

**Irish Sea MCZ – Stakeholder group  
workshop 4  
14<sup>th</sup> and 15<sup>th</sup> October**

Workshop outputs  
Word for Word Report

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## About the workshop and this report

### ▪ Purpose of the workshop

This is the fourth Stakeholder Group workshop in a six workshop process which is helping participants share knowledge and understanding. The aim of the process is to help key stakeholders discuss various locations in the sea and their suitability for consideration as possible locations for MCZ.

The list of participants and the full agenda can be found in the Annex.

This workshop ran over two days.

### ▪ About this report

The discussion was recorded on flip charts or ‘post-it ‘ notes. Following the workshop these have been typed word for word and then sorted - like with like - to aid understanding. This report follows the same order as the event.

### ▪ Why sort the outputs?

Conversations do not progress in a linear fashion but go off at tangents, circle back and change direction suddenly. As a result, it can be very difficult to make sense of a dialogue when it is reported in the sequence in which it happens and important themes and ideas can be obscured.

It is for this reason that the outputs of the workshops are sorted and grouped.

The sorting is done by ‘emergent analysis’ ie seeing what themes emerge rather than to a predetermined set of titles. The ideas could have been grouped differently, or different titles chosen, so no weight should be attached to them.

Whilst this report serves as a record of what was discussed, and an *aide memoir* for those who took part in the workshop, the contents are inevitably quite cryptic in places so it is strongly recommended that it is not used as a means of communicating with non-participants without proper explanation.

Acronyms used in this report	Meaning
FOCI	Features of Conservation Importance
ENG	Ecological Network Guidance (authored by Natural England and JNCC)
RSG or SG	Regional stakeholder group (otherwise referred to as the ISCZ stakeholder group)
EA	Environment Agency
EU	European Union
FAQs	Frequently asked questions
MCZ	Marine conservation zone
MPA	Marine protected area
pMCZ	possible/tentative Marine Conservation Zone
IoM	Isle of Man
GIS	Geographical Information System (mapping software)
NI	Northern Ireland
ISCZ	Irish Sea Conservation Zones

JNCC	Joint Nature Conservation Committee
NE	Natural England
MMO	Marine Management Organisation
Nephrops	Norway lobster ( <i>Nephrops norvegicus</i> ); also known as scampi, Dublin Bay Prawn, or Langoustine.
SAC	Special Area for Conservation
SOLAS	International Convention for the Safety of Life at Sea (SOLAS)
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
nm	Nautical mile
DECC	Department for energy and climate change
VMS	Vessel monitoring system (tracking device for vessels over 15 m in length)
UNCLOS	United Nations Convention on the Law of the Sea

## DAY 1

### 1 Information Café (Speed Data!)

During this session people worked in groups first of all from the same/similar sectors and then moving around the different topics. Their task was to tease out from the wealth of new information key messages they wanted others to know.

#### 1.1 Marine Industries Cluster 1

Shipping and shipping channels, Ports and harbours, Aggregate/mineral extraction, Dumping of dredge spoil and other licensed dumping areas, Subsea cables

##### General Points

What key points do you want others to know	Based on...	Other comments
<b>Shipping</b>		
– Exclusion zone will make no difference to areas of shipping lane	– No anchorage available due to depth of water restrictive	– Assuming protected measures will not affect navigation
– Shipping traffic needs more space to move in bad weather	– Safety	
– MCZ should not be negative on shipping		
<b>Anchorage</b>		
– Moving anchorage would have a negative impact on safety of environment		
– Alternative anchorages used in bad weather inclement weather (wind + sea state)	– Safety	– Emergency and takes precedence
– Limiting anchorage would adversely affect movement and CO2 emissions		
<b>Aggregates</b>		
– Some areas represent sediment types		
– Some areas mineral no biological		
– Aggregates can only be extracted from where they are	– Many building material gathered from sea	
<b>Ports and harbours</b>		
– Port anchorages already established in more efficient and safe area		
– Areas will not preclude other activity		
<b>Dumping of Dredge and other spoil</b>		
– Need to check details of dumping grounds	– Mapping needs to be available to s/g	– More dumping than dredging.

##### To do with a particular pMCZ

What key points do you want others to know	Based on...	Which p MCZ
<b>General points about MCZ</b>		
– No matter where they are they cannot please everyone		– ALL MCZs

– Position of MCZ should be accurately positioned with co-ordinate including decca	– Need to understand where MCZ is	
<b>MOD activity</b>	–	
– MOD activity in relation to MCZ should be provided	– All activity not just naval	
– MOD to inform if MCZ will cause a problem		
– MOD may have geographic/hydrographical knowledge that will help		
<b>Aggregates</b>		
– Area of aggregates worth £8 million km/sq may be viable with effective management		
<b>Marine cables</b>		
– Marine cables being laid from Huntston to Wirral or North Wales needs to be added to map	– Dredging and cables	
– Marine cables should be located together where possible		
– Clarity on compact ability with MCZ		
<b>Dredging – definitions</b>		
– Definition of dredging times to be clarified to s/g		
<b>Nuclear facilities</b>		
– Concern over building nuclear facilities in Cumbria		
<b>Expansion of Liverpool port</b>		
– Plan in place to expand l/pool container port		

**To do with a particular activity**

What key points do you want others to know	Based on...	Which Activity
<b>MOD</b>		
– Altcar firing range not on mapping		– MOD
<b>Ports and harbours</b>	–	
– MCZ must not constrain port development	– Industries at sea continue to evolve: offshore renewable constraint on local ports will raise CO2 emissions	– Ports and harbours
<b>Shipping</b>		
– If cargo movement is affected this will affect UK economy	– Shipping is lowest carbon	– Shipping
– Longer shipping routes would raise carbon emissions	– producer per unit weight	– Shipping
– Cheapest way to transport goods is by water		– Shipping
– Shipping lanes and fishing grounds are not compatible	– Transport and fishing	– Shipping

– Shipping route can change according to weather	– Shipping density (MAP)	Shipping
<b>Survey</b>		
– In there any mapping for where survey vessels operate and survey buoys		Survey

## 1.2 Marine industries Cluster 2

Windfarms (current and proposed), Wave, tidal, other marine renewables, Current oil and gas fields including pipelines, Prospecting for oil and gas

### General Points

What key points do you want others to know	Based on...
<b>Management measures</b>	
– In principle the renewable ind' supports MCZs but struggles to endorse specific sites before mgmt	
– Mgmt measures could impact: investment, development, climate change targets	
<b>Round 3 windfarms</b>	
– Round 3 windfarm are likely to have impact on bi-valve ground + geodiversity features	– Stakeholder knowledge

### To do with a particular pMCZ

What key points do you want others to know	Based on...	Which pMCZ
<b>Tidal projects</b>		
– Tidal projects Mersey estuary most developed, Solway 2nd		
<b>Ports</b>		
– Offshore energy needs ports to support it MCZ should not restrict port activity		
<b>Co-location</b>		
– Is likely MCZ will be located in round 3 areas to meet requirements		
– Co-location win-win situations desirable		– pMCZ 3

### To do with a particular activity

What key points do you want others to know	Based on...
<b>Planning process for renewables</b>	
– Future marine renewable areas are based on lots of factors: not just wind speed, depth distance from shore etc	– Industry perspective, stakeholder knowledge
<b>Risks to industry</b>	
– Concern over pMCZ 3 would like to see small area within Round 3 windfarm altered/removed	
– Too much at stake for industry huge implications	

### 1.3 Commercial Fishing Cluster 1

Mobile gear fishing (demersal fishing e.g. bottom trawling), Mobile gear fishing (pelagic fishing e.g. mid-water trawling), Scallop dredging

#### General Points

What key points do you want others to know	Based on...
<b>General</b>	
– Displacement of fishing effort if closing areas to particular activities	
– Some VMS data is misleading	
– International fishing rights?	
– Much shore fishing is recreational not commercial	
<b>Closures</b>	
– Bylaws in place to restrict activities temporarily - this must be presented also	
– Need more info on closures: when are for what?	
<b>Mapping questions</b>	
– VMS data smaller vessel activity how close do they correlate	
– Data is highly variable, year to year this is representative only cannot be considered absolute	
– Provide co-ordinates on map to enable more interpretation	
– Quantification of high/low on maps	
– Suggest an overlay of ISCZ search zone + the pMCZ boundaries so easier to make comparisons	
– Intensity of activities need to be represented	
– Data presented is unclear as to what exactly it: value of number of vessels need to be clarified	

#### To do with a particular pMCZ

What key points do you want others to know	Based on...	Which pMCZ?
<b>Conflict with some users</b>		
– Large potential for conflict with static gear users depending on mgmt measures put in place	– Observation, recalled from meeting 3	– pMCZ 1
– pMCZ 1 was shifted to avoid conflict with inshore users but is it there, where are co-ordinates?		

#### To do with a particular activity

What key points do you want others to know	Based on...	Which activity?
<b>Data questions</b>		
– Activity map for potting and effort map for potting do not correlate, same with line and netting	– Maps presented	– Potting / line / netting
– Line fishing value seem high is it daily or		

infrequently		
– Not aware of any potting within 12 nm, near St Bees head.		
<b>Suggested data for inclusion</b>		
– As these two data sources (VMS and fishermap) are complimentary suggest they be combined		
– Suggest more information be collected from welsh and Scottish fisheries to build a complete picture		
– <23> can provide relevant contracts		
– No Mari culture data		
– Seed mussel not represented but does occur, can provide contacts,		
<b>Closures</b>		
– Herring fishery closures also seasonal 14th/2nd -31st/5th-also affect different gears	Regulations and fishing regulations	

### 1.4 Commercial Fishing Cluster 2

Static gear fishing (eg potting, creeling, various netting, long-line), Inshore shellfisheries (e.g. whelks, cockles, mussels, clams), Mariculture, Migrating game fish (e.g. haaf netting)

#### General Points

What key points do you want others to know	Based on...
<b>Data interpretation</b>	
– Lots of mobile fishing data	
– Should be focusing on activities that are more likely to be affected	
– Fishermap shows number of polygons not intensity of use	
<b>Dredging</b>	
– Compromise / overlap between dredging activity and protecting sea	
– Dredging taking place in Lune Deep SAC	

#### To do with a particular pMCZ

What key points do you want others to know	Based on...	Which pMCZ?
<b>International data</b>		
– Spanish/French data is more passage not fishing,	– Maps and personal knowledge	– 1-6
– Covers Belgian beam trawling,		
– Lack of scale of foreign VMS sheets		
<b>pMCZ6</b>		
– Query habitat data on pMCZ6		
– Difficulty in agreeing pMCZ 6 on nephrops		
<b>Boundaries</b>		
– Think boundaries have moved from previous meeting now covers serince net grounds		
<b>Offshore fishing grounds</b>		
– Offshore avoid main fishing grounds,-lower impact on industry		

– Use VMS data to identify offshore/large vessel fishing grounds		
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**To do with a particular activity**

What key points do you want others to know	Based on...	Which activity?
<b>General</b>		
– Important to note some vessels built 14.9m	– Fishing	– FISHING
– Inshore fishing restrictions are in place		
– Not a huge amount of nephrops dredging around bees head or south of Duddon estuary		
– Bottom trawling on nw coast small vessels		
– Round 3 windfarms could impact on fishing, south of IoM and reduce fishing grounds]		
– More data available from fishermen-grounds information		
<b>Data presentation</b>		
– Lumped pelagic an semi-pelagic together on VMS, need to be separate		
– Need co-ordinates		
– Need detailed co-ordinates for fishing communities.		
<b>Data questions</b>		
– Doubt dredging in NW corner of ISCZ project area		
– NI number of vessels suspect		
– Need split for VMS and fmap		
– IoM has 20 boats active in Irish sea not 9 (maybe not all in project area)		
– Possible data gaps/bias, in where questionnaires with interested to know if fishermap and VMS vessels of St Bees are target same species/gear		
– Great to have fishing data issues in tying up fishermap data ie how defined/accurate is it		

**1.5 Natural Environment**

(focus will be on existing and new ecological info – Ecological sensitivities, Ecologically important areas, Protected area, Foci, SAP feedback, Eunis level 5 info, Geodiversity maps

**General Points**

What key points do you want others to know	Based on...
<b>General</b>	
– Dee flyover data for birds	
– Lots more coastal salt marsh in Dee+ Mersery estuary definitely in Solway	
<b>Data questions</b>	
– Challenge spawning and nursery ground wrong way round	
– Fish distribution is nonsense	
– EA information for spawning and nursery grounds are estimates	

- Distribution of herring is wrong lots found in Manx waters	
- Where has geological data come from, source?	
- Cod nursery grounds wrong way round	
- No native oyster off Walney island at all!	
<b>Areas of significance</b>	
- Solway only area designated for sea lamprey	- Geology features
- Key area for smelt on Welsh side of Dee and Wyre	- Report and maps
- Best area of geodiversity between Isle of Man+ Anglesey	
- Precambrian geology missing should be off Anglesey	
- Seal colony on Hilbre island - tourism	
- Mersey narrows SPA	
- Saballeria species on Hilbre island	
- Sea pens in Morecambe Bay	
<b>Features for consideration</b>	
- Migration routes of whales and dolphins	
- Basking sharks	
- Periglacial patterned ground	

**To do with a particular pMCZ**

What key points do you want others to know	Based on...	Which pMCZ?
<b>Geodiversity</b>		
- RIGS-geodiversity sites in Lancashire		- 3, 4, 1
- Bare rock not falling in Irish seam		
<b>Birds</b>		
- Colonisers of birds based on habitats and distance of foraging		
- Main colony extension off St Bees Head		
<b>Designations</b>		
- Existing MPS, SAC define what is protected		

