

Appendices

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A. Acronyms used

To be completed.

B. Summary table of current and future activities taking place within each of the sites

Key:

- Activities in the sector occur in or near the dMCZ currently and/or in the future and are unlikely to impact of features protected by the MCZ (so are unlikely to need to mitigate any impacts).
- Activities within the sector occur in or near the dMCZ currently and/or in the future and are likely to need to mitigate impacts on features protected by the MCZ.
- [Blank cell] Activities within the sector do not occur in or near the dMCZ.

Sector	Inshore dMCZs								
	NG 1b	NG 1c	NG 2	NG 5	NG 8	NG 10	NG 11	NG 13	NG 13a
Aggregate extraction									
Aquaculture		0							
Cables (excl. renewables cables)									
Power		0							
Telecommunications	0	0	0			0			
Carbon capture & storage									
Coastal defence		0		●	0	0	0	0	
Coastal developments (excl. ports & harbours)		0	0					0	
Commercial fisheries									
Demersal trawls	●	0	0	0	0	0	0	0	0
Dredges			0	0			0	0	
Hooks & lines	0	0	0	0	0	0	0	0	
Nets	0	0	0	0	0	0	0	0	0
Pelagic trawls (including seines)	0		0	0				0	
Pots & traps	0	0	0	0	0	0	0	0	0
Other (bait digging, hand collection)		0		0	0	0		0	0
Disposal sites									
Education & research						0			
Gas & oil exploration & production			0	0	0				
Oil & gas licensed area			0	0	0				
Gas interconnectors									
Gas storage									
National defence				0		0			
Ports & harbours						0	0		
Recreation									

Recreational boating		0	0	0	0	0	0	0	0
Recreational diving			0	0	0	0	0	0	0
Recreational fisheries	0	0	0	0	0	0	0	0	0
Wildlife watching			0	0	0	0			
Other									
Renewable energy									
Wind								0	
Wave									
Tidal stream									
Shipping									
Transit of vessels	0		0	0	0		0	0	
Water pollution from activities on land		0	0	0	0		0	0	0
Other					0			0	

Sectors	Inshore/Offshore dMCZs		Offshore dMCZs						
	NG 4	NG 9	NG 6	NG 7	NG 12	NG 14	NG 15	NG 16	NG 17
Aggregate extraction	0	0	0						
Aquaculture									
Cables (excl. renewables cables)									
Power									
Telecommunications				0	0	0			0
Carbon capture & storage									
Coastal defence									
Coastal developments (excl. ports & harbours)									
Commercial fisheries									
Demersal trawls	0	●	●	●	●	●	0	0	0

Dredges	0	0	0			0			
Hooks & lines	0	0	0			0			
Nets	0	0	0	0	0	0			0
Pelagic trawls (including seines)	0	0	0	0		0	0	0	0
Pots & traps	0	0	0	0	0	0	0		
Other (bait digging, hand collecting)									
Disposal sites									
Education & research									
Gas & oil exploration & production	0	0	0	0				0	0
Oil & gas licensed area	0	0	0	0	0			0	0
Gas interconnectors									
Gas storage		0							
National defence	0		0			0	0	0	0
Ports & harbours									
Recreation									
Recreational boating	0	0	0		0	0			
Recreational diving	0	0				0			
Recreational fisheries	0	0	0		0	0			
Wildlife watching	0	0	0		0				
Other									
Renewable energy									
Wind	0								
Wave									
Tidal stream									
Shipping									
Transit of vessels	0	0	0	0	0	0	0	0	0
Water pollution from activities on land									
Other									

Sectors	Inshore RAs				Offshore RAs			
	RA LW4	RA LW5	RA YH2	RA NE2	RA LW2	RA YH1	RA NE1	RA NE3
Aggregate extraction								
Aquaculture								
Cables (excl. renewables cables)								
Power								
Telecommunications								
Carbon capture & storage								
Coastal defence								
Coastal developments (excl. ports & harbours)								
Commercial fisheries								
Demersal trawls		•	•	•	•	•	•	•
Dredges		•		•				•
Hooks & lines		•	•	•	•			•
Nets		•	•	•			•	•
Pelagic trawls (including seines)		•					•	•
Pots and traps		•	•	•	•	•	•	•
Other (bait digging, hand collection)	•	•						
Disposal sites								
Education & research	•							
Gas & oil exploration & production								
Oil & gas licensed area					•	•		
Gas interconnectors								
Gas storage								
National defence		•	•			•	•	•
Ports & harbours								
Recreation								

Recreational boating	•	•	•	•		•		•
Recreational diving			•					
Recreational fisheries	•	•	•	•	•	•		
Wildlife watching	•		•			•		
Other		•						
Renewable energy								
Wind	•	•			•	•		
Wave								
Tidal stream								
Shipping								
Transit of vessels			•		•	•	•	•
Water pollution from activities on land								
Other								

Notes:

1) These data present the occurrence of activities within 17 dMCZs and eight proposed reference areas. Discussions are still to be had over four additional reference areas for broad-scale habitats (coastal saltmarsh and saline reedbeds), habitats of conservation importance (subtidal chalk and blue mussel beds) and species of conservation importance (starlet sea anemone).

2) Further information is being sought regarding activities occurring within reference areas and what aspects of these activities require mitigation.

C. Charts

To be completed.

D. Regional description of the baseline

D.1 The environment

The Net Gain project area spans the southern portion of the Northern North Sea (Scottish border to Flamborough Head) and the northern portion of the Southern North Sea (Flamborough Head to Bawdsey). Water depths range from up to 200 m in the north to less than 50 m in the south. Most of the region is well mixed by tides and wind throughout the year, and sea surface temperatures vary seasonally, from 4°C in winter to 19°C in summer (Defra 2010).

The effects of climate change have been observed in the project area. Sea level rise is of particular concern in the Southern North Sea region; associated with increased risk of coastal erosion, flooding and loss of intertidal habitats. Rising sea temperature has been linked to changes in plankton production and the plankton community, which may be affecting the marine food web (Defra 2010).

The coastline in the north is predominantly rocky, interspersed with intertidal sediments in bays and inlets. In the south, the coastline is varied with large expanses of intertidal sands and muds and soft cliffs. The offshore benthic environment comprises large expanses of sands, muds and coarser sediments. Both the Northern and Southern North Sea areas support a diversity of marine species, including marine mammals, birds and commercially important fish and crustaceans (Defra 2010). Annex E presents the broad-scale habitats and features of conservation importance (FOCI) that occur within the Net Gain project area. Additional habitats and species are already protected by other designations, including Special Areas for Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs) and Ramsar sites (Natural England, 2011).

The Net Gain area supports some of the most valuable demersal and *Nephrops* fisheries in the UK. In addition, herring, mackerel and other shellfish fisheries are important. Fish stock assessments indicate that stocks are not at full reproductive capacity or are not being harvested sustainably. Demersal fish communities appear to be improving in terms of abundance, biomass and species richness, but smaller and opportunistic fish are dominant (Defra 2010). Fishing activity, particularly bottom trawling, is considered to be a major pressure on the marine benthic environment.

The region is also extremely important to the oil and gas sector, the aggregate extraction sector, the renewable energy sector and to shipping (Defra 2010). Most industries are well regulated but are still considered to be a source of pressure to the marine environment due to the effects of infrastructure, pollution, disturbance, and extractive and depositional activities.

The marine environment in the Net Gain area is also important for recreation, supporting the local populations and tourism (Defra 2010).

The current likely conditions of broad-scale habitats and FOCI in the Net Gain area have been determined via a vulnerability assessment exercise, as advised by the Statutory Nature Conservation Bodies (Natural England and JNCC 2011). It is difficult to predict the changes in condition of these features over the 20 year period of analysis. A recent assessment of the safety and biological diversity of our seas (Defra 2010) indicated that intertidal habitats are deteriorating in both the Northern and Southern North Sea areas. This deterioration was linked to sea level rise and human activities, including land claim, beach litter, shellfish harvesting and the presence of coastal structures. Subtidal habitats are generally stable or improving in condition. Subtidal rocky habitats are generally only subject to local pressures such as construction of coastal infrastructure and bottom trawling. Subtidal sediments, however, are subject to widespread pressures from aggregate extraction, benthic fishing, pollution and renewable energy infrastructure. The status of estuarine fish was assessed to be improving in the Northern North Sea, but deteriorating in the Southern North Sea, linked to improved water quality and reduced eel recruitment, respectively. Cetacean, grey seal and seabird populations are either stable or increasing in the North Sea. Conversely, harbour seals are decreasing in response to various pressures such as disease, competition, predation, unregulated shooting and declines in prey species. Cleanliness and safety indicators have shown little deterioration in the Net Gain area.

It may be assumed that if climatic conditions and human activities remain as per the status quo, the condition of broad-scale habitats and FOCI will remain unchanged over the next 20 years. However, if the exposure of features to certain pressures increases (e.g. as a result of increased intensity, duration, footprint or frequency of human activities), then the condition of features may be expected to deteriorate over time. Improved regulation of human activities in the marine environment may mitigate against this deterioration.

D.2 Human activities

This section describes the human activities occurring in the Net Gain area, in the absence of MCZs, over the 20 year period of analysis. Only sectors that may be negatively affected by the recommended suite of MCZs are considered. Additional information will be provided at a later date, following the completion of the national SNCB sense check.

D.2.1 Aggregate Extraction

The presence of extensive sand and gravel deposits around the Humber, off Great Yarmouth and the Outer Thames Estuary has led to a concentration of aggregate dredging in these areas (Department of Trade and Industry 2002). The statistics presented below are taken from the most recent online annual report from BMAPA (2009). Additional up-to-date information will be sought.

