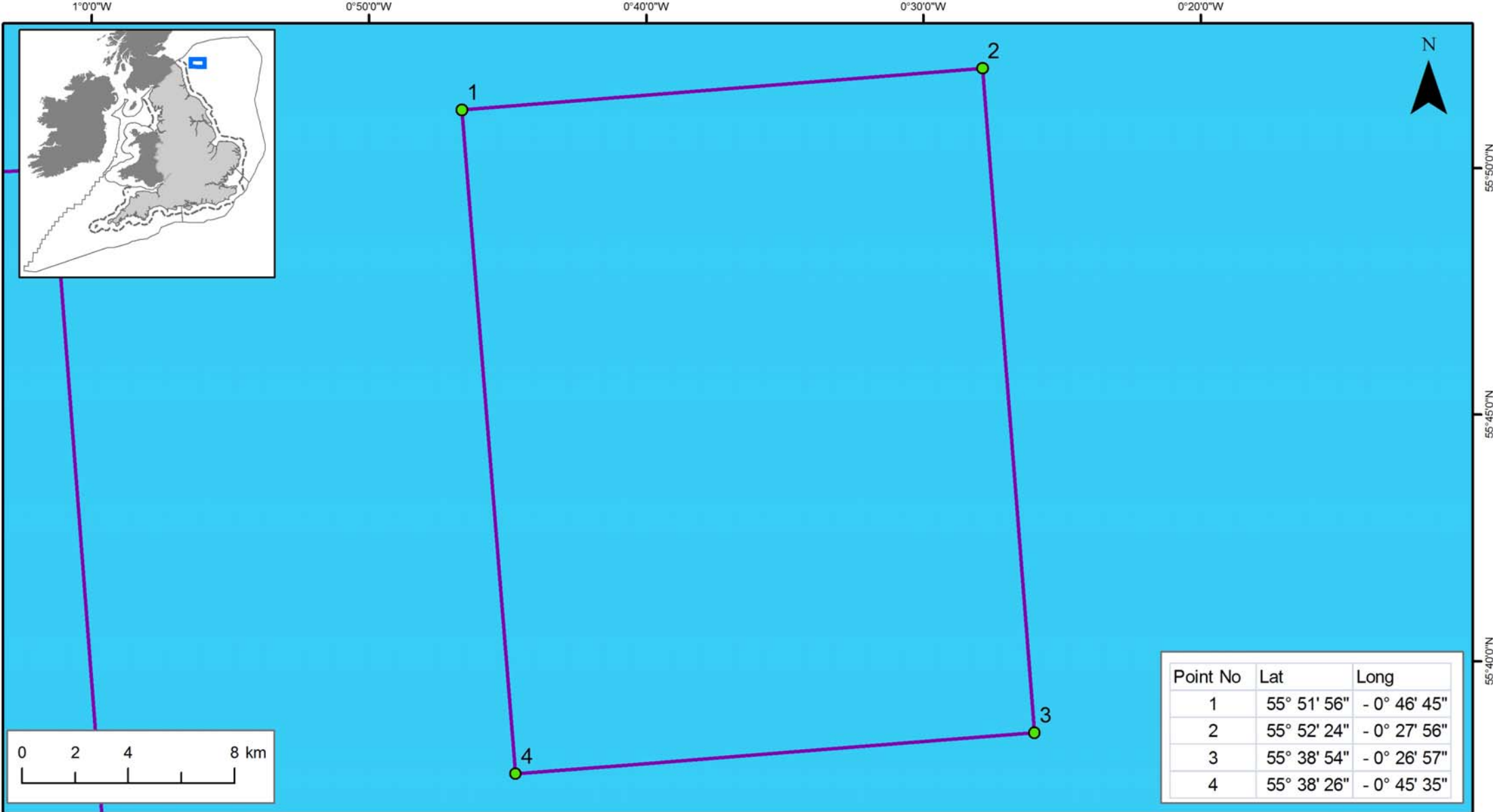
The advantages for this site justify the socio-economic costs and data certainty is acceptable for sufficient features. This site has therefore been proposed for designation in 2013 for the features listed in the table below. Further work will be required to improve the data certainty for features not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

Table 4. Features Proposed for Designation in 2013

Features for designation in 2013	Features requiring improvement in data certainty prior to designation
Subtidal coarse sediment	Low energy circalittoral rock
Subtidal sands and gravels	

² Recent survey data has been collected for this site ([site report published on Defra website](#)), this survey data will be considered in further detail following the consultation and prior to designation.

Subtidal sand	
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Rock Unique rMCZ

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

Depth Areas (metres)

- 0.0 - 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

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Rock Unique rMCZ

- Recommended MCZ
- 12nM Territorial Seas Limit
- Regional MCZ project area
- Land

Features proposed for 2013 designation

- Subtidal coarse sediment (A5.1)
- Subtidal sand (A5.2)
- Subtidal sands and gravels

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