**To do with a particular activity**

What key points do you want others to know	Based on...	Which activity?
<b>Geoheritage</b>		
- West coast paleo-landscape project mapping geomorphology of Liverpool bay - report Feb 2011-geo diversity cultural heritage.		
- Submerged forest off NW coast		
<b>General</b>		
- No protection for fish in existing MPS,		
- Sea pens are missed by pMCZ 1+2		
<b>Other projects</b>		
- Celtic sea trout project		

## 1.6 Recreation

Charter boating, Recreational sea angling (shore and boat), Dive sites - Pleasure diving, Small near shore craft /water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing), Yachting/recreational boating (Yachting, sailing, cruising), Wildlife watching from craft (bird, seal, shark ), Recreation and tourism generally

### General Points

What key points do you want others to know	Based on...
<b>Yachting</b>	
– Need to add more sailing club onto the maps EA report is available	
– Royal Yachting Association have data available	– EA, stakeholder experience
– Need to add the cruising atlas RYA have report	
– Copy of cruising assoc	
<b>Mapping</b>	
– Need to clarify the scale on the map	
– Overlay maps need transparent plastic sheets showing the maps boundaries +co-ordinate	
– What's the basis of MCZ site map?	
– Spatial correlation to uses and wrecks on the map	
– MCZ maps need to be annotated descriptions added to clarify what recreational use they mean	
– MCZ map is v important as it show biological use as well as recreational use	
– Base the data concerns over data used canoeing data in draft reports	
<b>Shore angling</b>	
– No shore angling is shown on map this needs to be defined	

### To do with a particular pMCZ

What key points do you want others to know	Based on...	Which pMCZ?
<b>Angling</b>		
– Need more angling info data not reliable		
– Need more data on Cumbrian boat anglers		
<b>Shore based activities</b>		
– Need shore based activities		
<b>Yachting</b>		
– Yachts have the same protection as shipping		
– Need for a map to show sailing clubs		
<b>Information gaps</b>		
– Need to know mgmt of diving		
– Need a map of basking sharks		
– Charter boat missing for Solway		
– Recreation need separate mapping		

### To do with a particular activity

What key points do you want others to know	Based on...	Which activity?
<b>On-shore activities</b>		

- Bait digging need to be identified		
- Recreation walks need to be identified ie people go to see specific birds when low tide		- Tourism
- Walks along Morecambe bay organised several hundred people		- Tourism
- Kite surfing/sand yachting ie land based activities		
- Slipway access needs to be defined :need safe launch sites		
- Need a map showing rock pooling on shore recreation		
Recreational boating		
- Transit through restriction need to be shown		
- Data isn't complete on the angling boat fishing map		
- Distribution of recreational use near NI : Strangford lock vast recreational use		
- Yachting use map needs to be required		
- Harbour based activities need mapping		
- Recreational boat trips off the coast of Cumbria: ie: dive boats glass bottom boats		
- Need to survey foreign charter boats		
<b>Mapping / data</b>		
- Need a map to show intensity of use		
- No definition of maps		
- Add Maryport		
- Recreation set line/netting need to be identified	Personal knowledge/use/mp as Personal business	Recreation
- Anchorage need to be identified, water sports participants in the draft report does this include kayaking?	- Reports	
- Access it catch return data from the environment agency		
- Natura based recreation report is being developed look at source data		

## 2 Management discussion - What is compatible with what?

For each of the pMCZ locations identified at the previous workshops, the groups were asked to consider which uses would need management to be compatible with the set of habitats found there. Having identified those human uses the next task was to suggest management solutions.

**Please note well** as a result of this discussion on management, and in the light of other information, the boundaries and location of the pMCZ were altered.

### 2.1 pMCZ 1



What is compatible with pMCZ 1 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 1?
<b>Marine Industry</b>					
Shipping and shipping channels		✓			
Ports and harbours	✓		✓		
Navigation and safety	✓ (SOLAS)		✓	✓ navigation and law needs to be there	
Aggregate/Mineral extraction			✓	✓	– Obtaining statutory dredging permission

What is compatible with pMCZ 1 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 1?
					<ul style="list-style-type: none"> <li>– Carry out full EIA</li> <li>– Agree suite of monitoring surveys e.g. benthic ecology, archaeology</li> <li>– Mitigation seasonal restrictions</li> <li>– Fishery monitoring while dredging is taking place</li> <li>– Full review of monitoring results every few (5?) years</li> </ul>
Dumping of dredge spoil and other licenced dumping sites			✓	✓	
Subsea Cables – operation and installation				✓	<ul style="list-style-type: none"> <li>– Regulate maintenance etc</li> <li>– Need to allow cables to link windfarms to grid or windfarms becomes useless</li> </ul>
Windfarms	✓			✓	<ul style="list-style-type: none"> <li>– Any compatible management measure for a windfarm needs to enable consent without additional requirements for environmental monitoring and mitigation or re-routing of cables</li> </ul>
Wave, tidal and other marine renewables			✓	✓	
Current oil and gas field including pipelines	✓				
Prospecting for oil and gas			✓	✓	
MOD activities	✓				
Small scale marine industries				✓	<ul style="list-style-type: none"> <li>– Regulate anchoring</li> <li>– What does this include? Compatibility will depend on specifics</li> </ul>
<b>Commercial Fishing</b>					–
Fishing Cluster 1	✓	✓	✓	✓	
Mobile fishing - demersal			✓	✓	
Mobile gear fishing - pelagic	✓			✓	
Scallop dredging	✓		✓	✓	<ul style="list-style-type: none"> <li>– Cultured practice</li> <li>– Zoning of sensitive areas</li> <li>– Compatible for all fishing activities – fishery legislation and for inshore shell fisheries</li> <li>– Scallop dredging – spatial closures, curfews and seasonal closures</li> <li>– Mobile fishing - demersal - spatial closures, curfews and seasonal closures</li> <li>– Permanent closures needed to protect / recover seabed habitats</li> <li>– Hi res vessel positioning system</li> <li>– Less damaging fishing gear</li> </ul>
Static gear fishing (potting, creeling and various netting, long line)				✓	<ul style="list-style-type: none"> <li>– Monitoring of by-catch (sea birds, porpoise)</li> <li>– Fishing management / company regulations</li> <li>– Cultured practice</li> <li>– Zoning of sensitive areas</li> </ul>

What is compatible with pMCZ 1 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 1?
Inshore shellfisheries		✓		✓	
Mariculture	✓				
Migrating game fish	✓		✓	✓	– EA bylaws
<b>Recreation</b>					–
Recreational sea angling	✓			✓ we believe it occurs here and it is compatible with managem't	– Limiting anchoring sites – Avoid sensitive sites i.e. code of practice
Charter boating				✓	– Regulate anchoring
Dive sites				✓	– Obey diving codes – Regulate anchoring
Small near shore craft and water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing)			✓		
Yachting/recreational boating		✓		✓	– Movement restrictions – Zoning – Seasonal restrictions – applies to any boating activity
Wildlife watching from craft				✓	– Follow good practice Re wildlife watching – Not approach cetaceans etc
Tourism and general recreation (ie walking, dog walking, kite flying)	✓			✓	– Restrict taking material off sea bed
<b>Natural and Historic Environment</b>					
Marine nature and geological conservation		✓			
Marine research activities				✓	– Rarely anchor – Positioning not precise enough – Use dynamic positioning (engines to hold position through GPS) – Permission systems – Anchorage – No indiscriminate drilling for research without license
Marine historic and archaeological features	✓			✓	–
Water quality and management				Outfalls of	– Appropriate management of industry water outflows

What is compatible with pMCZ 1 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	<b>Compatible with management</b> What management could you suggest that would mean that this activity has no significant effect on pMCZ 1?
				waste water and sewage industry	– Include additional equipment to reduce the discharges of damaging pollutants

## 2.2 pMCZ 2



What is compatible with pMCZ 2 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 2?
<b>Marine Industry</b>					
Shipping and shipping channels		✓			
Ports and harbours	✓				
Navigation and safety		✓			
Aggregate/Mineral extraction			✓	✓	
Dumping of dredge spoil and other licenced dumping sites			✓	✓	
Subsea Cables – operation and installation				✓	<ul style="list-style-type: none"> <li>– Use same routes to minimise impact</li> <li>– Cables compatible with management only if management does not include re-routing around a feature as this potentially cost prohibitive to industry, i.e. cables = extra 300k – 400k per km</li> </ul>
Windfarms				✓	<ul style="list-style-type: none"> <li>– Windfarms could be an issue for game net in this location</li> <li>– Windfarms only compatible with management if there is no requirement for additional environmental surveys, monitoring, mitigation or delays to consenting, or erroneous</li> </ul>

What is compatible with pMCZ 2 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 2?
					restrictions on timing of constructions – also need to consider impact of measures on operations – Review our construction, operational, removal needs v. seabed features and conservation objection to assess compatibility and avoid mitigation measures
Wave, tidal and other marine renewables				✓	
Current oil and gas field including pipelines				✓	
Prospecting for oil and gas				✓	
MOD activities	✓				
Small scale marine industries	✓				
<b>Commercial Fishing</b>					
Fishing Cluster 1					
Mobile fishing - demersal				✓	– Spatial separation; dredging; mobile trawl – To benefit sea bed habitats / FOCI, need permanent closures – Fishing (mobile and dredge) manage by curfews, spatial / seasonal closures and method management
Mobile gear fishing - pelagic		✓	✓		
Scallop dredging			✓	✓	
Static gear fishing (potting, creeling and various netting, long line)				✓	– Static gear should be allowed with management measures and assessment – Within static gear, long lines specifically, may not be compatible – risk of sea bird by-catch with relevant SPP in this location – management could require diversionary measures on the long lines to reduce by-catch
Inshore shellfisheries	✓				
Mariculture	✓				
Migrating game fish	✓				
<b>Recreation</b>					
Recreational sea angling	✓	✓		✓	– Codes of conduct / bylaws
Charter boating		✓		✓	– Generally compatible with management – Regulate all activities which use anchors – Anchorage restrictions – Mostly no anchoring undertaken during dives
Dive sites				✓	– Generally compatible with management – Regulate all activities which use anchors – Anchorage restrictions – Mostly no anchoring undertaken during dives

<b>What is compatible with pMCZ 2 (boundary as at workshop 3 version )</b>	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	<b>Compatible with management</b> What management could you suggest that would mean that this activity has no significant effect on pMCZ 2?
Small near shore craft and water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing)	✓				
Yachting/recreational boating		✓		✓	<ul style="list-style-type: none"> <li>– Generally compatible with management</li> <li>– Regulate all activities which use anchors</li> <li>– Anchorage restrictions</li> <li>– Mostly no anchoring undertaken during dives</li> </ul>
Wildlife watching from craft		✓		✓	
Tourism and general recreation (ie walking, dog walking, kite flying)	✓				
<b>Natural and Historic Environment</b>					
Marine nature and geological conservation		✓			
Marine research activities				✓	
Marine historic and archaeological features		✓			
Water quality and management	✓			✓	<ul style="list-style-type: none"> <li>– Transitional and coastal objectives for water framework directive</li> <li>– May need to manage specific activity e.g. ship ballast discharge</li> </ul>

2.3 pMCZ 3



What is compatible with pMCZ 3 (boundary as at workshop 3 version)	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 3?
<b>Marine Industry</b>					
Shipping and shipping channels		✓			
Ports and harbours	✓				
Navigation and safety		✓			
Aggregate/Mineral extraction	✓			✓	
Dumping of dredge spoil and other licenced dumping sites			✓	✓	

What is compatible with pMCZ 3 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	<b>Compatible with management</b> What management could you suggest that would mean that this activity has no significant effect on pMCZ 3?
Subsea Cables – operation and installation				✓	<ul style="list-style-type: none"> <li>– Routes subject to verification of static features of conservation interest</li> <li>– Controlled positioning with MCZ depending on feature</li> <li>– Good practice guidance</li> <li>– Access compatibility between operations and specific features</li> <li>– Avoid sensitive areas</li> <li>– Cables / reuse existing routes to avoid disturbing several areas</li> <li>– Decommissioning or not to be decommissioned to be decided in advance on environmental consideration if necessary</li> </ul>
Windfarms			✓	✓	<ul style="list-style-type: none"> <li>– Spatial impact on sea bed assessed in terms of conservation objectives of entire site</li> <li>– Revise MCZ boundary, as necessary, to avoid / mitigate impacts</li> <li>– Review compatibility between wind farms and features for which the site is proposed – construction / operational / removal</li> <li>– Identify avoidance / mitigation measures</li> <li>– Windfarm only compatible if the management allows for consenting with no additional environmental survey or mitigation requirement or delays to consenting</li> <li>– Management measures must also not impeded operation and maintenance of windfarms once built</li> <li>– Lifecycle analysis of impact considering maintenance and decommissioning effects in context of anticipated life span</li> <li>– Controlled decommissioning</li> <li>– Technical fixes – piling types, noise limits etc</li> <li>– Control activities in a temporal manner if relevant to feature</li> <li>– Subject to precautionary principles (exclusion) until science base significantly improved</li> <li>– Conditions in licensing for development</li> <li>– Additional conditions maybe overly restrictive / review conditions already placed in consents</li> </ul>
Wave, tidal and other marine renewables	✓		✓	✓	<ul style="list-style-type: none"> <li>– Spatial impact on sea bed assessed in terms of conservation objectives of entire site</li> <li>– Revise MCZ boundary, as necessary, to avoid / mitigate impacts</li> <li>– Review compatibility between wind farms and features for which the site is proposed – construction / operational / removal</li> <li>– Identify avoidance / mitigation measures</li> <li>– Windfarm only compatible if the management allows for consenting with no additional environmental survey or mitigation requirement or delays to consenting</li> </ul>