In 2009 the Humber BMAPA region had 10 production licences for both sand and gravel, covering an area of 469.89 km². The actual area available for dredging was 146.99 km². Dredging took place within 20.94 km² (4.46%) of the licensed area. During 2009, 2.5 million tonnes of aggregate were dredged for construction, and an additional 5.05 million tonnes were dredged for a beach nourishment scheme. The area licensed for marine aggregate extraction increased by 15.27 km² in 2009 (BMAPA 2009).

In 2009 the East Coast BMAPA region had 14 production licenses for both sand and gravel, covering an area of 266.52 km². The actual area available to be dredged was 158.17 km². Dredging took place within 47.26 km² (17.73%) of the licensed area. During 2009, 5.64 million tonnes of aggregate were dredged for construction, and an additional 1.3 million tonnes were dredged for a contract fill scheme. The area licensed for marine aggregate extraction decreased by 1.46 km² in 2009 (BMAPA 2009).

Aggregate extraction does not occur within any of the proposed dMCZs or reference areas. However, aggregate extraction occurs within 2 km of dMCZs NG 4, NG 6 and NG 9. Further guidance is being sought regarding whether this activity will require mitigation, and whether the costs to operators of undertaking Environmental Impact Assessment in future could increase for plans and projects that could impact on features.

D.2.2 Cables (excluding cables for renewables)

A network of subsea telecommunications cables transverses the Net Gain project area, linking the UK with Europe. The telecommunications sector in the Net Gain area contributes £100 – 500 m GVA to the UK economy and is increasing in capacity (Defra, 2010). In the northern part of the Net Gain area, telecom cables run from UK to Denmark and Germany. Cable density increases further south, with several cables running from Norfolk and Suffolk to the Netherlands (Department of Trade and Industry 2002). There is one power cable crossing the Alde Ore Estuary in Suffolk (local knowledge).

In general, most telecom cables in the North Sea are trenched to a depth of 40-90 cm, but rock-dumping is occasionally used where necessary. Older redundant cables are more likely not to be trenched (Department of Trade and Industry 2002).

Telecom cables are considered to cause a low impact to marine habitats because of their small localized footprint. For features protected by MCZs that are not reference areas, it is assumed that no additional mitigation of impacts will be required compared with the mitigation of impacts required in the absence of MCZs. However, it is anticipated that as a results of MCZs, the costs to operators of undertaking Environmental Impact Assessment in future could increase for plans and projects that could impact on features.

Cables (excluding renewables cables) occur within dMCZs NG 1b, NG 1c, NG 2, NG 7, NG 10, NG 12, NG 14 and NG 17. No planned new developments are currently known. Telecom cables typically have a life expectancy of 25 years; therefore, many of the existing cables are likely to need replacing during the 20 year period of analysis. Further information is currently being sought from UKCPC.

D.2.3 Coastal defence

Coastal defence activity is common along the coastline of the Net Gain project area due to the dynamic nature of the east coast of England. Shoreline Management Plans (SMPs) were introduced in 1994 by the Ministry for Agriculture, Fisheries and Food (MAFF) to provide a large-scale assessment of the potential risk of flooding and coastal erosion, and to present policies to guide future decision-making about coastal defence management. The policies in the SMP aim to reflect local and national priorities, and to assess different management

options: no active intervention, hold the existing line of defence, managed realignment, and advance the existing line of defence (Environment Agency 2011).

In the Net Gain area there are 7 SMPs: Scottish Border to River Tyne, The Tyne to Flamborough Head, Flamborough Head to Gibraltar Point, Gibraltar Point to Hunstanton, Hunstanton to Kelling Hard, Kelling Hard to Lowestoft and Lowestoft to Felixstowe. Coastal defence management occurs within dMCZs NG 1c, NG 5, NG 8, NG 10, NG 11 and NG 13. Further guidance is being sought regarding this activity and whether there is a need for mitigation.

D.2.4 Commercial fisheries

The Net Gain project area supports some of the most valuable demersal and *Nephrops* fisheries in the UK. In addition, pelagic fisheries for herring and mackerel are important in the area (Defra 2010).

A recent shift away from offshore fin-fish target species, and towards inshore *Nephrops* and mixed demersal species, has been attributed partly to stock declines and associated fishing restrictions, particularly those aimed at cod recovery. Since 2002, total fishing effort in the international demersal fisheries has fallen by around 30% in the North Sea. During this period, North Sea haddock and cod, and northern-shelf staithe have shown significant declines in fishing mortality. These trends are likely to be due to a combination of EU controls on total allowable catches and effort, and the decommissioning of vessels (Defra 2010).

Fishermap indicates that 351 UK vessels (<15 m) operate within the Net Gain area, from 66 UK home ports. Catch from within Net Gain is landed in 60 UK ports. The total value of landings for UK fisheries within the Net Gain area is £33,371,575.49 (MMO, data averaged over 2007-2010). Data from the >15 m fleet has not yet been included in the data presented here and in Annex H. When available, these data will be incorporated and then quality-assured with representatives from the MMO and IFCA, and with key representatives of the sector. Non-UK vessels also fish within the Net Gain area, further information is being sought regarding their activities.

Fishers use a variety of fishing methods and gear types in the Net Gain area, including demersal trawls, pelagic trawls, dredges, hooks and lines, nets, pots and traps, and hand collection. Fishing activity occurs within the majority of the proposed dMCZs and reference areas (see Annex H for details).

D.2.5 Gas and oil exploration and production

The North Sea oil and gas industry has grown into a major economic industry since the late 1960s and is now the fourth largest oil and gas province in the world in terms of production. The North Sea region is the second largest supplier of natural gas to continental Europe, and contains Western Europe's largest oil and natural gas reserves. Production of oil and gas in the North Sea (EU and Norway) in 2010 was 204 million tonnes and 189 million tonnes, respectively (DECC 2011).

Recent trends indicate that oil production in the North Sea has been decreasing over the last 10 years and is projected to decline further to 139 million tonnes by 2015. Gas production has increased over the last 10 years but is projected to decline to 169 million tonnes by 2015 (DECC 2011).

Within the Net Gain area there are approximately 160 currently licensed areas for oil and gas exploration and production, containing four oil fields and approximately 140 gas fields (DECC 2011). Activity is mainly centred on the oil and gas fields of the northern and central North Sea and the gas fields of the southern North Sea (Department of Trade and Industry 2002).

Oil and gas infrastructure (platforms and pipelines) and oil and gas exploration and production occur within dMCZs NG 2, NG 4, NG 5, NG 6, NG 7, NG 8, NG 9 and NG 16. Oil and gas infrastructure (platform) occurs within NG 17. In addition, NG 12, RA LW 2 and RA YH 1 overlap with licensed areas. NG 9 overlaps with a gas storage facility. For features protected by MCZs that are not reference areas, it is assumed that no additional mitigation of impacts will be required compared with the mitigation of impacts required in the absence of MCZs. However, it is anticipated that as a result of MCZs, the costs to operators of undertaking Environmental Impact Assessment in future could increase for plans and projects that could impact on features.

D.2.6 National defence

Various military activities occur within the Net Gain area. Baseline information to be provided.

National defence activities occur within dMCZs NG 4, NG 5, NG 6, NG 10, NG 14, NG 15, NG 16 and NG 17. In addition, activity occurs within reference areas LW5, YH1, YH2, NE1 and NE3. Further guidance is being sought regarding whether mitigation is required within reference areas.

D.2.7 Recreation

Tourism is an important source of income and employment for coastal regions in the Net Gain project area, which supports several established seaside resorts (Department of Trade and Industry 2002). Activities in and near the sea include recreational boating, recreational fisheries, recreational diving and wildlife watching.

Recreation occurs across most of the Net Gain area and within the majority of the dMCZs and reference areas. Further information to be provided.

D.2.8 Renewable energy - wind

Several offshore wind operations occur within the Net Gain project area. There are three operational Round 1 (R1) wind farms in the area, Blyth Offshore in the northeast, Lincs and Inner Dowsing off the Lincolnshire coast, and Scroby Sands off Norfolk. In addition, two R1 operations have been installed and one other has been approved. There are eight Round 2 offshore wind projects in various stages of approval or construction, and three Round 3 zones under consultation (RenewableUK 2011).

The small footprint of renewable devices and their cables is considered to reduce the potential for impact on the marine environment. For features protected by MCZs that are not reference areas, it is assumed that no additional mitigation of impacts will be required compared with the mitigation of impacts required in the absence of MCZs. However, it is anticipated that as a results of MCZs, the costs to operators of undertaking Environmental Impact Assessment in future could increase for plans and projects that could impact on features.

Renewables (wind) activities occur within dMCZs NG 4 and NG 13, and in reference areas LW 2, LW 4, LW 5 and YH 1. However, in these reference areas, the activity relates to R2 scoping areas only, and no infrastructure is present in these sites. Further information to be provided.

D.2.9 Shipping

Shipping occurs across the entire Net Gain project area. Baseline information to be provided.

Transit of vessels occurs within the majority dMCZs and within reference areas LW2, YH1, YH2, NE1 and NE3. Further guidance is being sought regarding whether this activity will require management within reference areas.

D.3 Other ecosystem services

To be completed.