What is compatible with pMCZ 3 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 3?
					<ul style="list-style-type: none"> <li>– Management measures must also not impeded operation and maintenance of windfarms once built</li> <li>– Lifecycle analysis of impact considering maintenance and decommissioning effects in context of anticipated life span</li> <li>– Controlled decommissioning</li> <li>– Technical fixes – piling types, noise limits etc</li> <li>– Control activities in a temporal manner if relevant to feature</li> <li>– Subject to precautionary principles (exclusion) until science base significantly improved</li> </ul>
Current oil and gas field including pipelines	✓				
Prospecting for oil and gas				✓	<ul style="list-style-type: none"> <li>– EIA</li> <li>– Assessment against conservation objectives in existing EIA</li> <li>– Licensing conditions</li> <li>– Least invasive technology</li> <li>– Control activities on temporal basis if relevant</li> </ul>
MOD activities	✓			✓	<ul style="list-style-type: none"> <li>– Issues of NTM's surface to adhere to bylaws etc</li> </ul>
Small scale marine industries	✓			✓	
<b>Commercial Fishing</b>					
Fishing Cluster 1					
Mobile fishing - demersal			✓	✓ seine net area to west of MPA fished bottom impact minimum mobile trawl	<ul style="list-style-type: none"> <li>– Code of practice (voluntary)</li> <li>– Seasonal closures / spatial closures / curfews / VMS</li> <li>– Less damaging gear</li> <li>– Avoid very sensitive areas</li> <li>– Frequently reporting vessel position</li> </ul>
Mobile gear fishing - pelagic		✓ no sea bed impact	✓	✓	
Scallop dredging	✓ does not occur here		✓	✓	<ul style="list-style-type: none"> <li>– Code of practice (voluntary)</li> <li>– Seasonal closures / spatial closures / curfews / VMS</li> <li>– Less damaging gear</li> <li>– Avoid very sensitive areas</li> </ul>

What is compatible with pMCZ 3 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 3?
					– Frequently reporting vessel position
Static gear fishing (potting, creeling and various netting, long line)				✓	
Inshore shellfisheries	✓				
Mariculture	✓			✓	
Migrating game fish	✓			✓	– Spatial – technical licensing access – Behaviour: codes of practice
<b>Recreation</b>					–
Recreational sea angling	✓	✓		✓	– Spatial – technical licensing access – Behaviour: codes of practice
Charter boating		✓		✓	
Dive sites		✓		✓	– Code of practice – Permits
Small near shore craft and water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing)	✓				
Yachting/recreational boating		✓		✓	
Wildlife watching from craft		✓		✓	
Tourism and general recreation (ie walking, dog walking, kite flying)	✓				
<b>Natural and Historic Environment</b>					
Marine nature and geological conservation		✓			
Marine research activities		✓		✓	
Marine historic and archaeological features		✓			
Water quality and management	✓				

## 2.4 pMCZ 4



What is compatible with pMCZ 4 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 4?
<b>Marine Industry</b>					
Shipping and shipping channels		✓			
Ports and harbours	✓				
Navigation and safety		✓			
Aggregate/Mineral extraction			✓	✓	<ul style="list-style-type: none"> <li>– Obtain statutory dredging permission from the MMO with a full EIA</li> <li>– Seasonal restrictions on dredging</li> <li>– Environmental monitoring survey and review with governments regulators, JNCC, NE, CEFAS</li> <li>– Restrictions on spatial extent of extraction</li> </ul>
Dumping of dredge spoil and other licenced dumping sites			✓		
Subsea Cables – operation and installation				✓	<ul style="list-style-type: none"> <li>– Manage by limiting to surface and not buried cables</li> <li>– Please reuse exiting lines / routes rather than cut new trenches</li> <li>– Existing LEIA process will identify whether compatible (with or without mitigation) or not</li> </ul>

What is compatible with pMCZ 4 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 4?
Windfarms				✓	<ul style="list-style-type: none"> <li>– Could be a conflict with Gannet in this area</li> <li>– Depends upon details of construction and operations and removal needs of impacts</li> <li>– Future wind farm deployment may not be compatible with more sensitive rock broadscale habitats. However, maybe compatible with management in less sensitive habitats like sand / mud</li> </ul>
Wave, tidal and other marine renewables				✓	<ul style="list-style-type: none"> <li>– Build at certain times of the year to avoid sensitive periods</li> <li>– Limits to floating</li> <li>– Not fixed structures</li> <li>– Not expected to occur in this area, just possible in future though</li> </ul>
Current oil and gas field including pipelines	✓				
Prospecting for oil and gas			✓	✓	<ul style="list-style-type: none"> <li>– Existing LEIA process will identify whether compatible (with or without mitigation) or not</li> </ul>
MOD activities	✓				
Small scale marine industries	✓				
<b>Commercial Fishing</b>					
Fishing Cluster 1					<ul style="list-style-type: none"> <li>– Possible management measures could include seasonal fishing or fishing with more sustainable gear</li> <li>– Dependence on its intensity (time, effort, number and area) of the activities</li> <li>– Management doesn't mean closure</li> </ul>
Mobile fishing - demersal	✓		✓	✓	<ul style="list-style-type: none"> <li>– Zone off very sensitive areas</li> <li>– Less damaging gear</li> <li>– High frequency vessel position monitoring</li> </ul>
Mobile gear fishing - pelagic	✓				
Scallop dredging	✓		✓	✓	<ul style="list-style-type: none"> <li>– Zone off very sensitive areas</li> <li>– Curfews</li> <li>– Seasonal</li> <li>– Spatial management</li> <li>– Less damaging gear</li> <li>– High frequency vessel position monitoring</li> </ul>
Static gear fishing (potting, creeling and various netting, long line)	✓			✓	<ul style="list-style-type: none"> <li>– Long line specifically - likely impacts on SPP of seabed RE by-catch</li> <li>– Could be reduced by diversionary measures on the long lines</li> <li>– Does static gear fishing take place here?</li> </ul>
Inshore shellfisheries	✓				
Mariculture	✓				

What is compatible with pMCZ 4 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 4?
Migrating game fish	✓			✓	
<b>Recreation</b>					
Recreational sea angling		✓		✓	– Code of practice – Zone off very sensitive areas
Charter boating		✓			
Dive sites		✓		✓	– Code of practice
Small near shore craft and water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing)	✓				
Yachting/recreational boating		✓			
Wildlife watching from craft		✓			
Tourism and general recreation (ie walking, dog walking, kite flying)	✓				
<b>Natural and Historic Environment</b>					
Marine nature and geological conservation		✓		✓	
Marine research activities		✓		✓	– Permits
Marine historic and archaeological features	✓				
Water quality and management		✓		✓	

## 2.5 pMCZ 5

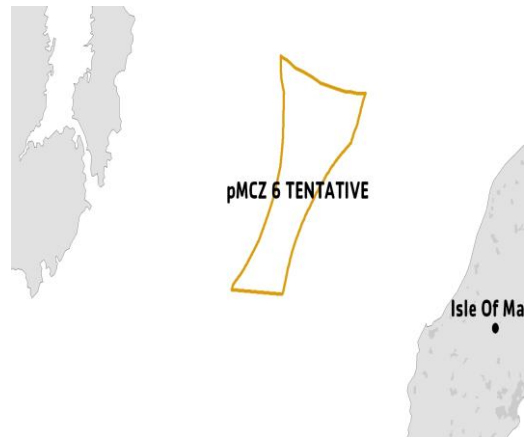


What is compatible with pMCZ 5 (boundary as at workshop 3 version)	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 5?
<b>Marine Industry</b>					
Shipping and shipping channels		✓			
Ports and harbours	✓				
Navigation and safety		✓			
Aggregate/Mineral extraction	✓		✓		<ul style="list-style-type: none"> <li>– Will depend on IA and mitigation scale, monitoring</li> <li>– Actually, it's too deep</li> </ul>
Dumping of dredge spoil and other licenced dumping sites			✓		
Subsea Cables – operation and installation				✓	<ul style="list-style-type: none"> <li>– Avoid very sensitive features</li> <li>– License and conditions</li> </ul>
Windfarms	✓			✓	<ul style="list-style-type: none"> <li>– IA monitoring, scale, mitigation</li> </ul>
Wave, tidal and other marine renewables	✓			✓	
Current oil and gas field including pipelines				✓	<ul style="list-style-type: none"> <li>– Avoid very sensitive features</li> <li>– License conditions e.g. N2000 management</li> </ul>
Prospecting for oil and gas				✓	

What is compatible with pMCZ 5 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 5?
MOD activities	✓				
Small scale marine industries	✓				
<b>Commercial Fishing</b>					
Fishing Cluster 1					
Mobile fishing - demersal			✓	✓	<ul style="list-style-type: none"> <li>– Voluntary agreements e.g. year by year rotation of closed areas</li> <li>– Only French fishing activity – who cares?</li> <li>– Temporal closures</li> <li>– Seasonal or curfew closures</li> <li>– VMS says only French fleet fish here, not UK fleet</li> <li>– Use less damaging gear types</li> <li>– Avoiding features that are? Sensitive e.g. horse mussels</li> <li>– Permanent closures needed for all or part of FOCI e.g. horse mussel</li> </ul>
Mobile gear fishing - pelagic		✓	✓ dredge / otter trawl is incompatible with horse mussel beds		<ul style="list-style-type: none"> <li>– Long line fishing – measures in place to reduce sea bird by-catch at this location, such as diversionary features on the long line (MANX shearwater)</li> </ul>
Scallop dredging			✓	✓	<ul style="list-style-type: none"> <li>– Voluntary agreements e.g. year by year rotation of closed areas</li> <li>– Only French fishing activity – who cares?</li> <li>– Temporal closures</li> <li>– Seasonal or curfew closures</li> <li>– VMS says only French fleet fish here, not UK fleet</li> <li>– Use less damaging gear types</li> <li>– Avoiding features that are? Sensitive e.g. horse mussels</li> <li>– Permanent closures needed for all or part of FOCI e.g. horse mussel</li> </ul>
Static gear fishing (potting, creeling and various netting, long line)				✓	
Inshore shellfisheries	✓				
Mariculture	✓				
Migrating game fish	✓				
<b>Recreation</b>					
Recreational sea angling		✓			

What is compatible with pMCZ 5 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 5?
Charter boating		✓			
Dive sites	✓ not relevant as about 200 deep			✓	<ul style="list-style-type: none"> <li>– Permits</li> <li>– Codes of conduct – take photos, leave only bubbles</li> <li>– Implement existing regulation of wrecks – but that is only salvage of wreckage not habitat or animals</li> </ul>
Small near shore craft and water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing)	✓				
Yachting/recreational boating					
Wildlife watching from craft		✓			
Tourism and general recreation (ie walking, dog walking, kite flying)	✓				
<b>Natural and Historic Environment</b>					
Marine nature and geological conservation		✓			
Marine research activities				✓	<ul style="list-style-type: none"> <li>– Code of conduct</li> <li>– Permits</li> </ul>
Marine historic and archaeological features		✓			
Water quality and management				✓	<ul style="list-style-type: none"> <li>– Diffuse pollution – hard to manage</li> <li>– Discharge of ballast water here needs to be managed, issue that this area is outside the jurisdiction of the EA</li> </ul>

2.6 pMCZ 6



What is compatible with pMCZ 6 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 6?
<b>Marine Industry</b>					
Shipping and shipping channels		✓			–
Ports and harbours	✓				–
Navigation and safety		✓			–
Aggregate/Mineral extraction	✓			✓	– Allow to dredge for certain time of day
Dumping of dredge spoil and other licenced dumping sites	✓		✓		–
Subsea Cables – operation and installation				✓	– Depends on impacts of effort – anchoring – amounts - frequency
Windfarms				✓	– Wind farms need management to mitigate impacts of footprints – Temporal restriction when you can build / construct
Wave, tidal and other marine renewables				✓	–
Current oil and gas field including pipelines	✓				–
Prospecting for oil and gas	✓				–
MOD activities				✓	– Use NTM's and range safety to determine activities. Type of activities will determine management
Small scale marine industries	✓ clarify in				–



What is compatible with pMCZ 6 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	Compatible with management What management could you suggest that would mean that this activity has no significant effect on pMCZ 6?
	definitions				
<b>Commercial Fishing</b>					–
Fishing Cluster 1					–
Mobile fishing - demersal		✓	✓	✓	– Identify alternative areas / zonation of the area (within this site) – Permanent / long term closures – Seasonal closures / restrictions
Mobile gear fishing - pelagic		✓			–
Scallop dredging		✓	✓	✓	– Less damaging dredging gear – Reduce intensity – High resolution VMS in 'real time' systems – less than two hours – Voluntary agreements – zonation and seasonal – Curfew – certain number of hours per day
Static gear fishing (potting, creeling and various netting, long line)		✓		✓ netting and long line only	– Gear modification to avoid sea bed by-catch (for long line) – Monitoring by-catch (netting)
Inshore shellfisheries	✓				–
Mariculture	✓				–
Migrating game fish	✓				–
<b>Recreation</b>					–
Recreational sea angling		✓		✓	– Restrictions on anchoring
Charter boating		✓			–
Dive sites		✓		✓	– Code of conduct (no extraction) – Restriction on anchorage
Small near shore craft and water sports (eg surfing, powerboats, jet skis, canoe, kayak, kite surfing)	✓				–
Yachting/recreational boating		✓			–
Wildlife watching from craft		✓			–
Tourism and general recreation (ie walking, dog walking, kite flying)		✓			–
<b>Natural and Historic Environment</b>					–
Marine nature and geological conservation	✓				–
Marine research activities				✓	– Depends on sampling gear and anchoring of equipment – needs an in-depth sonar

What is compatible with pMCZ 6 (boundary as at workshop 3 version )	Not relevant (e.g. doesn't occur here)	Compatible – no significant effect	Not compatible	Compatible with managem't	<b>Compatible with management</b> What management could you suggest that would mean that this activity has no significant effect on pMCZ 6?
					survey to see what is there
Marine historic and archaeological features	✓				–
Water quality and management	✓				–



### 3 Near shore and Coastal pMCZ

Take a look at the information and draw lines where you suggest for a pMCZ. Discuss benefits and disbenefits for this location. If the group think that location should go on the map ask the facilitator to transfer it to the master map for your group.