E. Summary table of interest features protected and their occurrence

Feature	Area of feature (km²)	No. of occurrences
<i>Broad-scale Habitats</i>		
Coastal saltmarshes and saline reedbeds	0.10	
High energy circalittoral rock	0.05	
High energy infralittoral rock	86.94	
High energy intertidal rock	0.21	
Intertidal coarse sediment	0.21	
Intertidal mixed sediments	1.76	
Intertidal mud	4.25	
Intertidal sand and muddy sand	0.65	
Low energy circalittoral rock	20.34	
Low energy intertidal rock	0.26	

Moderate energy circalittoral rock	862.96	
Moderate energy infralittoral rock	203.42	
Moderate energy intertidal rock	0.77	
Subtidal biogenic reefs	0.06	
Subtidal coarse sediment	1717.18	
Subtidal mixed sediments	1302.69	
Subtidal mud	14.01	
Subtidal sand	7629.12	
<i>Habitats of Conservation Importance</i>		
Estuarine rocky habitats		6
Intertidal underboulder communities		9
Littoral chalk communities (modelled)	2.79	
Peat and clay exposures	4.05	1
Ross worm (<i>Sabellaria spinulosa</i>) reefs	0.05	13
Seagrass beds	0.02	
Sheltered muddy gravels		3
Subtidal chalk		61
Subtidal chalk (modelled)	379.82	
Subtidal sands and gravels	39.75	110
Subtidal sands and gravels (modelled)	7455.04	32
Tide swept channels	10.84	
<i>Species of Conservation Importance</i>		
Ocean quahog (<i>Artica islandica</i>)		56
Smelt (<i>Osmerus eperlanus</i>)	36.70	

Source: Net Gain Draft Final Recommendations Submission to the Science Advisory Panel 2011
(see Annex H for more detail on data sources)

Notes:

1) These data present the occurrence of features proposed for designation in 17 dMCZs and eight proposed reference areas. Discussions are still to be had over four additional reference areas for broad-scale habitats (coastal saltmarshes and saline reedbeds), habitats of conservation importance (subtidal chalk and blue mussel beds) and species of conservation importance (starlet sea anemone).

2) For some features, modelled data are presented in addition to record data. Modelled data may be considered of lower confidence.

F. Consents for activities, plans and projects in MCZs

To be completed.

G. Methods

To be completed.

H. Assessment of site-specific impacts of MCZs

This version of this annex sets out information at the level of an individual dMCZ. It includes:

- A baseline description of activities that will be impacted on by MCZs in each site
- Current understanding of the most likely mitigation of impacts created by human activities that may be needed to achieve the conservation objectives for the site. This information is presented for each MCZ (including reference areas) in the Regional Project's area.

Later versions of this annex will provide the following information (which is not available at this stage):

- Site-specific costs arising from the effect of MCZs on human activities. Current indications are that site-specific costs of MCZs arise only from the effect of an MCZ on human activities. These include:
 - Increases in costs of assessing the environmental impact for future licensed activities that could impact on features protected by MCZs.
 - Costs arising from the mitigation of impacts of human activities that is required to achieve the conservation objective for features protected by MCZs.
- Site specific benefits of MCZs.

The following impacts will be assessed for suites of sites and presented in another annex:

- Indirect and second round costs and benefits
- Costs of managing the MCZs (for example, the costs of setting up a management group)
- Cumulative impacts that arise over and above the combined impacts of the individual sites.

In this annex, information on each MCZ is presented separately in a series of tables as follows:

- Table 1: Features protected by the MCZ
- Table 2: Site-specific costs of the MCZ (assessed in a separate table for each affected sector)

- Table 3: Human activities in the site that are not negatively affected by the MCZ
- Table 4: Site-specific benefits of the MCZ on human activities.
- Table 5: Site-specific benefits of the MCZ on other ecosystem services.

The methods, assumptions and sources used to derive the costs and benefits are not included here, but will be included in an annex that presents the methods used for the assessment. The methods annex is not part of the fourth iteration submission.

Further clarity on the most likely mitigation of impacts will be given once the national review of the vulnerability assessments has been completed and the information reviewed by the RSG (by end of July 2011).

The MCZs included in this Annex are set out in the following order:

NG 1b, Fishermen's Friend
NG 1c, Alde Ore Estuary
NG 2, Cromer Shoal Chalk Beds
NG 4, Wash Approach
NG 5, Lincs Belt
NG 6, Silver Pit
NG 7, Markham's Triangle
NG 8, Holderness Inshore
NG 9, Damnation Alley / Westermost Rough
NG 10, Castle Ground
NG 11, Boulby Zone
NG 12, Compass Rose
NG 13, Coquet – St Mary's
NG 13a, Aln Estuary
NG 14, Farnes East
NG 15, Rock Unique
NG 16, Swallow Sand
NG 17, Fulmar
Reference Area LW2
Reference Area LW4
Reference Area LW5
Reference Area YH1
Reference Area YH2
Reference Area NE1
Reference Area NE2
Reference Area NE3

MCZ name: *NG 1b, Fishermen’s Friend*

Site area (km²): 71.95

Level of stakeholder support: not specified

Note that blank cells and entries that are ‘not specified’ are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 1b
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Subtidal mixed sediments	0.25 (JNCC 2010)		Recover to favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Commercial Fisheries			MCZ: NG 1b
Source of costs of the MCZ: Prohibition of demersal trawls			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fishermap data indicates that thirty five <15m vessels fish within the site from twelve UK home ports. Catch from within the site is landed in the same twelve ports. Total value of landings for all fisheries within the site is £42,403.30 (MMO and Fishermap). Demersal trawling (£4,739.90), hooks and lines (£30,697.62), potting (£5,032.20) and netting (£1,933.57) all occur within the site.</p>			
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that seven <15m vessels from five UK home ports (Leigh-on-Sea, Lowestoft, Shoreham, Southwold and Whitby) use demersal trawls within the site. Catch from within the site is landed in these same five ports. Target species include cod, bass, haddock, pollack, whiting and various flatfishes. The total value of landings</p>			

Table 2. Commercial Fisheries		MCZ: NG 1b
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
for demersal trawls within the site is £4,739.90 (MMO and Fishermap). Beam trawling (£203.84), bottom otter trawling (£4,195.37) and unspecified otter trawling (£340.70) all occur within the site.		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 1b
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (existing management through licensed regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Hooks and lines ○ Nets ○ Pelagic trawls (including seines) – not in values ○ Pots and traps • Recreation <ul style="list-style-type: none"> ○ Recreational fisheries • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)	MCZ: NG 1b
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Baseline:	Option 1: recommended network	
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 1b
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 1c, Alde Ore Estuary*

Site area (km²): 12.24

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 1c
Feature	Area of feature (km²)	No. of occurrences	Conservation objective	
<i>Habitats of Conservation Importance</i>				
Estuarine rocky habitats		2 (ABPmer 2010)	Maintain at favourable condition	
Sheltered muddy gravels		1 (ABPmer 2010)	Maintain at favourable condition	
<i>Species of Conservation Importance</i>				
Smelt (<i>Osmerus eperlanus</i>)	36.70 (ABPmer 2010)		To be specified	
<i>Geological and Geomorphological Features of Interest</i>				
Orfordness (subtidal)	12.23 (NE 2010)			

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 1c
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 1c
<ul style="list-style-type: none"> • Aquaculture • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Power (existing management through licensing regulations) ○ Telecommunications (existing management through licensing regulations) • Coastal defence • Coastal developments (excluding ports and harbours) • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Hooks and lines ○ Nets ○ Pots and traps ○ Other (bait digging) • Water pollution from activities on land (existing management through licensing regulations) • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational fisheries 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 1c
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	

Not specified	Not specified	Not specified
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	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 2, Cromer Shoal Chalk Beds*

Site area (km²): 322.76

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Feature	Area of feature (km²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
High energy infralittoral rock	2.71 (JNCC 2010)		Maintain at favourable condition
Moderate energy circalittoral rock	11.49 (JNCC 2010)		Maintain at favourable condition
Moderate energy infralittoral rock	145.65 (JNCC 2010)		Maintain at favourable condition
<i>Habitats of Conservation Importance</i>			
Subtidal chalk	189.37 (ABPmer 2010 modelled)	60 (Seasearch 2010, North Sea Wildlife Trusts 2009-10)	Maintain at favourable condition
<i>Geological and Geomorphological Features of Interest</i>			
North Norfolk coast (subtidal)	14.89 (NE 2010)		

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 2
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 2
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (not in service) • Coastal developments (excluding ports and harbours) • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Dredges ○ Hooks and lines ○ Pelagic trawls (including seines) ○ Pots and traps ○ Nets • Water pollution from activities on land (existing management through licensing regulations) • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational diving ○ Recreational fisheries ○ Wildlife watching • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 2
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 2
Baseline:	Option 1: recommended network				
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 4, Wash Approach*

Site area (km²): 724.27

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 4
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				
Subtidal mixed sediments	414.05 (JNCC 2010, MESH 2010, MALSF 2011)		Maintain at favourable condition	
Subtidal sand	125.69 (JNCC 2010, MESH 2010, MALSF 2011)		Maintain at favourable condition	

<i>Habitats of Conservation Importance</i>			
Subtidal sands and gravels	483.48 (ABPmer 2010, modelled)	32 (ABPmer 2010)	Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 4
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 4
<ul style="list-style-type: none"> • Aggregate extraction within 2 km (existing management through licensing regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Dredges ○ Hooks and lines ○ Nets ○ Pelagic trawls (including seines) ○ Pots and traps • Gas and oil exploration and production (existing management through licensing regulations) <ul style="list-style-type: none"> ○ Licensed area ○ Infrastructure • National defence • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational diving ○ Recreational fisheries ○ Wildlife watching • Renewable energy 	

- Wind (R2 scoping offshore zone development envelope) (existing management through licensing regulations)
- Shipping
 - Transit of vessels

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 4
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 4
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 5, Lincs Belt*

Site area (km²): 175.49

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 5
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				

Subtidal coarse sediment	33.83 (JNCC 2010, ABPmer 2010, MESH 2010, MALSF 2011)		Recover to favourable condition
Subtidal mixed sediments	66.14 (JNCC 2010, ABPmer 2010, MESH 2010, MALSF 2011)		Recover to favourable condition
Subtidal sand	74.30 (JNCC 2010, ABPmer 2010, MESH 2010, MALSF 2011)		Recover to favourable condition
<i>Habitats of Conservation Importance</i>			
Peat and clay exposures		present (local knowledge)	Maintain at favourable condition
Subtidal sands and gravels	4.42 (ABPmer 2010) 19.77 (ABPmer 2010, modelled)		Recover to favourable condition
<i>Geological and Geomorphological Features of Interest</i>			
Spurn Head (subtidal)	0.000009 (NE 2010)		

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Coastal Defence		MCZ: NG 5
Source of costs of the MCZ: Prohibition of coastal defence activity within the site		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Coastal defence: The Environment Agency has been implementing a beach re-nourishment project (the Lincshore Project) between Mablethorpe and Skegness since 1994. Replacement of lost sand occurs annually at	To be specified	To be specified

Table 2. Coastal Defence		MCZ: NG 5
Source of costs of the MCZ: Prohibition of coastal defence activity within the site		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>locations of low beach level. Sand is dredged from a licensed site offshore, pumped onto beaches through a submerged pipeline, and then levelled by a bulldozer.</p> <p>This activity provides protection against a 1 in 200 year flood event for 30,000 properties and 35,000 ha land (including agricultural land and wildlife sites) along the Lincolnshire coast. It also protects the clay foreshore against further erosion and encourages tourism.</p> <p>In 2009 the project cost £6 million.</p>		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 5
<ul style="list-style-type: none"> • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Dredges ○ Hooks and lines ○ Pelagic trawls (including seines) ○ Pots and traps ○ Nets ○ Other (bait digging, hand collection) • Water pollution from activities on land (existing management through licensing regulations) • Gas and oil exploration and production (existing management through licensing regulations) 	

- Licensed area
- Infrastructure
- National defence
- Recreation
 - Recreational boating
 - Recreational diving
 - Recreational fisheries
 - Wildlife watching
- Shipping
 - Transit of vessels

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 5
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 5
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 6, Silver Pit*

Site area (km²): 168.06

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 6
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Subtidal mixed sediments	126.52 (JNCC 2010, MESH 2010, MALSF 2011)		Recover to favourable condition
Subtidal sand	41.52 (JNCC 2010, MESH 2010, MALSF 2011)		Recover to favourable condition
<i>Habitats of Conservation Importance</i>			
Ross worm (<i>Sabellaria spinulosa</i>) reefs	0.05 (MALSF 2011)	9 (MALSF 2011)	Maintain at favourable condition
Subtidal sands and gravels	16.90 (ABPmer 2010)		Recover to favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Commercial Fisheries			MCZ: NG 6
Source of costs of the MCZ: Prohibition of demersal trawls			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Summary of all fisheries: Fisherman data indicates that twenty seven <15m vessels fish within the site from nine UK home ports. Catch from within the site is landed in the same nine ports. Total value of landings for all fisheries within the site is £197,504.59 (MMO and Fisherman). Demersal trawling (£54,117.38), hooks and lines (£2,332.60), potting (£140,827.68), dredging (£151.96) and netting (£74.97) all occur within the site.			
Gear type: Demersal Trawls			

Table 2. Commercial Fisheries		MCZ: NG 6
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Fishermap data indicates that seven <15m vessels from five UK home ports (Amble, Brancaster Staithe, Grimsby, Kings Lynn and Whitby) use demersal trawls within the site. Catch from within the site is landed in the same five ports. Target species include brown and pink shrimp, bass, cod, whiting, dogfish, sand eels and various flatfishes. The total value of landings for demersal trawls within the site is £54,117.38 (MMO and Fishermap). Beam trawling (£34,666.10), bottom otter trawling (£609.76) and unspecified otter trawling (£18,841.52) all occur within the site.		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 6
<ul style="list-style-type: none"> • Aggregate extraction within 2 km(existing management through licensing regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Dredges ○ Hooks and lines ○ Nets ○ Pelagic trawls (including seines) – not in values ○ Pots and traps • Gas and oil exploration and production (existing management through licensing regulations) 	

- Licensed area
- Infrastructure
- National defence
- Recreation
 - Recreational boating
 - Recreational fisheries
 - Wildlife watching
- Shipping
 - Transit of vessels

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 6
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 6
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 7, Markham's Triangle*

Site area (km²): 199.98

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 7
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Subtidal coarse sediment	167.73 (JNCC 2010, MESH 2010)		Recover to favourable condition
Subtidal sand	30.76 (JNCC 2010, MESH 2010)		Recover to favourable condition
<i>Geological and Geomorphological Features of Interest</i>			
North Sea glacial tunnel valleys (Outer Silver Pit)	0.00041 (NE 2010)		

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Commercial Fisheries			MCZ: NG 7
Source of costs of the MCZ: Prohibition of demersal trawls			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fishermap data indicates that six <15m vessels fish within the site from five UK home ports. Catch from within the site is landed in the same five ports. Total value of landings for all fisheries within the site is £4,909.89 (MMO and Fishermap). Demersal trawling (£371.93), potting (£4,534.77) and netting (£3.19) all occur within the site.</p>			
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that one <15m vessels from Amble uses demersal trawls within the site. Catch from within the site is landed in Amble. Target species include</p>			

Table 2. Commercial Fisheries		MCZ: NG 7
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
haddock, cod, whiting, Pollack, ling, bass, spurdog and various flatfishes. The total value of landings for demersal trawls within the site is £371.93 (MMO and Fishermap). All of this value is attributed to bottom otter trawling.		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 7
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (not in service) • Commercial fisheries <ul style="list-style-type: none"> ○ Nets ○ Pelagic trawls (including seines) – not in values ○ Pots and traps • Gas and oil exploration and production (existing management through licensing regulations) <ul style="list-style-type: none"> ○ Licensed area ○ Infrastructure • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)	MCZ: NG 7
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Baseline:	Option 1: recommended network	
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 7
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 8, Holderness Inshore*

Site area (km²): 301.04

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 8
Feature	Area of feature (km²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				
Intertidal mixed sediments	1.47 (JNCC 2010, MALSF 2011)		Maintain at favourable condition	
Subtidal coarse sediment	217.54 (JNCC 2010, MALSF 2011)		Maintain at favourable condition	
Subtidal sand	14.20 (JNCC 2010, MALSF 2011)		Maintain at favourable condition	
<i>Habitats of Conservation Importance</i>				

Peat and clay exposures		1 (ABPmer 2010)	Maintain at favourable condition
Ross worm (<i>Sabellaria spinulosa</i>) reefs		4 (ABPmer 2010)	Maintain at favourable condition
Subtidal chalk	182.39 (ABPmer 2010, modelled)	1 (ABPmer 2010)	Maintain at favourable condition
Subtidal sands and gravels	97.34 (ABPmer 2010, modelled)	106 (ABPmer 2010)	Maintain at favourable condition
<i>Geological and Geomorphological Features of Interest</i>			
Spurn head	12.28 (NE 2010)		

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 8
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 8
<ul style="list-style-type: none"> • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Hooks and lines ○ Nets ○ Pots and traps ○ Other (bait digging, hand collection) • Water pollution from activities on land (existing management through licensing regulations) • Gas and oil exploration and production (existing management through licensing regulations) <ul style="list-style-type: none"> ○ Licensed area ○ Infrastructure • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational diving 	

- Recreational fisheries
- Wildlife watching
- Shipping
 - Transit of vessels
- Other (seismic activities)

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 8
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 8
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 9, Damnation Alley / Westermost Rough* Site area (km²): 1,175.98

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 9
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	

<i>Broad-scale Habitats</i>			
Subtidal coarse sediment	536.45 (JNCC 2010, MALSF 2011)		Recover to favourable condition
Subtidal mixed sediments	610.36 (JNCC 2010, MALSF 2011)		Recover to favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Commercial Fisheries		MCZ: NG 9
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Summary of all fisheries: Fishermap data indicates that fifty seven <15m vessels fish within the site from twelve UK home ports. Catch from within the site is landed in eleven of these ports. Total value of landings for all fisheries within the site is £1,949,770.32 (MMO and Fishermap). Demersal trawling (£27,057.27), hooks and lines (£8,499.66), potting (£1,882,428.22), dredging (£14,852.42) and netting (£16,932.75) all occur within the site.</p>		
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that nine <15m vessels from five UK home ports (Amble, Bridlington, Gromsby, Scarborough and Whitby) use demersal trawls within the site. Catch from within the site is landed in these same five ports. Target species include cod, haddock, pollack, ling, sand eels, whelks, <i>Nephrops</i> and various flatfishes. The total value of landings for demersal trawls within the site is £27,057.27 (MMO and Fishermap). Beam trawling (£6,712.08) and bottom otter trawling (£20,345.18) occur within the site.</p>		

Table 2. Commercial Fisheries		MCZ: NG 9
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 9
<ul style="list-style-type: none"> • Aggregate extraction within 2 km (existing management through licensing regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Dredges ○ Hooks and lines ○ Nets ○ Pelagic trawls (including seines) – not in values ○ Pots and traps • Gas and oil exploration and production (existing management through licensing regulations) <ul style="list-style-type: none"> ○ Licensed area ○ Infrastructure ○ Gas storage • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational diving ○ Recreational fisheries ○ Wildlife watching • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 9
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 9
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 10, Castle Ground*

Site area (km²): 3.71

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 10
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				
High energy intertidal rock	0.08 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition	
Intertidal coarse sediment	0.06 (JNCC 2010,		Maintain at favourable condition	

	ABPmer 2010, MESH 2010)		
Intertidal mud	0.02 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Intertidal sand and muddy sand	0.62 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Low energy intertidal rock	0.04 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Moderate energy intertidal rock	0.44 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
<i>Habitats of Conservation Importance</i>			
Intertidal underboulder communities		3 (ABPmer 2010)	Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 10
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 10
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (existing management through licensing regulations) • Coastal defence • Coastal developments (excluding ports and harbours) • Commercial fisheries 	

- Demersal trawls
- Hooks and lines
- Nets
- Pots and traps
- Other (bait digging)
- Education & research
- National defence
- Ports and harbours
- Recreation
 - Recreational boating
 - Recreational diving
 - Recreational fisheries
 - Wildlife watching