#### 3.1 Group 1 Discussion Map

Location Number	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
Grey 1	–	–	This is all that there is.
Purple 1 Orange 1	Next to designated site and 1 (native oyster)	–	Don't know what is within adjacent designated area, could extend existing site.
Purple 2		–	–
Purple 3	Close to 1 (sabellaria aveolata.	–	–
Green 1	Good as in existing designation	–	–
Orange 1	Good as in existing designation and next to 1(saballaria aveolata)	–	–
Orange 2	Close to existing designation.	–	–
Green 2	Close to existing designation and 2(native oyster)	–	–
Green 3	In existing designation	–	–
Orange 3	Existing designation	–	–
Green 1	Only area of concentration	–	–
Green 2	Only other occurrence	–	–
Dark green 1 Dark green 2	Brings together two occurrences	–	–
Dark green 3	Only one occurrence, further away from other two-good distance	–	–
Red 1	Out of the way	Pipelines?	–
Red 2	Near other end of mudflats		–
Red 3	Near number 1, easier to manage	Pipelines?	–



### 3.2 Group 2 Discussion Map

Location Number	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
6	<ul style="list-style-type: none"> <li>- Boulder communities</li> <li>- Aveolata ties in with Drigg</li> <li>- Quahog</li> </ul>	-	-
7	<ul style="list-style-type: none"> <li>- Aveolata coverage</li> <li>- Boulder communities</li> </ul>	-	- Also includes an intertidal submerged forest
8	<ul style="list-style-type: none"> <li>- Oysters and Quahog. Good area for these features and beach users</li> </ul>	-	-
9	<ul style="list-style-type: none"> <li>- Hilbre Island. To protect oyster.</li> <li>- Seal colonies</li> <li>- Important geomorphological area</li> </ul>	<ul style="list-style-type: none"> <li>- Could restrict activities that aren't already restricted</li> </ul>	- Already a protected site
1	<ul style="list-style-type: none"> <li>- Includes the Quahog</li> </ul>	-	-
2	<ul style="list-style-type: none"> <li>- For mud habitat (and sea pens)</li> <li>- Blue mussel beds</li> <li>- Boulder communities</li> <li>- Proximity to St Bees Head (bird colonies)</li> <li>- Aveolata</li> <li>- Covers other broadscale habitats</li> </ul>	<ul style="list-style-type: none"> <li>- Covers Nephrops fishery</li> </ul>	-
3	<ul style="list-style-type: none"> <li>- Quahogs and oysters</li> <li>- Extends the nature reserve offshore</li> <li>-</li> </ul>	-	-
4	<ul style="list-style-type: none"> <li>- Aveolata, oysters</li> <li>- Estuarine rocky habitat</li> <li>- Tern colonies</li> <li>- Submerged peat beds</li> </ul>	<ul style="list-style-type: none"> <li>- Oil and gas pipelines</li> <li>- Power cables</li> </ul>	- Features are existing there despite the cables and pipes
5	<ul style="list-style-type: none"> <li>- Cover deep mud habitats and sea pens</li> </ul>	<ul style="list-style-type: none"> <li>- Concern over windfarms</li> <li>- Nephrops fishery</li> </ul>	- Potential to link to Walney or pMCZ 2



### 3.3 Group 3 Discussion Map

Location Number	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
Black 1	sabellaria alveolata and spinulossa present here	–	Spinulosa has still to be verified look as considered
Black 2	Intertidal bolder communities, sabellaria spinulossa, blue mussel all present.	–	This is preferable to site 1 as intertidal bolder communities, important cliffs present, boundaries will be redefined in spinulossa data is false.
Black 3	Sabellaria aveolata recorded in pMCZ 1 (boundaries changed) Blue mussels present.	If boundaries of pMCZ 1 change the FOCI will not be covered	–
Black 7	Ocean quahog recorded in PMCZ 1 (boundary changed)	If boundaries of pMCZ 1 change the FOCI will not be covered	–
Black 9	Blue mussel and s.aveolata present, extension of existing protected site, good alliterative to 3	–	–
Black 5	The only second example of intertidal bolder communities, s.aveolata,	–	–
Black 6	Ocean quahog, native oyster, already in protected area.		–
Black 8	Ocean quahog grouped with 5		–
Black 9	Native oyster, Included in the Dee estuary SAC	Potential issues with fisheries and mussel farming	–
Black 10	Native oyster, intertidal bolder communities, s.aveolata, ocean quahog all present within existing protected sites.	–	–
Black 11	Seagrass bed present within existing protected areas.	Potentially already protected-CHECK!!	–
Black 12	Away from windfarm developments	–	–
Black 13	Could be included in pMCZ 1 if boundaries change	–	–

### 3.4 Group 4 Discussion Map

Location Number	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
Green 2 Orange 1	<ul style="list-style-type: none"> <li>– Multi habitat location</li> </ul>	–	–
Green 3	<ul style="list-style-type: none"> <li>– Within an existing MPA</li> </ul>	–	–
Orange 2	<ul style="list-style-type: none"> <li>– Multi-habitat zone – could adjoin onto an existing MPA</li> </ul>	<ul style="list-style-type: none"> <li>– Intertidal net fishery</li> <li>– Winkle gathering takes place here</li> </ul>	–
Orange 3	<ul style="list-style-type: none"> <li>– Hilbre Island</li> <li>– Smelt and herring nursery ground</li> <li>– Could also include saballaria spinulosa</li> <li>– RIGS site</li> </ul>	<ul style="list-style-type: none"> <li>– Lots of cockling takes place here – management would need to consider</li> </ul>	–
Green 1 Purple 1 Dk gr 1	<ul style="list-style-type: none"> <li>– Protects several features</li> <li>– To include the quahog record in pMCZ 1</li> </ul>	<ul style="list-style-type: none"> <li>– Intertidal net fishery (December to May)</li> <li>– Winkle gathering also takes place here</li> </ul>	–
Dk gr 2 Purple 2 Purple 3	<ul style="list-style-type: none"> <li>– Herring nursery ground</li> <li>– Wouldn't affect commercial fishing interests</li> </ul>	–	– One part of the site includes blue mussel beds
Dk gr 3	<ul style="list-style-type: none"> <li>– Multi-habitat zone</li> <li>– Inshore and offshore components</li> <li>– Won't affect commercial fishing interests</li> </ul>	<ul style="list-style-type: none"> <li>– Implications for sub-sea cables (from windfarm)?</li> </ul>	–
Grey 1 Purple 4	<ul style="list-style-type: none"> <li>– Multi-habitat zone</li> <li>– Only occurrence of saballaria spinulosa</li> </ul>	<ul style="list-style-type: none"> <li>– Sellafield extension?</li> <li>– Outfalls?</li> <li>– Intertidal net fishery (December to May)</li> <li>– Winkle gathering takes place here</li> </ul>	–

### 3.5 Group 5 Discussion Map

Location Number	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
Orange-general	Not sensible to designate for native oyster as query about whether they are significant here (IRISH IEA) historically - uncertainty in data.	–	–
Yellow-general	Historically occurred further offshore no example[le on our maps (modulous moduoous beds)	–	–
Brown-general	Only seagrass beds are already protected under current designation.	–	–
Blue 9	Seapens+ mud habitats in deep water Protection for 2 in 1, adds to 1 and 4 protecting multiple FOCI	Treated as one as they are synonymous, Big chunk out of a working fishing area Impacts on fishing industry Query about mud - where it is? how fixed is it? dependent on refined knowledge.	–
Blue 10	Is this an extension to pMCZ 2 to include appropriate coverage, mud habitats +seapens	–	–
Green 1	This is the only example of intertidal bedrock we have, Has the potential to meet all requirements	Level of fishing activity at St Bees Head, netting and potting Dependency by multiple fleets.	–
Green 1	Geodiversity conservation area	Important to balance socio-economic considerations, reduced fishing opportunity in the east of the Irish Sea.	–
Green 1	– Important as a bird area	Important to know the mgmt measures before committing	–
Purple 2	The large area protected, potentially less restriction required. Nationally important area of occurrence, geographic limit just north of the Solway	Need to know how far out these area will extend and what will be restricted	–
Purple 3	Good example (best) close to the extent	–	–
Purple 4	Extension to proposal in #1	–	–
Black 5	Geoheritage, submerged forests, interest area. Very important for fossil records-climate change records, Triassic sandstone dinosaur footprints seal colony glacial till.	–	–
Black 6	Submerged forest Limestone pavement in Morecambe Bay?	–	–

Green general	Blue mussel adequately protected	–	–
Red general	Estuarine habitats sufficiently protected.	–	–
Black 7	Glacial channel quaternary period-important/unique	–	–
Black 8	Geoheritage/ archaeology submerged forest	–	–
Blue-general	Not thought to be relevant	–	–
Dark green-general	Not easy to identify specific example sites but likely to be swept up under broadscale features or FOCI	–	–

## 4 Science Advisory Group Presentation

### 4.1 Questions of clarification (Eg questions that start 'what did you mean by...' or 'can you tell me more about.....')

**Q:** There is a comment in the SAP feedback about common Scotra moving between Welsh and Lancashire coast, ~ how this may relate to MCZs can you clarify this point?

**A:** Encourage use of inshore SPA's, SAC's.

**Q:** Who will actually review designated MCZ after the review period of 6 years?

**A** DEFRA + ministers will put that in place.

**Q:** Where is geodiversity expert on SAP? Especially geoconservation + quaternary?

**A** Not one so far but some expert knowledge.

**Q:** Reference zones - do we need to try to ID in 2<sup>nd</sup> iteration- management implications may be different (tighter?) + influence location?

**A** Wise to try but more than enough to do

**Q:** In the SAPs recommendation for an MCZ in the area between NI and IOM the feedback does not explain very well why this area is important i.e. it is not clear why a hydrological front is important and what benefit can MCZ could give

**A** 'Fronts' are a useful indicator of biodiversity + productivity and SAP were concerned that it had been rejected as an area of search for pMCZ:- justifies consideration in SAP opinion. (A clarification by the facilitator was that this location had emerged at workshop 3 but questions about the underlying ecological information could not be resolved within the workshop and do it did not go in the progress report to the SAP. This information had been verified and as a result the pMCZ at this location was 'back in play')

**Q:** Whose responsibility is it to ultimately decide the location of the MCZs? – Many of the stakeholders come from interest outside of marine conservation interests- is it their role to define where MCZs should be?

**A** RSGs will make recommendations to Government – looking for sites that meet criteria while limiting socioeconomic impacts - responsibility of RSG to make recommendations.

**Q:** MPA coalition expressed doubts to minister about SAP member's credibility.

**A** Peter takes personal responsibility to ensure credibility and to represent the consensus response

**Q:** Each pMCZ is protecting several different types of habitat therefore the compatibility matrix designs management for each habitat. How do we come up with conservation objectives when there are different types of habitat + foci driving the management pressure?

**A** Suggest identify the pMCZ features of conservation importance and value and pay attention to these

## DAY 2

### 5 Inshore Mapping session 2

The areas of overlap where 4 of the 5 groups suggested a location have been processed and the options set out for you to consider. Please say which boundaries you would select and why.

#### 5.1 All comments on pMCZ 10

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
1			Difficult to work with and enforce
1	✓	Links with existing MPA	
1	✓	Could support designation as the area proposed is just outside an existing protected area	
1	✓	Smallest option	Not enough knowledge of the wider consequences
1	X		Too small and fragmented
1	x		Too small and confusing for users
1	X		
1	X		Broken up
1	X		Two separate sites not sensible
1	X		Very small so not sensible for enforcement purposes
1	X		Silly gap – difficult to implement
1	X		It's split
1	X		Impractical – 2 small sites
1	X		Too small
1	X		Too small, misses some features
1	X		
2	✓	Smallest site – links with existing MPA	
2	✓	Covers a reasonable area	Is bait dug here? If so, will there be any restrictions?