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 10
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 10
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 11, Boulby Zone*

Site area (km²): 67.97

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 11
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
High energy circalittoral rock	0.05 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
High energy infralittoral rock	10.66 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Moderate energy circalittoral rock	19.55 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Moderate energy infralittoral rock	8.59 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Subtidal coarse sediment	13.47 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Subtidal mixed sediments	7.80 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition

Subtidal sand	6.86 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
<i>Species of Conservation Importance</i>			
Ocean quahog (<i>Arctica islandica</i>)		8 (NESFC 2010)	Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 11
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 11
<ul style="list-style-type: none"> • Coastal defence • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Dredges ○ Hooks and lines ○ Nets ○ Pots and traps • Water pollution from activities on land (existing management through licensing regulations) • Ports and harbours • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational diving ○ Recreational fisheries • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 11
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 11
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 12, Compass Rose*

Site area (km²): 551.53

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 12
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				
Moderate energy circalittoral rock	244.85 (JNCC 2010)		Recover to favourable condition	

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Commercial Fisheries		MCZ: NG 12
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Summary of all fisheries: Fisherman data indicates that twelve <15m vessels fish within the site from six UK home ports. Catch from within the site is landed in the same six ports. Total value of landings for all fisheries within the site is £17,773.44 (MMO and Fisherman). Demersal trawling (£14,892.83), potting (£2,869.33) and netting (£11.28) all occur within the site.</p>		
<p>Gear type: Demersal Trawls</p> <p>Fisherman data indicates that five <15m vessels from five UK home ports (Amble, Bridlington, Grimsby, Hartlepool and Whitby) use demersal trawls within the site. Catch from within the site is landed in these same five ports. Target species include cod, haddock, whiting, bass, pollack, ling, <i>Nephrops</i> and various flatfishes. The total value of landings for demersal trawls within the site is £14,892.83 (MMO and Fisherman). All of this value is attributed to bottom otter trawling.</p>		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 12
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (existing management through licensing regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Nets ○ Pots and traps 	

- Gas and oil exploration and production (existing management through licensing regulations)
 - Licensed area
- Recreation
 - Recreational boating
 - Recreational fisheries
 - Wildlife watching
- Shipping
 - Transit of vessels

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 12
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 12
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 13, Coquet – St Mary’s*

Site area (km²): 198.98

Level of stakeholder support: not specified

Note that blank cells and entries that are ‘not specified’ are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 13
Feature	Area of feature (km²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
High energy infralittoral rock	73.39 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Intertidal coarse sediment	0.15 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Intertidal mixed sediments	0.29 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Intertidal mud	0.03 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Intertidal sand and muddy sand	0.03 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Low energy intertidal rock	0.05 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Moderate energy circalittoral rock	69.42 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Moderate energy infralittoral rock	48.33 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition

	2010)		
Moderate energy intertidal rock	0.33 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Subtidal coarse sediment	1.00 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Subtidal mixed sediments	2.58 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Subtidal mud	0.16 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Subtidal sand	0.13 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
<i>Habitats of Conservation Importance</i>			
Intertidal underboulder communities		6 (ABPmer 2010)	Maintain at favourable condition
Tide-swept channels	10.80 (ABPmer 2010)		Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 13
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 13
<ul style="list-style-type: none"> • Coastal defence • Coastal developments (excluding ports and harbours) 	

- Commercial fisheries
 - Demersal trawls
 - Dredges
 - Hooks and lines
 - Nets
 - Pelagic trawls (including seines) – not in values
 - Pots and traps
 - Other (bait digging)
- Water pollution from activities on land (existing management through licensing regulations)
- Recreation
 - Recreational boating
 - Recreational diving
 - Recreational fisheries
- Renewables
 - Wind
- Shipping
 - Transit of vessels
- Other (sea coal extraction, seismic activities)

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 13
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)			MCZ: NG 13
	Baseline:	Option 1: recommended network	

Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 13a, Aln Estuary*

Site area (km²): 0.39

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 13a
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Coastal saltmarshes & saline reed beds	0.10 (EA 2011)		Maintain at favourable condition
High energy infralittoral rock	0.03 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
Intertidal mud	0.10 (JNCC 2010, ABPmer 2010, MESH 2010)		Maintain at favourable condition
<i>Habitats of Conservation Importance</i>			
Estuarine rocky habitats		2 (ABPmer 2010)	Maintain at favourable condition
Sheltered muddy gravels		1 (ABPmer 2010)	Maintain at favourable condition
Subtidal sands and gravels	10.79 (ABPmer 2010)		Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 13a
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 13a
<ul style="list-style-type: none"> • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Nets – no value in model ○ Pots and traps ○ Other (bait digging) • Water pollution from activities on land (existing management through licensing regulations) • Recreation <ul style="list-style-type: none"> ○ Recreational boating ○ Recreational fisheries 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 13a
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 13a
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 14, Farnes East*

Site area (km²): 945.81

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 14
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Moderate energy circalittoral rock	517.58 (JNCC 2010)		Maintain at favourable condition
Subtidal coarse sediment	247.32 (JNCC 2010)		Maintain at favourable condition
Subtidal mixed sediments	3.31 (JNCC 2010)		Maintain at favourable condition
Subtidal mud	13.22 (JNCC 2010, Ritchie, S. 2010)		Recover to favourable condition
Subtidal sand	177.59 (JNCC 2010)		Maintain at favourable condition
<i>Habitats of Conservation Importance</i>			
Peat and clay exposures	4.05 (Lawrence, B. 2011)		Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2. Commercial Fisheries			MCZ: NG 14
Source of costs of the MCZ: Prohibition of demersal trawls			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Summary of all fisheries: Fishermap data indicates that forty six <15m vessels fish within the site from thirteen UK home ports. Catch from within the site is			

Table 2. Commercial Fisheries		MCZ: NG 14
Source of costs of the MCZ: Prohibition of demersal trawls		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
landed in fourteen UK ports. Total value of landings for all fisheries within the site is £592,509.85 (MMO and Fishermapper). Demersal trawling (£29,404.27), hooks and lines (£5,664.89), potting (£518,464.23), dredging (£37,147.01) and netting (£1,829.46) all occur within the site.		
<p>Gear type: Demersal Trawls</p> <p>Fishermapper data indicates that twelve <15m vessels from five UK home ports (Amble, Blyth, Bridlington, Hartlepool and North shields) use demersal trawls within the site. Catch from within the site is landed in these same five ports. Target species include cod, haddock, whiting, pout, hake, bass, monkfish, <i>Nephrops</i> and various flatfishes. The total value of landings for demersal trawls within the site is £29,404.27 (MMO and Fishermapper). <i>Nephrops</i> trawling (£16,784.37) and bottom otter trawling (£12,619.89) occur within the site.</p>		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 14
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (existing management through licensing regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Dredges ○ Hooks and lines 	

- Nets
- Pelagic trawls (including seines) – not in values
- Pots and traps
- National defence
- Recreation
 - Recreational boating
 - Recreational diving
 - Recreational fisheries
- Shipping
 - Transit of vessels

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 14
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 14
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 15, Rock Unique*

Site area (km²): 492.31

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: NG 15
Feature	Area of feature (km²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Low energy circalittoral rock	20.34 (JNCC 2010)		Maintain at favourable condition
Subtidal coarse sediment	161.26 (JNCC 2010)		Maintain at favourable condition
Subtidal sand	309.22 (JNCC 2010)		Maintain at favourable condition
<i>Habitats of Conservation Importance</i>			
Subtidal sands and gravels	323.00 (ABPmer 2010, modelled)	1 (ABPmer 2010)	Maintain at favourable condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 15
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 15	
<ul style="list-style-type: none"> • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Pelagic trawls (including seines) – not in values ○ Pots and traps • National defence • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 		

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 15
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 15
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 16, Swallow Sand*

Site area (km²): 4,744.94

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 16
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				
Subtidal coarse sediment	293.26 (JNCC 2010)		Maintain at favourable condition	
Subtidal sand	4,451.67 (JNCC 2010)		Maintain at favourable condition	
<i>Habitats of Conservation Importance</i>				
Subtidal sands and gravels	4,497.00 (ABPmer)	3 (ABPmer 2010)	Maintain at favourable condition	

	2010, modelled)		
<i>Geological and Geomorphological Features of Interest</i>			
North Sea glacial tunnel valleys (Swallow Hole)	18.44 (NE 2010)		

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 16
Source of costs of the MCZ: None identified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 16
<ul style="list-style-type: none"> • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Pelagic trawls (including seines) – not in values • Gas and oil exploration and production (existing management through licensing regulations) <ul style="list-style-type: none"> ○ Licensed area ○ Infrastructure • National defence • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)		MCZ: NG 16
Baseline:	Option 1: recommended network	
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 16
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *NG 17, Fulmar*

Site area (km²): 2,435.34

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ				MCZ: NG 17
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective	
<i>Broad-scale Habitats</i>				
Subtidal coarse sediment	45.32 (JNCC 2010)		Maintain at favourable condition	
Subtidal sand	2,389.90 (JNCC 2010)		Maintain at favourable condition	
<i>Habitats of Conservation Importance</i>				
Subtidal sands and gravels	2,402.00 (ABPmer 2010, modelled)		Maintain at favourable condition	
<i>Species of Conservation Importance</i>				
Ocean quahog (<i>Arctica islandica</i>)		48 (ABPmer 2010)	Maintain at favourable condition	

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2.	MCZ: NG 17
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Source of costs of the MCZ: None identified