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
2	✓	Links with existing MPA	
2	✓	Protects the target species whilst being relatively constrained in location	
2	✓	Based on evidence from Natural England	
2	✓	Could support designation as the area proposed is just outside an existing protected area	
2	✓	Covers features of interest	
2	✓	Smaller footprint so less social and commercial upset	
2	✓	Large enough to be practical and include some subtidal coarse sediment. Plus reef and blue mussel	
2	✓	Smallest – less impact on fisheries	
2	✓	This area should have been included in the Solway Firth SAC/SSSI – of sufficient quantity	
2	✓	Joined up	Not enough knowledge of the wider consequences
2	X		Too small
2	X		Okay but a little small – misses opportunity
2	X		Little different to option 3
2	X		small
2	X		Missing opportunity to protect area of saballaria
2	X		Too small
2	X		Too small, misses some features
3	✓	It captures the locations of saballaria and is next to the existing site (MPA)	
3	✓	Protects saballaria and blue mussel beds	
3	✓	Covers a reasonable area	Is bait dug here? If so, will there be any restrictions?
3	✓	Protects the target species whilst being relatively constrained in location	
3	✓	Connect to other protection	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
3	✓		
3	✓	Could support designation as the area proposed is just outside an existing protected area	
3	✓	Largest single option	
3	✓	Includes Dubmill Scar – just outside Solway SAC/SPA – one of the best areas of intertidal boulder scar and honeycomb worm reef in NW. Area to the south includes further examples of honeycomb worm reef	
3	X		
3	X		Funny shape – hard to get to grips with
3	X		It's a large area and not sure what management restrictions will be imposed
3	X		Same as option 2 but protrudes further out to sea so potential conflict with inshore fisheries
3	X		Wider than necessary
3	X	Large enough to be practical and include some subtidal coarse sediment. Plus reef and blue mussel	Very similar to option 2 (preferred)
3	X		Ok but better options
3	x		Too small
3	X		Too small, misses some features
3	X	okish	
4	✓	Includes honeycomb reef, blue mussels, there is little shellfish gathering. Tertiary wastewater treatment. Also a herring nursery area	
4	✓	Multifunctional area	
4	✓	Takes in the whole bay Limited socio-economic impact 3 broadscale habitats Captures 2 FOCI and may be a herring nursery	It would be nice to take in the whole of Allanby Bay

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
		area Tourist area/attraction	
4	✓	Very little impact on intertidal shellfishing, whilst still protecting two FOCI	
4	✓		
4	✓	Connect with protection. More extensive protection/coverage of saballaria	
4	✓	Could support designation as the area proposed is just outside an existing protected area	
4	✓	Hugs the coast and encompasses the features it's protecting	
4	✓	Appears to cover an area of interest	
4	✓	Follows coast – less impact on trawling etc.	
4	✓	Tightest to shore – least impact on fisheries	
4	✓	Protects saballaria and blue mussels over a good stretch of coast	
4	✓	Protects two types of FOCI Limits socio-economic impact (tertiary outfall will not impact as much) limited fishing Recreational benefits and also includes herring nursery grounds Also protects some subtidal broadscale habitat	
4	✓	Picks up main features	Water quality issues?
4	X		It's a large area and not sure what management restrictions will be imposed
4	X		Excessively large for conservation objectives
4	X		small
4	X		
4	X		Rubbish – too extensive
5	✓		

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
5	✓	Broad protection of species	
5	✓	Takes in the whole bay Limited socio-economic impact 3 broadscale habitats Captures 2 FOCI and may be a herring nursery area Tourist area/attraction	
5	✓		Too close together – it doesn't fit the SAP advice on distance between FOCI
5	✓	Could support designation as the area proposed is just outside an existing protected area	
5	✓	Encompasses all options	
5	✓	Protects saballaria and blue mussels and includes valuable offshore habitats. No socio-economic issues. May also protect Herring spawning area?	
5	✓	Protects two types of FOCI Limits socio-economic impact (tertiary outfall will not impact as much) limited fishing Recreational benefits and also includes herring nursery grounds Also protects some subtidal broadscale habitat	
5	✓	Herring nursery ground off Maryport. Smelt and sea lamprey support area with small numbers of sea trout, salmon and European eel. Area falls within WFD transitional waters monitoring programme	
5	x		It's a large area and not sure what management restrictions will be imposed
5	X		Excessively large for conservation objectives
5	X		Needlessly large

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
5	X		Same as option 4 but extends further out
5	X		Wider than option 4 and covers more area than necessary
5	X		Very similar to option 4 (preferred)
5	X		
5	X		Rubbish – too extensive

### General comments on pMCZ 10

#### Benefits

- Combines two FOCI features
- Limited socio-economic impact e.g. mussel gathering – shouldn't affect
- Outfall is tertiary treated, so shouldn't impact site negatively
- Positive impacts for recreation (this is a main kite surfing area)
- Area is in good condition
- Could be incorporated into Solway MPA

#### Disbenefits

- Could extend further offshore to include offshore habitats
- Concern over bait digging
- Very concerned that Walney Island is not included for geodiversity. Lack of info provided to group means that everything depends on two peoples personal knowledge. No-one else has any scientific data to use as evidence base, so this interest is underestimated (only two groups could suggest areas with geodiversity knowledge).
- Uncertainties in broadscale habitat data make it difficult to consider boundary changes.
- Sediment off the coast is in constant flux – not easily mapped
- Economic considerations must be made to avoid impact on inshore fishers

## 5.2 All comments on pMCZ 11

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
1	✓	Gives two areas of protection	Will any beach activities be curtailed?
1	✓	Keep as small as possible as unsure of future restrictions	
1	✓	Smallest	
1	✓	Smallest and best affect on fishery	
1	✓	Tightly defined by FOCI	Specific doubts on biotope existence
1	X		Too small and fragmented
1	X		Too fragmented
1	X		Only protects boulders
1	X		All proposals at St Bees Head would have a very significant effect on commercial fishing activity if the protected zone extends offshore. The rock protection and bird colony could be accommodated if the zone is kept close to shore and fishing allowed to continue. Co-ordinates required.
1	x		Two separate locations and extends further offshore – so potential conflict
1	X	Ok – largest intertidal boulder communities, quahog, reef and blue mussel	Doesn't include offshore feeding for birds
1	X		Split option
1	X		Fragmented and difficult to manage/understand
1	X		Unpractical to manage
1	X		Too small and fragmented
1	X		Needs to include all bedrock around Whitehaven
2	✓		But needs to make sure that Sellafield is not included
2	✓	Keep as small as possible as unsure of future restrictions	
2	✓	Includes all of the bedrock exposures	
2	✓	Smallest	
2	✓	Smallest and best affect on fishery	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
2	✓	FOCI specific	
2	X		Too small and fragmented
2	X		Too fragmented
2	X		All proposals at St Bees Head would have a very significant effect on commercial fishing activity if the protected zone extends offshore. The rock protection and bird colony could be accommodated if the zone is kept close to shore and fishing allowed to continue. Co-ordinates required.
2	x		
2	X		Split option
2	X		Fragmented and difficult to manage/understand
2	X		Unpractical to manage
2	X		Too small and fragmented
2	X		
3	✓	Captures several FOCI	
3	✓	Saballaria, blue mussel, quahog	
3	✓	Possibly with a small northward extension. Good extent of populations in the north part; existing protected area in the south part which would not incorporate FOCI. Not protecting anything for a large stretch in between.	
3	✓	Full coverage of coast is large.	Would include Sellafeld
3	✓	Covers main FOCI – rocky habitat	
3	✓	Hits the target species and habitats and includes submerged forest off Bootle (or should do!)	Fails to include subtidal sands and gravels and Drigg
3	✓	Most closely reflects our discussion on day 1. Protects several key FOCI. Strongly support MCZ off St Bees Head	
3	X		Too small and fragmented

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
3	X		Too fragmented
3	X		Cannot choose larger area until management enforcement measures are clarified
3	X		All proposals at St Bees Head would have a very significant effect on commercial fishing activity if the protected zone extends offshore. The rock protection and bird colony could be accommodated if the zone is kept close to shore and fishing allowed to continue. Co-ordinates required.
3	X		Larger than necessary
3	X		Fragmented and difficult to manage/understand
3	X		Unpractical to manage
3	X		Too small and fragmented
3	X		
3	X		Too extensive
4	✓	Boulder communities, honeycomb reefs No significant socio-economic impact Linkage with Drigg SAC	
4	✓	Extending into existing MPA	
4	✓	Boulder communities, saballaria aveolata and spinulossa, subtidal sands and gravels, ocean quahog Links with Drigg coast SAC	Popular area for scavengers, but likely not to impact on existing activities so not really relevant
4	✓	Protecting five FOCI. Should have no impact on existing fishing practices	
4	✓	Intertidal boulder communities, saballaria (s and a), subtidal sands and gravels, ocean quahog – good stretch of target species	
4	✓	Better for communication – focus on a single site as opposed to fragmented ones	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
4	✓	St Bees Head is nationally important area of intertidal and shallow subtidal bedrock and boulders. See MNCR report (Hiscock, Lumb et al). Include additional example of honeycomb reef – but including northward extension	
4	X		Cannot choose larger area until management enforcement measures are clarified
4	X		All proposals at St Bees Head would have a very significant effect on commercial fishing activity if the protected zone extends offshore. The rock protection and bird colony could be accommodated if the zone is kept close to shore and fishing allowed to continue. Co-ordinates required.
4	x		Extends further offshore – potential conflicts
4	X		Larger than necessary
4	X		Unpractical to manage
4	X		Too extensive
5	✓	Includes all boulder habitat types No significant socio economic impact Linkage with Drigg SAC	
5	✓	Takes in diverse features	
5	✓	Boulder communities, saballaria aveolata and spinulossa, subtidal sands and gravels, ocean quahog Links with Drigg coast SAC Geological interest features	Popular area for scavengers, but likely not to impact on existing activities so not really relevant
5	✓	Would only support this if it only protected the intertidal rock areas in Sactom Bay (north of St Bees Head)	
5	✓	Gives flexibility of management and opens	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
		different areas for different activities	
5	✓	St Bees Head is nationally important	
5	✓	If this option extends NE along the coast from St Bees Head it captures the biological interest features towards Ravenglass	
5	✓	Connectivity. Includes Drigg submerged peat deposits and other important geodiversity	
5	✓	Links up with existing MPA 5 FOCI protected – multi-feature site Multi-feature site	Popular are of recreational sea anglers – assumption that it would not impact on Need to account for outfalls – secondary treatment
5	✓	Picks up a significant number of features and geodiversity interests	
5	X		Cannot choose larger area until management enforcement measures are clarified
5	X		Unnecessarily large?
5	X		All proposals at St Bees Head would have a very significant effect on commercial fishing activity if the protected zone extends offshore. The rock protection and bird colony could be accommodated if the zone is kept close to shore and fishing allowed to continue. Co-ordinates required.
5	x		Extends further offshore – potential conflicts
5	x		Larger than necessary
5	x	A wide selection of target features included	
5	X		
5	X		Too extensive
6	✓	Gives adequate area	Will any beach activities be curtailed?
6	✓	National importance (St Bees) for intertidal biodiversity and geodiversity and submerged forest	
6	✓	Strongly support MCZ off St Bees – key FOCI and	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
		seabirds	
6	✓	A wide selection of target features included and an additional geological area (intertidal)	
6	✓	Links up with existing MPA 6 FOCI protected – multi-feature site Multi-feature site	Popular area of recreational sea anglers – assumption that it would not impact on
6	✓	Should include bedrock to the north of St Bees Head around to Whitehaven as nationally important habitat – only extensive example within the project area. Intertidal is included within SSSI but marine biology is not a notified feature. Area also includes the St Bees Head seabird colony maintenance area	
6	x	Includes boulder habitats and geodiversity interests	Too small and fragmented
6	X	Good to include north of St Bees Head for geodiversity and birds	Otherwise small and silly so extending northwards would be a better option

**General comments on pMCZ 11**

**Benefits**

- Large site so easier to communicate to wider public (and stakeholders)
- Linkage with existing MPA
- OK assuming that it doesn't impact on existing activities
- St Bees Head beds are important for geodiversity – their structures
- Support for the protection of rocks and bird colony but ? regarding the extent of the zone offshore

**Disbenefits**

- Recreational sea angling takes place here (very popular)
- Static/passive gear fishing takes place here
- Outfalls within the site (think only secondary treatment – need to check!). Could introduce a level of pollution to the site.

- Coastal area is subject to change

### 5.3 All comments on pMCZ 12

No comments were recorded for pMCZ 12. The boundaries for this pMCZ were depended upon the boundaries for pMCZ 2. The group therefore decided to consider pMCZ 12 and pMCZ 2 together, rather than separately.

### 5.4 All comments on pMCZ 13

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
1		Quahog and oyster. Good separation (replication) of quahog and oyster from other areas.	
1	✓	Covers the main population	
1	✓	Keep as small as possible as unsure of future restrictions	
1	✓		
1	✓	Area identified covers FOCI to be protected. Tight around FOCI	
1	✓	Smallest footprint	
1	✓	Smallest and therefore best effect on fisheries	
1	✓	Compact / specific	
1	X		Too small
1	X		Needlessly small
1	x		Large areas with no FOCI
1	X		Too small
1	X		Too small
1	X		Too small
1	X		Too small

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
1	X		Too small – not practical
1	X		Too small
1	X		? If the site is being proposed for the ocean quahog need to be sure of the evidence for its presence here in significant populations – shallow, subtidal.
2	✓	Quahog and oysters	
2	✓	Covers the main population	
2	✓	Protects both oyster and quahog within boundaries of existing area of mudflat protection – and slightly larger than 3	
2	X		Too small
2	X		Needlessly small
2	X		Too far offshore
2	X		Same as option 3 but extends further to take in areas where FOCI are not identified
2	X		Larger than necessary
2	X		Too small
2	X		Too small
2	X		Too small – not practical
2	X		Too small
2	X		
2	X		Too far south
3	✓	Quahog and oysters	
3	✓	Covers a lot of features	
3	✓	Keep as small as possible as unsure of future restrictions	
3	✓	Protects target FOCI without unnecessary extent and links with existing Natura protection for mudflats, so reducing socio-economic impact	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
3	✓	Protects both oyster and quahog within boundaries of existing area of mudflat protection	
3	✓	Appears to cover main FOCI – keeps close to shore. Look at restrictions of existing designation. These may already provide protection for FOCI we are protecting here indirectly, even though not included within citation. Applicable for all existing designations.	
3	✓	Smallest and therefore best effect on fisheries	
3	✓		
3	✓	Better covers FOCI	
3	X		Too small
3	X		Needlessly small
3	X		Too small
3	X		Too small
3	X		Too small – not practical
3	x		Too small
4	✓	Geological and archaeological interests. Links with Ribble and Alt SPA	
4	✓		
4	✓	Provides cover for ocean quahog and oyster. Additional protection on top of Ribble/Alt estuary SPA, Sefton dunes SAC and national nature reserve. Prehistoric footprints and possibly submerged forest	Heavily used for recreation (inc. angling) Some shrimping, cockling and bait digging – but unlikely to be impacted
4	✓	Not likely to have an impact on commercial or recreational fishing	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
4	✓	Extends protection to additional FOCI	
4	✓	Includes a number of interests, and it's a good continuous area of crucial habitats. Good potential for habitat restoration	
4	✓	Within existing MPA – includes monitoring opportunities. Protects multiple features and archaeological interest Easier to manage one large area rather than 1-2 small sites	Better to use option 5 as it is larger
4	✓	Already have designated SAC, SPA, SSSI so not introducing new concept to users, but addressing additional features	
4	✓	Sefton coast SAC does not include intertidal sediment interest features – i.e. it is not a European marine site. Should include intertidal and shallow subtidal for faunal communities.	Omits the Hightown sunken forest – this is one of the best examples in the NW. Would warrant site extension to include this
4	X		Large areas with no FOCI
4	X		Unnecessarily extensive
4	X		Unnecessarily large
4	X		Seems to extend too far south – taking in an area where no FOCI are identified.
4	X		Larger than necessary
4	X		Covers non-FOCI area
5	✓	Geological and archaeological interests. Links with Ribble and Alt SPA	
5	✓		
5	✓	Provides cover for ocean quahog and oyster. Additional protection on top of Ribble/Alt estuary	Heavily used for recreation (inc. angling) Some shrimping, cockling and bait digging – but unlikely to be

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
		SPA, Sefton dunes SAC and national nature reserve. Prehistoric footprints and possibly submerged forest	impacted
5	✓	Not likely to have an impact on commercial or recreational fishing	
5	✓	It has a good population of arctica islandica and sits within an existing MPA. Also includes population of oysters	
5	✓	To cover the ocean quahog, submerged forest and trackmarks – so biodiversity and geodiversity	Need to capture all of the trackways so needs to extend around Formby Head
5	✓	Extends protection to additional FOCI	
5	✓		
5	✓	Within existing MPA – includes monitoring opportunities. Protects multiple features and archaeological interest Easier to manage one large area rather than 1-2 small sites	
5	✓	Already have designated SAC, SPA, SSSI so not introducing new concept to users, but addressing additional features. Also includes geological interests	
5	x		Large areas with no FOCI
5	X		Unnecessarily extensive
5	X		Unnecessarily large
5	X		Seems to extend too far south – taking in an area where no FOCI are identified.
5	X		Larger than necessary

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here?
5	X		
5	X		Covers non-FOCI area

**General comments**

**Benefits**

- Ribble-Alt SAC – included within – so provides additional protection
- Heavily used for recreation – would benefit as long as not restricted
- Pre-historic footprints within this site
- Query over submerged forest
- Coast is of geological interest
- Protection of beach already in place

**Disbenefits**

- Some fishing for brown shrimp, cockle harvesting, bait digging and sea angling. All of these need to be considered for management.

**5.5 All comments on pMCZ 14**

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here ?
1	✓	Best option to balance between commercial use and conservation	
1	✓	It captures an oyster population. Already in SAC and proposed SPA. It is of a viable size.	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here ?
1	✓	Protects oyster – adequate for feature	
1	✓	Small area – consistent with criteria	
1	✓	Less important to fisheries	
1	✓	Tightly constrained to FOCI without excessive spread	
1	✓	Only option to incorporate glacial till at Thurstaston. Also a seal colony on Hilbre Island and a submerged forest	
1	✓	Already protected for co-location	
1	✓	Already protected and should not impact on fisheries too much	
1	✓	Specific to FOCI oysters	
1	X		Too small
1	X		Too small
1	X		A bit small
1	X		Does not capture all of the geological features at this locality
1	X		No science facts
1	X		Already protected by fishing bans. Also a bit small and doesn't cover geodiversity interests
1	X		Too small
1	X		Too small
1	X		Too small
1	X		
2	✓	Would have no impact on commercial cockle fishing, which is important to this area	
2	✓	Covers FOCI oysters and blue mussels. Bit small – could be extended	Bit small – could be extended northeastward
2	X		
2	X		Doesn't pick up enough features

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here ?
2	X		Could impact on fisheries if restrictions impose
2	X		Too wide. Protection aimed for is likely already provided by Natura site
2	X		A bit small
2	X		No science facts
2	X		Because option 1 is fine
2	X		Too small
2	X		Too small
2	x		Doesn't pick up enough features or cover enough of the estuary
2	X		
2	X		Extends on existing SAC for no benefit
3			Surrounding habitat already protected by SPA
3	✓	Existing bird ringing station National Oceanography Centre monitoring Archaeological interests Grey seal population Includes a RIGS geodiversity site Biodiversity including Dee estuary (smelt etc.)	
3	✓	Additional features protected in Dee SPA and Wirral foreshore. Important for smelt Geological features Seal colony Submerged forest Nursery ground for bass, eels, turbot and flounder Bird ringing station Scientific data recording centre on Hilbre (and planned field centre)	Cockling area Heavy recreation area use (inc. sailing) Would need to make sure that intertidal walks to Hilbre Island could be allowed to continue

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here ?
3	✓	For oysters. Complete/enhance existing protection. Also includes geodiversity interests.	
3	✓	Best captures the geological interest features	
3	✓	Oysters, seals, submerged forest at West Kirby, glacial deposits, geodiversity, blue mussels, intertidal mudflats, rocky habitats. Good comprehensive coverage	Avoid NW corner of Wirral where cables come inshore. Note that every FOCI apart from the oyster is already protected
3	✓	To include archaeological target features and additional geodiversity interests, seal populations, some estuary habitats with breeding value (nursery for a number of fish). Educational opportunities.	Fishing management issues
3	✓	Includes smelt production, seal colony, fish nursery, archaeological interest, existing scientific monitoring, geological interests. Multiple FOCI protection	Concern over potential restriction to cockle fishery Outfall in area
3	✓	This option extends further into the estuary. The Dee is our strongest estuary for smelt recruitment and therefore extension of the MPA further into the estuary will allow us to consider evidence on this in the next iteration. Both options 1 and 2 include fish nursery grounds at Hilbre. Area falls within WFD transitional waters fish survey programme	
3	✓	Key reason for choosing this site was to recognise and protect the sunken forest. Proposed MCZ needs to appropriately capture the known distribution. Should include Hilbre Island for its biological interest – also includes honeycomb worm reef interest	
3	x		Effect on fishing / cockle harvest
3	X		Could impact on fisheries if restrictions impose

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here ?
3	X		Too wide. Protection aimed for is likely already provided by Natura site
3	X		No science facts
3	X		Would support – as encompasses geodiversity but need to consider cables from windfarms and extensions. Lots of bottom fishing and angling in this area
3	X		Because option 1 is fine
3	X		Extends on existing SAC for no benefit
4			Surrounding habitat already protected by SPA
4	✓	Existing bird ringing station National Oceanography Centre monitoring Archaeological interests Grey seal population Includes a RIGS geodiversity site Biodiversity including Dee estuary (smelt etc.)	Smaller than option 3
4	✓	Additional features protected in Dee SPA and Wirral foreshore. Important for smelt Geological features Seal colony Submerged forest Nursery ground for bass, eels, turbot and flounder Bird ringing station Scientific data recording centre on Hilbre (and planned field centre)	Does not include Thurstaston cliffs (geomorphological/geological interest), so is less good than option 3.
4	✓	Encompasses key FOCI and geodiversity along north Wirral foreshore	

Option number	Which do you prefer? (you will be asked to select a third of the options)	Why here?	Why not here ?
4	✓	Good, but misses out some estuarine habitat	Misses out some estuarine habitat
4	✓	Includes smelt production, seal colony, fish nursery, archaeological interest, existing scientific monitoring, geological interests. Multiple FOCI protection	Concern over potential restriction to cockle fishery Outfall in area
4	✓	This option extends further into the estuary. The Dee is our strongest estuary for smelt recruitment and therefore extension of the MPA further into the estuary will allow us to consider evidence on this in the next iteration. Both options 1 and 2 include fish nursery grounds at Hilbre. Area falls within WFD transitional waters fish survey programme	
4	X		Could impact on fisheries if restrictions impose
4	X		Too wide. Protection aimed for is likely already provided by Natura site
4	X		No science facts
4	X		Would support – as encompasses geodiversity but need to consider cables from windfarms and extensions. Lots of bottom fishing and angling in this area
4	x		Because option 1 is fine
4	X		
4	X		Extends on existing SAC for no benefit
5	X		No science facts

**General comments pMCZ 14**

**Benefits**

- Submerged forest
- Geological/geomorphological interest features (Quaternary till)
- Seal communities/colonies

- North Wirral foreshore
- Dee is the strongest recruiting estuary for smelt, which needs to be considered in future workshops when data are available – but good to further the protection in the Dee
- Turbot/Bass/Flounder nursery ground
- Archaeological interests (salt pans, ancient cockle dumps next to/on Hilbre Island, buried Viking treasure)
- Area of existing marine research (POL/NOC)
- Potential for a field centre on Hilbre Island (being discussed currently) – excellent opportunity for public education of MCZs
- Some protection in place for Terns (bird species)



**Disbenefits**

- Big concern about the impact on the inshore shellfishery in this general area. Frustration about lack of data.

**6 Reconsidering Offshore pMCZ**



**What changes or refinements do you want to make in the light of what you now know?**

**6.1 pMCZ 1**

Change number/accept?	Reasons for suggesting this change	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
1-NO	Deep mud community protecting sea pens  Matches with the bird feeding	Deep mud community protecting sea pens  Main species in the area  Join up with intertidal proposals	Economic loss totally unacceptable to fishing communities, extremely important demersal fishing to the Cumbria area	Fishing activity would have to be compatible,  Military range of bee's head.
2	Incorporate features on the shore	Pick up additional intertidal FOCI	NONE	–
3	Could remain as it is	Does not meet the criteria	–	–
1-N/A	Meet criteria of depth includes burrowing mega fauna that was missed last time  Includes mud habitats in deep water	Includes geological importance Better includes pink habitat at same time as deep mud and burrowing mega fauna links to intertidal FOCI	Lose 2 BSH on tidal MCZ	High publicity for this area  Feedback on 1 <sup>st</sup> iteration was not actually mud  Maryport pMCZ1 also missed area of

				Outfall needs to be considered
1-YES	Leave it as it is: did work on onshore previously around Bees Head concentrated onshore	Original reasons	Need to include more deep sea mud	-
1-NO	Leave it as it is huge distance of ground already	Includes all already	Huge distance of ground already	-
2-YES	So close to existing might as well be in it	Includes ocean quahog	More fishing ground gone	-
3	Ecological connectivity	Protects a good selection of habitats	Potentially displacing fishing effort, Fishing would to go out of the way	-
1-YES	Blue mussels beds + s.alveolata	Joining onshore and offshore Bring in additional habitats	Will affect local fisherman in the area  Will have an effect on Maryport boats	-
2	Biological and geological protection	Lots of foci included, intertidal bolder communities, submerged forest, mud habitats, sea birds, heritage coast socioeconomic benefits	Ports/shipping  Fishing issues	-
3	2 cm distance of zone	Lots of foci included, intertidal bolder communities, submerged forest, mud habitats, sea birds, heritage coast socioeconomic benefits. Fishing may not be affected	None-however it doesn't incorporate deep sea mud	-
1	Remove the whole boundary - not needed as habitats are elsewhere	Removing problems for the local fisherman  The habitat is correct with the boundary	Impacts local fisherman	Prefer to move the boundary rather than the zone to protect the quahog



6.2 pMCZ 2

Change number	Reasons for suggesting this change	 Benefits of this location and why here?	 Disbenefits of this location why not here?	C Other comments
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1	To replace pMCZ 1	–	–	This was designated by due discussion at workshop 2 and the group sees no reason to alter the boundaries also the NE corner captures a small amount of seapen and deep sea habitats this is a positive. Avoids confusion of MCZs off Cumbria and associated impact on fishing
1-YES	–	Incorporates PMCZ 12 with minimal impact on fishing to proximity to windfarms	–	–
1-YES	To follow the line of exclusivity agreement for Round 3 windfarms major benefit to wind industry	–	–	Must be inline round 3-line on map done by hand
2+3 YES	To avoid unconsented extension to the windfarm and substitute loss of habitat with area further south east	Saves millions of pounds for wind industry, potentially decreases the need for future consent.	Doubt the accuracy of the data - new information suggests it could disbenefit local fishermen  Gateway gas storage site to the east of 3	Need a complete maps showing windfarm over PMCZ conditional on 2 things  Correct data, no impact on local fishermen.
1-YES	To avoid overlap with the Round 3 windfarms	Avoids round 3 windfarms area so avoid potential difficulties for developers	–	–
2-YES	To avoid Round 2/2.5 windfarms	–	–	Group increased size of pMCZ 6 to compensate for the loss of habitat (pink)
3-YES	To maintain the size or coverage of habitats in the zone	–	–	Prefer not to reduce the overall size of the zone  Accept change provided it doesn't impact fishermen
1-YES	The group has traded off areas to the	MCZ then covers less of the important	–	–



	south for 2 horse mussel beds	fishing grounds		
2-YES	–	Includes depth variation of mud habitats, reduces northward restriction of scocio-economic	Closer to Barrow coastline so could impact fishing	–
1	Larger square: more deep water mud habitat could represent co-location with windfarms in positive way	–	–	–
2	Smaller area: less deepwater mud habitat protected could represent positive co-location with windfarms	–	–	–

### 6.3 pMCZ 3

Change number	Reasons for suggesting this change	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
1-YES	Removes key fisheries	Removes key fishing ground	Crab fisher	–
2-YES	–	Includes known seabird habitats	Haddock grounds-seine netting	Bird species affected by static gear.
3-YES	–	Includes extension of drumlin field Increased adequacy targets of BSH	Crab fisheries Round 3 windfarm	–
1-YES	Includes feature of geological importance	Drumlins features	Some potting but assumption that it wouldn't harm the feature, some mid-water potting Some dredging Round 3 windfarm search	Needs to be refined when features are mapped.
pMCZ 2	–	–	–	No enough knowledge in the group to suggest changes in pMCZ. Former Belgian beam trawling area, Shipping traffic
1-YES	Would exclude the Round 3 Windfarms	–	–	Could find habitats lost elsewhere.
2-YES	Compensatory extension given.	Modilous bed _FOCI-is it? Don't think so	–	–
3-YES	Diverse habitats in this area	Too far	Check beds	Suggest MECR add in



			Some fishing grounds - potting effort Windfarms won't approve	MCZ
Other area drawn on map	-	FOCI-modulus beds		Reconsider in 6 yrs time
4-YES	New areas MERC	-	Fishing grounds Only if needed	-
1-YES		Removed co-location with Round 3 windfarms Good fishing ground deleted for this pMCZ	Lose out on sand %	
2-YES	-	Adds on roughly the same area as it loses from 1 Possible area for sea birds	-	-
1		Retain fishing patterns of the fleet, and their socio-economics.	High area of biodiversity Important area for seabirds.	Area to the east is important for loM fisheries.
2-YES	-	Removes the sand but maintains the fishing grounds Removes conflict with Round 3 windfarms	Concern that this doesn't capture 3-5 example of modlilous FOCI	Part of a trade between habitat % for the PMCZs

#### 6.4 pMCZ 4

Change number	Reasons for suggesting this change	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
general	-	-	-	These mussels very far from MCZ
2	Increase the sand amount include horse mussels	Help horse mussels	-	-
3	Increase coarse sediment and horse mussels	-	Close to fishery	Very deep so surprised if they are there.