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: NG 17
<ul style="list-style-type: none"> • Cables (excluding cables for renewables) <ul style="list-style-type: none"> ○ Telecommunications (existing management through licensing regulations) • Commercial fisheries <ul style="list-style-type: none"> ○ Demersal trawls ○ Nets – no value in model ○ Pelagic trawls (including seines) – no value in model • Gas and oil exploration and production (existing management through licensing regulations) <ul style="list-style-type: none"> ○ Infrastructure • National defence • Shipping <ul style="list-style-type: none"> ○ Transit of vessels 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: NG 17
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: NG 17
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area LW2*

Site area (km²): 25.00

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: RA LW2
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Subtidal mixed sediments	6.00 (JNCC 2010, MESH 2010, MALSF 2011)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Subtidal sands and gravels	25.00 (ABPmer 2010, modelled)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries			MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fishermap data indicates that eighteen <15m vessels fish within the site from ten UK home ports. Catch from within the site is landed in nine of these ports. Total value of landings for all fisheries within the site is £13,995.08 (MMO and Fishermap). Demersal trawling (£1,195.00), hooks and lines (£116.38) and potting (£12,683.70) all occur within the site.</p>			

Table 2a. Commercial Fisheries		MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that four <15m vessels from three UK home ports (Grimsby, Kings Lynn and Wells) use demersal trawls within the site. Catch from within the site is landed in the same three ports. The total value of landings for demersal trawls within the site is £1,195.00 (MMO and Fishermap). Beam trawling accounts for the majority of this value (£1,194.77) but a small amount is attributed to bottom otter trawling (£0.24).</p>		
<p>Gear type: Hooks & Lines</p> <p>Fishermap data indicates that two <15m vessels from Lowestoft use hooks and lines within the site. Catch from within the site is landed in Lowestoft. The total value of landings for hooks & lines within the site is £116.38 (MMO and Fishermap). All of this value is attributed to unspecified longlines.</p>		
<p>Gear type: Pots & Traps</p> <p>Fishermap data indicates that ten <15m vessels from five UK home ports (Blakeney, Bridlington, Cromer, Morston and Wells) use pots and traps within the site. Catch from within the site is landed in four of these ports (Bridlington, Cromer, Morston and Wells). The total value of landings</p>		

Table 2a. Commercial Fisheries		MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
for pots and traps within the site is £12,683.70 (MMO and Fishermap).		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 2b. Gas and oil exploration and production		MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Oil and gas licensed area.	To be specified	To be specified

Table 2c. Recreation		MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Recreational fisheries: Recreational fishing is known to occur but stakeholder discussions suggest that activity is low level.	To be specified	To be specified

Table 2d. Renewable energy		MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity		

Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Wind: The site overlaps with a Round 2 scoping offshore zone development envelope. No infrastructure currently occurs within the site and it is unlikely that any development will be proposed in the future.	To be specified	To be specified

Table 2e. Shipping		MCZ: RA LW2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Transit of vessels (potentially damaging or disturbing)	To be specified	To be specified

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)		MCZ: RA LW2
None		

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA LW2
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: RA LW2
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services	Ecosystem services	Change in	Human population	Key assumptions, sensitivities

	provided (level and quality)	provided (level and quality)	ecosystem services	impacted on	and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area LW4*

Site area (km²): 0.02

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: RA LW4
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Intertidal mud	0.02 (ABPmer 2010, MESH 2010)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Seagrass beds	0.02 (ABPmer 2010)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries			MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fisherman data indicates that twenty eight <15m vessels fish within the site from eleven UK home ports. Catch from within the site is landed in ten of these ports. Total value of landings for all fisheries within the site is £16,398.74 (MMO and Fisherman). Demersal trawling (£16,215.95), hooks and lines (£2.03), potting (£138.29), dredging (£16.47) and netting (£1.78) all occur within the site (MMO and Fisherman). Fisherman</p>			

Table 2a. Commercial Fisheries		MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>data indicates that a small amount of hand collection (£14.32) and pelagic trawling (£9.90) also occur here. However, subsequent stakeholder discussions suggest that the only fishing activity occurring within the site is occasional hand collection. Therefore, these values may be an artefact of low spatial resolution within the fisheries model.</p>		
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that eighteen <15m vessels from eight UK home ports (Boston, Brancaster, Campbeltown, Grimsby, Kings Lynn, Leigh-on-Sea, Scarborough and Wells) use demersal trawls within the site. Catch from within the site is landed in these same eight ports. The total value of landings for demersal trawls within the site is £16,215.95 (MMO and Fishermap). Beam trawling accounts for the majority of this value (£16,202.02) but a small amount is attributed to otter trawling (£13.93). However, subsequent stakeholder discussions suggest that demersal trawls do not occur within the site.</p>		
<p>Gear type: Dredges</p> <p>Fishermap data indicates that four <15m vessels from two UK home ports (Kings Lynn and Campbeltown) use dredges within the site. Catch from within the site is landed in these same two ports. The total value of landings for dredges within the site is £16.47 (MMO and Fishermap). However, subsequent stakeholder discussions</p>		

Table 2a. Commercial Fisheries		MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
suggest that dredging does not occur within the site.		
<p>Gear type: Hooks & Lines</p> <p>Fishermap data indicates that two <15m vessels from Lowestoft use hooks and lines within the site. Catch from within the site is landed in Lowestoft. The total value of landings for hooks & lines within the site is £2.03 (MMO and Fishermap). All of this value is attributed to unspecified longlines. However, subsequent stakeholder discussions suggest that hooks and lines do not occur within the site.</p>		
<p>Gear type: Nets</p> <p>Fishermap data indicates that one <15m vessel from Morston uses nets within the site. Catch from within the site is landed in Morston. The total value of landings for nets within the site is £1.78 (MMO and Fishermap). However, subsequent stakeholder discussions suggest that netting does not occur within the site.</p>		
<p>Gear type: Pelagic trawls (including seines)</p> <p>Fishermap data indicates that one <15m vessel from Campbeltown uses pelagic trawls within the site. Catch from within the site is landed in Kings Lynn. The total value</p>		

Table 2a. Commercial Fisheries		MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
of landings for pelagic trawls within the site is £9.90 (Fishermap). All of this value is attributed to midwater otter trawls. However, subsequent stakeholder discussions suggest that pelagic trawls do not occur within the site.		
Gear type: Pots & Traps Fishermap data indicates that eight <15m vessels from four UK home ports (Cley, Kings Lynn, Morston and Wells) use pots and traps within the site. Catch from within the site is landed in these same four ports. The total value of landings for pots and traps within the site is £138.29 (MMO and Fishermap). However, subsequent stakeholder discussions suggest that pots and traps do not occur within the site.		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 2b. Education and research		MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
There is a residential field research station on Blakeney Point which hosts university students studying the ecology	To be specified	To be specified

Table 2b. Education and research		MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
and geography of Blakeney Point. It is possible that research activities occur within the site.		

Table 2c. Recreation		MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity that is damaging or disturbing		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Recreational boating: Recreational boating occurs near the site but stakeholder discussions suggest that this will be limited to the main navigable channels approximately 500 m from the site.		
Recreational fisheries: Stakeholder discussions suggest that some bait digging occurs within the site.	To be specified	To be specified
Wildlife watching: Blakeney Point is a popular destination for local people and tourists to view seals and birds. Several local wildlife tours operate to and around Blakeney Point by boat, and some land on the point to allow people to walk around. There is open access to the site on foot by walking along Blakeney Point from Cley Beach car park. The National Trust warden the area and erect fencing and visitor signage to prevent damage or disturbance to sensitive areas.	To be specified	To be specified

Table 2c. Recreation			MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity that is damaging or disturbing			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	

Table 2d. Renewable energy			MCZ: RA LW4
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Wind: The site overlaps with a Round 2 scoping offshore zone development envelope. No infrastructure currently occurs within the site and it is unlikely that any development will be proposed in the future.	To be specified	To be specified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)		MCZ: RA LW4
<ul style="list-style-type: none"> Recreation – activity that does not cause damage or disturbance only 		

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA LW4
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)			MCZ: RA LW4
	Baseline:	Option 1: recommended network	

Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area LW5*

Site area (km²): 12.31

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: RA LW5
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Intertidal mud	4.07 (JNCC 2010, ABPmer 2010, MESH 2010)		Recover to reference condition
Subtidal biogenic reefs	0.06 (JNCC 2010, ABPmer 2010, MESH 2010)		Recover to reference condition
Subtidal mixed sediments	0.28 (JNCC 2010, ABPmer 2010, MESH 2010)		Recover to reference condition
Subtidal mud	0.63 (JNCC 2010, ABPmer 2010, MESH 2010)		Recover to reference condition
Subtidal sand	7.27 (JNCC 2010,		Recover to reference condition

	ABPmer 2010, MESH 2010)		
<i>Habitats of Conservation Importance</i>			
Subtidal chalk	8.05 (ABPmer 2010, modelled)		Recover to reference condition
Subtidal sands and gravels	7.66 (ABPmer 2010) 11.00 (ABPmer 2010, modelled)		Recover to reference condition

Note: This site has been proposed for intertidal features only. However, data suggests that several subtidal features are also present within the site.