General	–	–	Boundary ok	–
general	–	–	Potential overlap with basking shark hotspot Have caution about mgmt for shipping	–
1	Include more sand on the basis of sand in pMCZ 3	More sand, no trawling ground in the area	Difficult to enforce	–
1	Include horse mussel beds better for birds increase sand reduce sand on pMCZ 3 capture geodiversity features glacial channel	–	–	–
1	–	Increase sand reduce sand elsewhere 2 FOCI spawning and nursery for fish	Physical size	–
pMCZ 4 general	–	–	–	More or less happy, Speak to scallop dredging - interest clash
1	For horse mussels - limited choice	–	Is an additional site clarity needed about horse mussel distribution –need to be clear	–
	Keep the same	High no of habitats	–	–


### 6.5 pMCZ 5

Change number	Reasons for suggesting this change	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
general	–	–	–	No change - chosen to avoid dredging areas may impinge on this Belgian and French fish here - no mention in previous work shop  Exploratory wells historic  Does not indicate other spawning grounds, but is inclusive of commercial species

				Includes range of sea birds  Good compromise between economics and natural environment
general	–	–	–	Concern about mgmt in shipping lane  MCZ should be easy for fishing navigation.
1 YES	As adjacent include reduction and expansion	Includes horse mussel More practical	–	–
2 YES	Expansion	More practical as merges with welsh 12nm	–	–
3 YES	Expansion	More practical	–	–
4	Protect horse mussels	Horse mussels.	–	–
general	–	–	–	French fishing in green - not sure if any fishing occurs  Plenty of coarse sediment
1-yes	To include FOCl feature feeding birds	Pick up yellow area	Include enough horse mussle	–
General	–	–	–	Some French fishing effort, could extend south if want to increase sub tidal coarse sediment Includes ocean quahog, mgmt would depend on horse mussel designation.
1 YES	To allow reduction or removal of pMCZ 1	Lemon sol nursery avoids impact of pMCZ on fishing		Only if accompanied by removal of pMCZ 1
General	–	–	–	Will impact mod area if moved  Welsh vessels fish in area  Could be ideal trawling

				ground
1-yes	To include horse mussel beds	–	MOD areas	–
2-yes	Practical reasons	–	–	–
General	Happy with existing boundaries	Potential conflict with other fishing	–	No change

## 6.6 pMCZ 6

Change number	Reasons for suggesting this change	 Benefits of this location and why here?	 Disbenefits of this location why not here?	<b>C</b> Other comments
1-YES	Incorporates the identified foci	<p>Saves a separate MCZ elsewhere</p> <p>Combines mud+ FOCI</p> <p>Building on existing MCZ</p> <p>Appeases fisheries sector in the east coast</p> <p>Spread economic impact</p> <p>Achieves eng</p>	<p>Intensely fished area</p> <p>Issues with size (too small)</p> <p>Suggest review of upper boundary</p>	–
2-no	To make pMCZ 2 smaller in response to 1	–	Has multiple areas of various habitats	–
3yes	Make more regular and capture more habitats	<p>Suggested Natura site</p> <p>Captures habitats</p> <p>High ecological importance</p> <p>High diversity</p> <p>Allows to reduce other boundary</p> <p>Thermal front present, easier to manage</p>	<p>Not required as have met requirements</p> <p>Boundary changes need justifying</p> <p>Uncertainty on habitats</p>	<p>Sap feedback should provide feedback</p> <p>No consensus</p> <p>– Agreement on importance of habitat</p>
1	–	<p>Geological features</p> <p>Captures foci</p>	Widely used for bottom gear fishing	Happy to suggest as a point of discussion but

		Important for birds Important for cod		needs to be reduced
1-yes	Merges with SAC proposal	Potentially already protected Deep water mud +foci	Impact on nephrops fishing	in addition to existing boundary actual boundaries dependent upon accuracy of reef
2-yes	Increases diversity of habitats within pMCZ	Increases diversity, substrate criteria fulfilled, replicates MCZ protection	Heavily fished - economic impact	Very conditional on mgmt measures some uses may be compatible
General	–	–	–	Query on habitat data  Conflicting maps  Anecdotal fisherman evidence says heavily fished  Mud full of boulders more accurate description  Tertiary dyke
1	To increase mud +foci	More mud + foci	Uncertainty of data  Fishing impact	–
1-YES		To capture foci and mud  Fishing compatible with mgmt  More data would make zonation possible  Nursery grounds for nephrops and cod	Historic fishing rights  Feature location uncertain	–
General	Submarine practise zone	–	–	–
1	Capture more mud  Replication  Geodiversity	–	Opposition from NI fishing fleet  Economic impact from restricting fishing	–

	Burrowing mega fauna -foci			
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## 7 Results of map selection

Following the previous mapping activity up to 7 possible boundaries were identified for each pMCZ location.

Each person was asked to select the two boundary options for each pMCZ that they preferred. The purpose of this was to identify the location and boundary to go in the progress report to the Science Advisory Panel.

The results of this session were inconclusive with many of the boundaries receiving similar levels of support. For some pMCZ the levels of support were so close that two boundaries will be passed to the SAP. Where a boundary was a few points ahead only one boundary went on the progress report to the SAP.

**However please note well;**

All the boundaries that came highest or second highest will be considered at the next workshop.

	pMCZ 1	pMCZ 2	pMCZ 3	pMCZ 4	pMCZ 5	pMCZ 6
<b>Highest support</b>	3	2	1	1 & 5	2	7
	5	4	2 & 5	2 & 4	3 & 6	2
<b>Medium support</b>	2	3	3		3	1
		5	4		4	
		6			6	
<b>Low support</b>	1	1	6		1	4
	4				5	6
	6					
<b>No support or duplicates of</b>				3		3
				6		5

## 8 What is your view of the map and each possible MCZ location?

IN the levels of support tables, people were given the option of showing their level of support based on the extent to which they thought their sea use or interest was compatible with the habitat types within the MCZ. The font colours have the following meaning:

**Green (your sea use or interest is compatible or doesn't occur here)**

**Yellow ((your sea use could be compatible with good management)**

**Red (Your sea use is not compatible)**

**Black means that the green, yellow and red categories were not relevant**

**\* indicates that someone put the same comment in relation to all the pMCZ locations**

### 8.1 pMCZ 1 Option....

Possible MCZ location map reference: pMCZ 1

#### To what extent can you support each possible location?

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
	17	20		
	12,	13,	10	16
	11	6,	9	15
	8	4,	7	14
	3,	2,	5	1

#### What do you like about what you see?

2	Well diversified area.
3	Very little
5	Possible porpoise pupping area. Minimum opposition from fisheries. Provides an MCZ in north east of Irish Sea Area.
7	FOCI. Habitat diversity.
8	Would have been ecologically stronger to include the inshore area.
9	Should not have an impact on mobile gear fishing operations.
10	OK as it stands.
13	Used consensus as before.
14	Same as originally proposed.
15	Protects habitat – no impact on cables / windfarms.

#### What would need to happen for you to increase your support?

3	<ul style="list-style-type: none"> <li>– Feedback from fishermen, NE and others indicate that this is not a good representative site for mud broadscale features and does not contribute to mud FOCI.</li> <li>– Also misses good green habitats to N. off Maryport.</li> <li>– V. strong suggest that this should be <u>moved</u> to include habitats off St Bees Head – would better contribute to mud B/S and FOCI interests and ENG.</li> </ul>
7	A little more sublittoral sand.
8	Integrate this site with the intertidal site.
11	Missed a key opportunity to link deep water habitat with important intertidal features that are otherwise completely missed as they were ignored in the intertidal session as they could link to this MCZ – <u>unfair!</u>
12	A larger more significant, all encompassing, MCZ is required off St. Bees Head. To include more FOCI (inshore and offshore – mud), huge benefit for seabirds (colony maintenance, extension, 2km) – a link to heritage coast.
13	Clarify it actually covers the appropriate habitat.
14	None needed. Fully support.

## 8.2 pMCZ 2 Option....

Possible MCZ location map reference: pMCZ 2

### To what extent can you support each possible location?

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
		20		
		17		
		13		16
	8	12		15
	5	9		14
	4	6		11
	3	2	7	10

### What do you like about what you see?

2	Diverse site
3	<ul style="list-style-type: none"> <li>Understand why boundary has changed to seek accommodation with windfarm interests</li> <li>Substantive coverage of sands and sandy muds</li> </ul>
7	FOCI. Some habitat diversity.
8	Don't agree with loss of NE corner and would like to see some of the deep mud habitat included.
13	Some agreement to balance wind.
14	Takes into consideration socio-economic impacts as WFs management may still be required as adjacent.
15	<u>Very happy</u> to see this – protects same level of habitat but avoids major financial and consenting burden to windfarm developers that could have run into millions of pounds and major to delays to operation and generation of green energy.

### What would need to happen for you to increase your support?

2	To include windfarm proposed extension. Clarification of sea bed structure.
3	Now even less coverage of ENG mud broadscale features and mud / seapen FOCI. Doesn't enable current iteration to meet ENG needs in terms of E of Irish Sea coverage and replication.
4	Too much sand.
5	[Not like] Heavily co-located with windfarms, oil and gas. Once mud in south is correctly identified as sand this will be almost entirely one type of BSH. Needs to move to pick up some mud habitats and in-faunal foci.
6	This area is designated as a co-location with windfarm so attempt to limit disruptive factor.
7	Adjacent Welsh MCZ. More familiarity with the area.
8	The northest corner area restored and / or deep mud area added. Deep mud habitat appears to be underrepresented.
10	Would like to have seen mud habitat in deep water included.
11	Incorporate deep mud habitat to N. east.
12	Extension further east towards Walney.
13	Clarify pink on newly incorporated areas.
14	No further change needed.
15	Support strongly.

### 8.3 pMCZ 3 Option....

Possible MCZ location map reference: pMCZ 3

#### To what extent can you support each possible location?

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
		20		16
		17		15
		13		14
	12	11		4
	8	6	10	3
	5	2,	9	1

#### What do you like about what you see?

3	Good representative feature coverage
8	The sand area in the NW corner is valuable in the area is associated with the Irish Sea front feature and there are v. important for bird feeding, cetacean and basking sharks.
10	OK as high energy ciralittoral rock included.
13	Indifferent to design to large extent.
14	No overlap with WF but additional habitat added to maintain net area. Also important fisheries avoided.
15	Strongly support as it reduces potentially major impact on windfarm development but also protects same level and type of habitat.

#### What would need to happen for you to increase your support?

3	<ul style="list-style-type: none"> <li>Need to see whether helps address modulus FOCI coverage</li> <li>Need to consider case for additional ciralittoral rock MCZ to east of this.</li> </ul>
5	This has moved away from conservation interests because of fisheries / windfarm area of search arguments. It is a less valuable area for birds, further from important frontal regions, less diversity of BSH.
8	The northern end of the site would need to be restored.
11	Needs section to N. east for drumlins – geomorphological feature.
12	Extend this MCZ north – significant seabird usage to the north, AEI, high productivity (thermal front) benefit for long distance foraging species eg Manx shearwater.
13	Balance maintained in broad habitat percentages after large loss of sublittoral sand. Clarify management.

### 8.4 pMCZ 4 Option....

Possible MCZ location map reference: pMCZ 4

#### To what extent can you support each possible location?

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
		20		
		17		
		12		
		10		
		7		16
		6		15
		5	13	14

		4	9	8
	11	2,	1	3

**What do you like about what you see?**

1	The area of mud habitats (FOCI) in deep water has now been taken out.
3	Main area makes appropriate contribution to delivering ENG broadscale features. Need to see whether this area also supports / is likely to support modiolus.
5	Covers modiolus beds in addition to required BSHs.
6	This particular area would appear to be lightly use for commercial fishing and offers protection.
7	Habitat diversity.
10	Covers some of geodiversity channel but need to join the area together.
13	Good consensus on core location.
14	Same site as before but including an additional FOCI.
15	Protects habitats and additional FOCI.

**What would need to happen for you to increase your support?**

3	Outliers – need to understand what modiolus records represent – one-off specimens or beds. Need to review whether these outliers necessary to deliver ENG requirements.
5	2 small areas of limited value. Better for fewer larger areas.
7	Inclusion of seapen and burrowing in-fauna FOCI.
8	Additional areas to protect valuable and rare horse mussels. Good additional coverage of a range of habitats. Horse mussels are a really important biogenic habitat that were not previously covered.
10	Increase area over sand.
11	Misses a good chance to include areas of St. Georges channel which would not adversely affect fisheries – geomorphological interest.
12	Extend SE to incorporate seabird foraging areas.
13	Clarify modiolus distribution inside large area. Management clarified.
14	None needed. Fully support.

**8.5 pMCZ 5 Option....**

Possible MCZ location map reference: pMCZ 5

**To what extent can you support each possible location?**

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
				16
				15,
			13	14
		20	11	12
		17	9	10
		6	5	8
	2	4	1	3

**What do you like about what you see?**

1	Additional FOCI ocean quahogs is present in the south part, this is actually not capture within the pMCZ 5.
2	Military range (firing) may now be affected.
3	Good representative coverage. Sensible boundary.
5	Incorporates modiolus.
6	Again consideration given to disruption factor. Would appear to be light fishing area.

8	Excellent protection of horse mussel reefs. More practical boundaries for fishermen. Horse mussel reefs good inclusion of high associated diversity.
10	Good to see this one extending to coast to include tunnel channels.
12	Good coverage for foraging seabirds.
13	Sensible boundaries to 12nm simple ??? inclusion of FOCI at no major size increase.
14	Good habitat coverage and additional FOCI of modiolus.
15	Protects habitats and FOCI.

**What would need to happen for you to increase your support?**

1	Move the boundary south to capture a good population of ocean quahogs. I have some concerns that information on this FOCI was not available to the group! Check Finding Sanctuary proposals.
5	More diversity of BSH.
13	Management clarified.
14	None needed.

**8.6 pMCZ 6 Option....**

Possible MCZ location map reference: pMCZ 6

**To what extent can you support each possible location?**

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
				16
				15
				14
			13	12
			9	10
			7	8
			6	5
17	2	20	4	3

**What do you like about what you see?**

2	Submarine training area must not be compromised.
3	<ul style="list-style-type: none"> <li>Retains Irish Sea mounds – high biodiversity hotspot – excellent</li> <li>Draws sensible boundary to north of this</li> <li>Includes essential / important contribution to mud broadscale feature / mud foci / species foci</li> </ul>
5	Wide range of BSHs. Incorporates mud and infauna. Provides connectivity in west of Irish Sea.
7	Habitat diversity. FOCI. Seapen and burrowing in-fauna.
8	Excellent coverage of wide variety of habitats and important bird area and intertidal mud – good.
10	Good that the diverse geodiversity is protected for the biodiversity.
12	Good coverage for foraging seabird interest.
13	Larger than expected in sensitive areas.
14	Very good representation of number of habitats and FOCI.
15	Protects more habitat and additional mud habitat.

**What would need to happen for you to increase your support?**

3	Content with proposal.
6	Agree with designation for balance of Irish Sea area and protective aspect.
7	Slightly larger in seapen FOCI.
13	Clarify management.
14	None needed.

## 8.7 pMCZ 10 Option....

Possible MCZ location map reference: pMCZ 10

### To what extent can you support each possible location?

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
			19	
			18,	
			13	15
			12	14,
			10	11
			9	7
			8	5
	17	20	4	3
	6	16	2	1

### What do you like about what you see?

1	Close to the Solway, proximity with existing MPA, migratory species present.
2	Several habitats.
3	Includes extensive examples of honeycomb reef – including some very good examples at Dunhill Scar – which abut but are not included in the Solway Firth SAC. Also includes good examples of intertidal rocky / boulder shores.
5	Adjacent to SAC. Incorporates diverse intertidal communities.
7	Accessible wildlife. FOCI.
8	It seems to be based on good info of key species and habitats and covers a good area of coast for conservation purpose.
11	Takes in Allonby Bay – easy for users to understand.
12	Coverage of FOCI.
13	The extent larger than I expected.
14	Inshore not conflict with fisheries. Covers specific FOCI.
15	Covers FOCI. Does not conflict with cables for renewables or windfarms.
18	Area covers a variety of habitats.

### What would need to happen for you to increase your support?

6	Provided that we could have a clear understanding on the inshore area to be protected ie high water mark out to sea and this not prevent commercial fishing activity we could possibly agree.
7	Even bigger.
8	More information about additional features supported eg other protected marine species.
13	Confirm management. Clarify extent offshore.
14	None needed. Fully support.

## 8.8 pMCZ 11 Option....

Possible MCZ location map reference: pMCZ 11

### To what extent can you support each possible location?

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
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				15
				14
			20	12
			19	10
			18	7
	6	17	13	5
	4	16	11	3
	2	9	8	1

**What do you like about what you see?**

1	Includes additional geomorphological coastal features.
2	Includes the nationally important bedrock and boulders shores around St Bees head. These are the best and outstanding examples in the project area – also includes extensive intertidal boulder and honeycomb worm reef habitats.
5	Long section of coast allows for movements of sab and mussel beds. Incorporates rare area of rocky coastline (rare for NW).
7	Accessible wildlife. FOCI.
8	Good inclusion of a wide range of focal species.
10	Extent
12	Good coverage of FOCI, could be incorporated into a ‘larger’ MCZ to include offshore deep water mud habitats, and cover seabird interests (maintenance extension 2km).
13	Extent larger than expected.
14	Covers large area of FOCI.
15	Covers FOCI. Does not conflict with renewables / cables, aggregates etc.
18	Good area.
20	Extend NE along coast towards Whitehaven.

**What would need to happen for you to increase your support?**

2	No interference with military range use.
3	Down to Drigg. Inclusion of rocky short at St Bees head – from S. of Whitehaven to St Bees village.
4	Make the area of mud smaller.
6	The rock area at St Bees Head is not in need of protection from commercial fishing activity and the existing bird colony is not at risk so any protective measures should only be close to the shoreline which would provide a win-win situation.
7	Even bigger.
8	More information about additional features supported.
9	Seaward limit should not exceed 500 metres.
10	For it to extend to the Northeast of the area designated to cover the geodiversity features.
11	Could usefully go a little further north.
13	Confirm management. Clarify extent offshore.
14	None needed. Fully support.

**8.9 pMCZ 13 Option....**

Possible MCZ location map reference: pMCZ 13

**To what extent can you support each possible location?**

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
		20		
		16	18	

		11	13	
		9	12	
	19	6	8	15
	17	4	7	14
	10	2	3	5

**What do you like about what you see?**

2	Diverse habitat
3	Inclusion of intertidal and shallow subtidal sandy sediments for their animal communities. Sediments are rich
6	If there are existing protective measures close by then it may be sensible to include area proposed.
7	FOCI. Accessible wildlife.
11	Not much – way too small
12	Coverage of FOCI.
13	Extent larger than expected along shore.
14	Good coverage of FOCI.
15	Protects FOCI. Does not conflict with our economic activities.
19	Extended to include archaeology 'footprint' (Formby), sunken forest (Hightown), trackway (Hightown).

**What would need to happen for you to increase your support?**

2	Management plan
3	Confirmation that this area does cover the species FOCI for which the site is being considered eg including ocean quahog.
7	Even bigger.
10	Does not cover the geodiversity ie submerged forest and trackway. Need to extend further south and round the bend – so to speak.
11	Needs to increase southwards down to Alt estuary to capture archaeology, submerged forests, etc. No reason not to as won't impact fishing practises (assuming they continue as is) and increases protection on a site which is a SAC, SPA, National Trust local nature reserve...
13	Confirm management. Clarify extent offshore.
14	None needed.
19	Possibly could reflect the boundary of Sefton coast SAC.

**8.10 pMCZ 14 Option....**

Possible MCZ location map reference: pMCZ 14

**To what extent can you support each possible location?**

I am completely opposed	I have strong concerns	I could live with it	I support it	I strongly support it
				15
				11
			20	10
			19	14
			18	8
	17	16	14	7,
	9	6	13	5
	4	2	12	3

**What do you like about what you see?**

2	Diverse habitat
3	Site proposed primarily for the sunken forest geodiversity interest – plus Hilbre Island and associated Honeycomb worm reefs.
5	Good research data probably available for Hilbre Island.
7	Access to wildlife, FOCI
8	Good inclusion of a wide range of focal species and additional benefit to fish and seals etc.
10	The linking together of the biodiversity and geodiversity conservation which shows a good holistic approach. The larger area is good.
11	Brings in geomorphological features, archaeology, petrified forests etc. Adds to existing SAC/SPA, LNR etc.
12	Coverage of FOCI
13	Extent larger than expected along shore.
14	Good coverage incorporating geomorphology interests.
15	Protects FOCI, geological and archaeological features. Does not conflict with cables / renewables.
18	Covers several habitats.

**What would need to happen for you to increase your support?**

2	Management plan
3	Clarification / confirmation of which features this area is being protected for – as above.
6	No experience of activity in this area – but if there was no disruption to fishing activity I could support.
7	Make it bigger.
8	More info on additional features supported.
9	Must not impact adversely on cockles and mussel fisheries (intertidal).
10	Nothing I am already with you.
12	Our group also offered an option for inshore MCZs around Walney – several FOCI, plus geodiversity. Would be concerned to lose sight of this one. Benefits for tern colonies too.
13	Confirm management. Confirm extent offshore.
14	Ensure cables from windfarms can continue without onerous conditions / restrictions.
15	Guarantee it will not be extended east over cable route for windfarm.

## 9 External Communication

Please indicate your preference for the following options

<b>Who should we tell about the progress report?</b>	
As before: alert everyone on the ISCZ data base and post the progress report on the website	✓✓✓✓✓ ✓✓
Do the above and also do a press release to alert people to the progress report on the website	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓ ✓ Press release for groups would help the rest of us when asked to comment and to 'sing from the same song sheet'
<b>How clearly defined should the pMCZ boundaries be this time?</b>	
As before – produce the map with 'fuzzy' boundaries for all sites	✓✓✓✓✓ the boundaries are still liable to change
Use clean boundaries for the offshore sites and 'fuzzy' boundaries for the inshore sites.	✓✓✓✓✓
Use clean boundaries for all the pMCZ	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓ With appropriate caveats With health warnings We can't comment otherwise
<b>Should the coordinates be released when specifically requested?</b>	
I agree coordinates should be released to organisations that ask for them to help them make comments	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓ ✓✓ With health warnings As shape files x 4 We need these to access overlay with activities in GIS
Do not release the coordinates to anyone	✓
<b>In the earlier workshops some people felt that they may be at personal risk if the map was publicly available</b>	
I do feel that I am at personal risk	✓✓✓✓
I do not feel at personal risk	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓
<b>Do you want to be on the Impact Assessment Group?</b>	
Yes I would like to be considered for this group	✓✓✓✓✓ ✓✓
No thank you	✓✓✓✓✓ ✓✓✓✓✓ ✓✓✓

## 10 Short term Actions following the workshop

WHO	WHAT	Aiming for:
ISCZ	Type up	
dialogue matters	Emergent processing to sort all comments out	
ISCZ	Mail out to participants	

## Annex 1 List of Attendees

1	Shipping	Adrian Lester
2	Sand and gravel extraction	Andrew Bellamy
3	Crown Estate	Andrew Finlay
4	NGO Birds	Andrew Gouldstone
5	North West Coastal Forum	Caroline Salthouse
6	Natural England	Chris Lumb
7	Inshore Shellfisheries	Chris Woods
8	Diving	Christopher Sweeting
9	Joint Nature Conservation Committee	Cristina Herbon
10	Geodiversity	Cynthia Burek
11	Sea Fisheries Committee	Dave Dobson
12	NGO Habitats and marine species	Dave Dunlop
13	Local Government Association	Dave McAleavy
14	Producer Organisation	Dick James
15	Isle of Man	Fiona Gell
16	Recreational/Leisure Craft	Geoff Meggitt
17	Welsh Fisheries	Jerry Percy
18	Sea Angling	John Amery
19	Marine Renewables	Julie Drew
20	NGO Marine environment	Kay Foster
21	Mariculture	Kelsey Thompson
22	Scotland	Lorna King
23	Mobile Whitefish Gear	Ron Graham
24	Environment Agency	Sarah Peet
25	English Heritage	Sue Stalibrass
26	Manx Fisheries	Tom Bryan Brown
27	MOD	Tony Wyld



- Use your booklet to note your own thoughts ready for tomorrow's discussion on the boundaries of these sites

2:45 Tea and coffee

3:00 Near shore and intertidal Mapping session 1

Where would you suggest for the inshore broad scale habitats and the Features of Conservation Importance (FOCI).

- Suggest areas
- Note the likes and dislikes of each location
- Identify the locations you want to suggest to the larger group

4:20 Wrap up the day

No later than 4.30 Finish

# ISCZ Stakeholder Group Workshop 4

Day 2

From 9:15 Registration, coffee and tea will be available

9:30 Presentation on progress on the inshore sites and fit with the criteria Kieran Bell ISCZ

Near shore and intertidal mapping session 2

- Select options

11:15 Tea and Coffee Break

11:30 Mapping session - Offshore pMCZ - Rotate around each pMCZ

Step 1 - suggest refinements and improvements

- Suggest refinements to the boundaries of each pMCZ?
- Remember to take into account the FOCI (Features of Conservation Importance) – do the current boundaries include these, if not how could they be amended to do so.
- Consider the location that was postponed until the habitat information was checked. (The shape in front of you is based on where 4 or more groups overlapped their suggestion at workshop 3).

12:30 Lunch

1:15 Continue mapping pMCZ as needed

**Step 2 – review options**

- **Look around at the options and select two you can accept**

2:45

Tea and coffee

**Communicating the next progress report**

- **What level of protection and communication is appropriate this time?**

**Development of the Impact Assessment**

- **Who is willing to be on the working group to inform the IA work**

**Levels of support**

- **Look at the pMCZ that have been selected and indicate your level of support for each.**

**What happens next**

No later  
than 4.30

Finish