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries		MCZ: RA LW5	
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fisherman data indicates that forty two <15m vessels fish within the site from ten UK home ports. Catch from within the site is landed in these same ten ports. Total value of landings for all fisheries within the site is £26,056.55 (MMO and Fisherman). Demersal trawling (£10,057.14), hooks and lines (£582.16), potting (£5,744.94), dredging (£5,353.25) and netting (£400.93) all occur within the site. Fisherman data indicates that hand collection (£3,440.83) and pelagic trawling (£477.30) also occurs within the site. However, this site has been proposed for intertidal features of two mobile sandbanks. It is possible that some fishing activity may occur within the site, but the values presented should be considered with caution as the spatial resolution within the fisheries model may be too low to account for the small size of the site.</p>			
<p>Gear type: Demersal Trawls Fisherman data indicates that twenty seven <15m vessels from seven UK home ports (Boston, Brancaster Staithe, Campbeltown, Grimsby, Kings Lynn, Leigh-on-Sea and Wells) use demersal trawls within the site. Catch from</p>			

Table 2a. Commercial Fisheries		MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>within the site is landed in these same seven ports. The total value of landings for demersal trawls within the site is £10,057.14 (MMO and Fishermap). Beam trawling (£9,915.35), bottom otter trawling (£9.94) and unspecified otter trawling (£131.84) all occur within the site. However, these data should be considered with caution (see above explanation).</p>		
<p>Gear type: Dredges Fishermap data indicates that eighteen <15m vessels from five UK home ports (Boston, Brancaster Staithe, Campbeltown, Kings Lynn and Leigh-on-Sea) use dredges within the site. Catch from within the site is landed in these same five ports. The total value of landings for dredges within the site is £5,353.25 (MMO and Fishermap). However, these data should be considered with caution (see above explanation).</p>		
<p>Gear type: Hooks & Lines Fishermap data indicates that five <15m vessels from three UK home ports (Grimsby, Lowestoft and Skegness) use hooks and lines within the site. Catch from within the site is landed in these same three ports. The total value of landings for hooks & lines within the site is £582.16 (MMO</p>		

Table 2a. Commercial Fisheries		MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
and Fishermap). Unspecified longlines account for £390.22 and the remaining £191.94 is attributed to trolling lines. However, these data should be considered with caution (see above explanation).		
Gear type: Nets Fishermap data indicates that three <15m vessels from three UK home ports (Boston, Skegness and Southwold) use nets within the site. Catch from within the site is landed in these same three ports. The total value of landings for nets within the site is £400.93 (MMO and Fishermap).		
Gear type: Pelagic trawls (including seines) Fishermap data indicates that two <15m vessels from two UK home ports (Boston and Campbeltown) use pelagic trawls within the site. Catch from within the site is landed in Boston and Kings Lynn. The total value of landings for pelagic trawls within the site is £477.30 (Fishermap). Midwater otter trawls (£415.68) and midwater pair trawls (£61.62) both occur within the site. However, these data should be considered with caution (see above explanation).		

Table 2a. Commercial Fisheries			MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Gear type: Pots & Traps</p> <p>Fishermap data indicates that eight <15m vessels from four UK home ports (Boston, Brancaster Staithe, Kings Lynn and Wells) use pots and traps within the site. Catch from within the site is landed in these same four ports. The total value of landings for pots and traps within the site is £5,744.94 (MMO and Fishermap). However, these data should be considered with caution (see above explanation).</p>			
Total direct impact on UK commercial fisheries:			
Impact on non-UK commercial fisheries:			

Table 2b. National defence			MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
To be specified	To be specified	To be specified	

Table 2c. Recreation			MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity that is damaging or disturbing			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Recreational boating: Local people and tourists use the	To be specified	To be specified	

Table 2c. Recreation		MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity that is damaging or disturbing		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
area for boating trips. The channels in the lee of the sandbanks are an important sheltered haven in rough conditions. Jet skis may access the sandbanks when dry.		
Recreational fisheries: Local people and tourists use the area for recreational fishing trips. The channels in the lee of the sandbanks are an important sheltered haven in rough conditions. Stakeholders stressed the value of the site for social wellbeing.	To be specified	To be specified
Other recreation: Tourists from Skegness use the uncovered sandbanks within the site for bathing and picnicking when on boats or jet skis.	To be specified	To be specified

Table 2d. Renewable energy		MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Wind: The site overlaps with a Round 2 scoping offshore zone development envelope. No infrastructure currently occurs within the site and it is unlikely that any development will be proposed in the future.	To be specified	To be specified

Table 2d. Renewable energy			MCZ: RA LW5
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: RA LW5
<ul style="list-style-type: none"> Recreation – activity that does not cause damage or disturbance only 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA LW5
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: RA LW5
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area YH1*

Site area (km²): 0.25

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: RA YH1
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Moderate energy circalittoral rock	21.80 (JNCC 2010)		Recover to reference condition
Subtidal sand	3.20 (JNCC 2010)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Subtidal sands and gravels	0.25 (ABPmer 2010, modelled)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries			MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fishermap data indicates that thirty nine <15m vessels fish within the site from four UK home ports. Catch from within the site is landed in these same four ports. Total value of landings for all fisheries within the site is £868.36 (MMO and Fishermap). Demersal trawling (£856.04) and potting (£12.32) occur within the site.</p>			
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that three <15m vessels from three UK home ports (Amble, Bridlington and Whitby) use demersal trawls within the site. Catch from within the site is landed in these same three ports. The total value of landings for demersal trawls within the site is £856.04 (MMO and Fishermap). All of this value is attributed to</p>			

Table 2a. Commercial Fisheries		MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
bottom otter trawling.		
Gear type: Pots & Traps Fishermap data indicates that one <15m vessel from Bridlington uses pots and traps within the site. Catch from within the site is landed in Bridlington. The total value of landings for pots and traps within the site is £12.32 (MMO and Fishermap).		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 2b. Gas and oil exploration and production		MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Oil and gas licensed area.	To be specified	To be specified

Table 2c. National defence		MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
To be specified	To be specified	To be specified

Table 2d. Recreation			MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity that is damaging or disturbing			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Recreational boating: Occurs within the site.	To be specified	To be specified	
Recreational fisheries: Sea angling and charter boats operate within the site.	To be specified	To be specified	
Wildlife watching: Fisherman data indicates that at least one interviewee uses the area for wildlife watching.	To be specified	To be specified	

Table 2e. Renewable energy			MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Wind: The site overlaps with a Round 2 scoping offshore zone development envelope. No infrastructure currently occurs within the site and it is unlikely that any development will be proposed in the future.	To be specified	To be specified	

Table 2f. Shipping			MCZ: RA YH1
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		

Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Transit of vessels (potentially damaging or disturbing)	To be specified	To be specified

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: RA YH1
<ul style="list-style-type: none"> Recreation – activity that does not cause damage or disturbance only 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA YH1
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: RA YH1
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area YH2, Kirk's Own* Site area (km²): 0.94

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ	MCZ: RA YH2
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Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
High energy infralittoral rock	0.15 (JNCC 2010, MESH 2010)		Recover to reference condition
Intertidal coarse sediments	0.00046 (JNCC 2010, MESH 2010)		Recover to reference condition
Intertidal sand and muddy sand	0.000012 (JNCC 2010, MESH 2010)		Recover to reference condition
Moderate energy infralittoral rock	0.79 (JNCC 2010, MESH 2010)		Recover to reference condition
Moderate energy intertidal rock	0.000047 (JNCC 2010, MESH 2010)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Littoral chalk communities	2.79 (ABPmer 2010, modelled)		Recover to reference condition
Subtidal sands and gravels	0.40 (ABPmer 2010)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries		MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Summary of all fisheries: Fisherman data indicates that fifteen <15m vessels fish within the site from four UK home ports. Catch from within the site is landed in these same four ports. Total value of landings for all fisheries within the site is £18,689.68 (MMO and Fisherman). Demersal trawling (£1.86), hooks and lines (£51.87), potting (£18,307.44) and netting (£328.51) all occur within the site.</p>		

Table 2a. Commercial Fisheries		MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that one <15m vessel from Grimsby uses demersal trawls within the site. Catch from within the site is landed in Grimsby. The total value of landings for demersal trawls within the site is £1.86 (MMO and Fishermap). All of this value is attributed to bottom otter trawling.</p>		
<p>Gear type: Hooks & Lines</p> <p>Fishermap data indicates that two <15m vessels from two UK home ports (Bridlington and Flamborough) use hooks and lines within the site. Catch from within the site is landed in Bridlington. The total value of landings for hooks & lines within the site is £51.87 (MMO and Fishermap). All of this value is attributed to unspecified longlines.</p>		
<p>Gear type: Nets</p> <p>Fishermap data indicates that seven <15m vessels from two UK home ports (Bridlington and Flamborough) use nets within the site. Catch from within the site is landed in Bridlington. The total value of landings for nets within the site is £328.51 (MMO and Fishermap).</p>		

Table 2a. Commercial Fisheries			MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Gear type: Pots & Traps</p> <p>Fishermap data indicates that twelve <15m vessels from two UK home ports (Bridlington and Flamborough) use pots and traps within the site. Catch from within the site is landed in these same two ports. The total value of landings for pots and traps within the site is £18,307.44 (MMO and Fishermap).</p>			
Total direct impact on UK commercial fisheries:			
Impact on non-UK commercial fisheries:			

Table 2b. National defence			MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
To be specified	To be specified	To be specified	

Table 2c. Recreation			MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Recreational boating: Yachting occurs within the site.	To be specified	To be specified	
Recreational diving: Site is frequented by independent	To be specified	To be specified	

Table 2c. Recreation			MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
divers and charter boats.			
Recreational fisheries: Fisherman indicates up to 50 sea anglers active within the site, both shore-based and boat-based.	To be specified	To be specified	
Wildlife watching: Bird-watching tours to Bempton Cliffs which are in close proximity to the site.	To be specified	To be specified	

Table 2d. Shipping			MCZ: RA YH2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Transit of vessels (potentially damaging or disturbing)	To be specified	To be specified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)		MCZ: RA YH2
<ul style="list-style-type: none"> • Recreation – activity that does not cause damage or disturbance only 		

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)		MCZ: RA YH2
Baseline:	Option 1: recommended network	

Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified

	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area NE1*

Site area (km²): 52.51

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Low energy circalittoral rock	13.89 (JNCC 2010)		Recover to reference condition
Subtidal coarse sediment	1.20 (JNCC 2010)		Recover to reference condition
Subtidal sand	36.63 (JNCC 2010)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Subtidal sands and gravels	48.10 (ABPmer 2010, modelled)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries		MCZ: RA NE1
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Summary of all fisheries: Fisherman data indicates that eight <15m vessels fish within the site from five UK home ports. Catch from within the site is landed in these same five ports. Total value of landings for all fisheries within the site is £285.28 (MMO and Fisherman). Demersal trawling (£282.62) and potting (£2.66) occur within the site.</p>		
<p>Gear type: Demersal Trawls Fisherman data indicates that three <15m vessels from three UK home ports (Amble, Blyth and Bridlington) use demersal trawls within the site. Catch from within the site is landed in these same three ports. The total value of landings for demersal trawls within the site is £282.62 (MMO and Fisherman). All of this value is attributed to bottom otter trawling.</p>		
<p>Gear type: Pots & Traps Fisherman data indicates that one <15m vessel from Seahouses uses pots and traps within the site. Catch from within the site is landed in Seahouses. The total value of landings for pots and traps within the site is £2.66 (MMO and Fisherman).</p>		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 2b. National defence			MCZ: RA NE1
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
To be specified	To be specified	To be specified	

Table 2c. Shipping			MCZ: RA NE1
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Transit of vessels (potentially damaging or disturbing)	To be specified	To be specified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: RA NE1
None	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA NE1
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: RA NE1
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks

Not specified	Not specified	Not specified	Not specified	Not specified	Not specified
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MCZ name: *Reference Area NE2*

Site area (km²): 0.46

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: RA NE2
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
High energy intertidal rock	0.13 (JNCC 2010, MESH 2010)		Recover to reference condition
Low energy intertidal rock	0.18 (JNCC 2010, MESH 2010)		Recover to reference condition
Moderate energy intertidal rock	0.000052 (JNCC 2010, MESH 2010)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Intertidal under boulder communities		1 (ABPmer 2010)	Recover to reference condition
Tide swept channels	0.05 (ABPmer 2010)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries			MCZ: RA NE2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	

Table 2a. Commercial Fisheries		MCZ: RA NE2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Summary of all fisheries: Fisherman data indicates that nine <15m vessels fish within the site from three UK home ports. Catch from within the site is landed in two of these UK ports and one other UK port. Total value of landings for all fisheries within the site is £12,319.54 (MMO and Fisherman). Demersal trawling (£4,523.77), hooks and lines (£2.60), potting (£7,700.92), dredging (£52.58) and netting (£39.66) all occur within the site.</p>		
<p>Gear type: Demersal Trawls</p> <p>No information is available in Fisherman on <15m vessels using demersal trawls within the site. The total value of landings for demersal trawls within the site is £4,523.77 (MMO). All of this value is attributed to bottom otter trawling.</p>		
<p>Gear type: Dredges</p> <p>No information is available in Fisherman on <15m vessels using dredges within the site. The total value of landings for dredges within the site is £52.58 (MMO).</p>		
<p>Gear type: Hooks & Lines</p> <p>Fisherman data indicates that one <15m vessel from Berwick uses hooks and lines within the site. Catch from within the site is landed in Berwick. The total value of landings for hooks & lines within the site is £2.60 (MMO and Fisherman). All of this value is attributed to unspecified longlining.</p>		

Table 2a. Commercial Fisheries		MCZ: RA NE2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Gear type: Nets</p> <p>Fishermap data indicates that three <15m vessels from three UK home ports (Berwick, Holy Island and Seahouses) use nets within the site. Catch from within the site is landed in Berwick, Eyemouth and Seahouses. The total value of landings for nets within the site is £39.66 (MMO and Fishermap).</p>		
<p>Gear type: Pots & Traps</p> <p>Fishermap data indicates that eight <15m vessels from three UK home ports (Berwick, Holy Island and Seahouses) use pots and traps within the site. Catch from within the site is landed in Berwick, Eyemouth and Seahouses. The total value of landings for pots and traps within the site is £7,700.92 (MMO and Fishermap).</p>		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 2b. Recreation		MCZ: RA NE2
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Recreational boating: Yachting occurs in a small portion of	To be specified	To be specified

Table 2b. Recreation			MCZ: RA NE2
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
the site. Fisherman data indicates up to 20 water sport vessels active in the site.			
Recreational fisheries: Fisherman data indicates that up to three sea anglers active in the site, both shore-based and boat-based.	To be specified	To be specified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)	MCZ: RA NE2
<ul style="list-style-type: none"> • Recreation – activity that does not cause damage or disturbance only 	

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA NE2
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: RA NE2
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and quality)	Ecosystem services provided (level and quality)	Change in ecosystem services	Human population impacted on	Key assumptions, sensitivities and risks
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

MCZ name: *Reference Area NE3*

Site area (km²): 3.43

Level of stakeholder support: not specified

Note that blank cells and entries that are 'not specified' are awaiting the outcome of the vulnerability assessment and stakeholder discussions

Table 1. Features protected by the MCZ			MCZ: RA NE3
Feature	Area of feature (km ²)	No. of occurrences	Conservation objective
<i>Broad-scale Habitats</i>			
Moderate energy circalittoral rock	3.28 (JNCC 2010)		Recover to reference condition
Subtidal sand	0.15 (JNCC 2010)		Recover to reference condition
<i>Habitats of Conservation Importance</i>			
Peat and clay exposures		Present (Local knowledge)	Recover to reference condition
Subtidal sands and gravels	2.75 (ABPmer 2010, modelled)		Recover to reference condition

Site-specific costs arising from the effect of the MCZ on human activities (over 2012 to 2031).

Table 2a. Commercial Fisheries			MCZ: RA NE3
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
<p>Summary of all fisheries: Fisherman data indicates that twenty six <15m vessels fish within the site from seven UK home ports. Catch from within the site is landed in these same seven ports. Total value of landings for all fisheries within the site is £5,301.96 (MMO and Fisherman). Demersal trawling (£339.07), hooks and lines (£75.50), potting (£4,851.13), dredging (£18.83) and netting (£17.43) all occur within the site.</p>			

Table 2a. Commercial Fisheries		MCZ: RA NE3
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Gear type: Demersal Trawls</p> <p>Fishermap data indicates that ten <15m vessels from four UK home ports (Amble, Blyth, Bridlington and North Shields) use demersal trawls within the site. Catch from within the site is landed in these same four ports. The total value of landings for demersal trawls within the site is £339.07 (MMO and Fishermap). <i>Nephrops</i> trawling (£161.84) and bottom otter trawling (£177.23) occur within the site.</p>		
<p>Gear type: Dredges</p> <p>No information is available in Fishermap on <15m vessels using dredges within the site. The total value of landings for dredges within the site is £18.83 (MMO).</p>		
<p>Gear type: Hooks & Lines</p> <p>Fishermap data indicates that two <15m vessels from Seahouses use hooks and lines within the site. Catch from within the site is landed in Seahouses. The total value of landings for hooks & lines within the site is £75.50 (MMO and Fishermap). All of this value is attributed to unspecified longlining.</p>		

Table 2a. Commercial Fisheries		MCZ: RA NE3
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
<p>Gear type: Nets</p> <p>Fishermap data indicates that two <15m vessels from Seahouses use nets within the site. Catch from within the site is landed in Seahouses. The total value of landings for nets within the site is £17.43 (MMO and Fishermap).</p>		
<p>Gear type: Pots & Traps</p> <p>Fishermap data indicates that seven <15m vessels from two UK home ports (Craster and Seahouses) use pots and traps within the site. Catch from within the site is landed in these same two ports. The total value of landings for pots and traps within the site is £4,851.13 (MMO and Fishermap).</p>		
Total direct impact on UK commercial fisheries:		
Impact on non-UK commercial fisheries:		

Table 2b. National defence		MCZ: RA NE3
Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
To be specified	To be specified	To be specified

Table 2c. Recreation	MCZ: RA NE3
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Source of costs of the MCZ: Prohibition of activity		
Baseline	Option 1: recommended network	
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis
Recreational boating: Fishermap data indicates that one vessel uses the site for watersports.	To be specified	To be specified

Table 2d. Shipping			MCZ: RA NE3
Source of costs of the MCZ: Prohibition of activity			
Baseline	Option 1: recommended network		
Description of activity & its impact on interest features.	Costs of effect of MCZ on the sector	Sensitivity analysis	
Transit of vessels (potentially damaging or disturbing)	To be specified	To be specified	

Table 3. Human activities in the site that are not negatively affected by the MCZ (over 2012 to 2031)		MCZ: RA NE3
<ul style="list-style-type: none"> Recreation – activity that does not cause damage or disturbance only 		

Site-specific benefits of the MCZ

Table 4. Site-specific benefits of the effect of the MCZ on human activities (over 2012 to 2031)			MCZ: RA NE3
Baseline:	Option 1: recommended network		
Human activity	Positive impacts of MCZ on human activity	Key assumptions, sensitivities and risks	
Not specified	Not specified	Not specified	

Table 5. Site-specific benefits of the effect of the MCZ on other ecosystem services (over 2012 to 2031)					MCZ: RA NE3
	Baseline:	Option 1: recommended network			
Ecosystem service	Ecosystem services provided (level and	Ecosystem services provided (level and	Change in ecosystem	Human population impacted on	Key assumptions, sensitivities and risks

Net Gain

Impact Assessment Iteration 4

	quality)	quality)	services		
Not specified	Not specified	Not specified	Not specified	Not specified	Not specified

- I. Impacts of MCZs assessed for groups of sites**
To be completed.
- J. Summaries of impacts of MCZs for each site**
To be completed.
- K. Summaries of impacts of MCZs at a regional scale**
To be completed.
- L. Stakeholder engagement**
To be completed.
- M. Calculation of costs of sites for each sector on human activity**
To be completed.
- N. Calculation of total combined costs of national suite of sites**
To be completed.
- O. Cumulative impacts of national suite of sites (over and above combined impacts)**
To be completed.
- P. Summary of impacts of national suite of sites produced for briefing for minister**
To be completed.
- Q. Specific impact tests**
To be completed.
- R. References**
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