

11th June 2010
South Shields

North East
Regional Hub Meeting 2
MEETING REPORT

H Jackson
Net Gain

1. INTRODUCTION

This is the report of the Regional Hub meeting held in South Shields on 11th June 2010. This was the second meeting for this particular Hub, one of four that were held during June to cover the whole of Net Gain's East coast area. Further Hub meetings will be held as work proceeds towards detailed recommendations to government for the location of Marine Conservation Zones (MCZs) in the Net Gain area.

The overall format was developed by the Stakeholder Engagement Team and Net Gain and incorporated feedback offered by participants at the earlier round of Hub and Stakeholder Advisory Panel meetings. The format of the meeting differed slightly from the Yorkshire and Humber Hub meeting held on the 9th June 2010 to take account of feedback received during, and following, that particular Hub meeting regarding the delivery of the sessions. In summary, the socioeconomic impacts and conservation benefits session was shortened and moved toward the end of the day to allow the group to get into the map work earlier and to have longer to consider options. The Hub event included:

- ⊕ **Evening briefing session**
- ⊕ **Welcome and introductions (to all)**
- ⊕ **Update on maps and the Regional Profile**
- ⊕ **Tools and guidance for interpretation and assessment**
- ⊕ **Group work - evaluating and developing draft proposals**
- ⊕ **Socio-economic impacts and conservation benefits**
- ⊕ **Plenary discussion of group work**
- ⊕ **Next stages**

2. BRIEFING SESSIONS

The evening session was designed for anybody new to the process to meet the Net Gain team, and to get up to speed on the project. Stations were set up showing various information with any questions and concerns being answered.

The full day session began with a briefing on the project work completed so far – highlighting the 30th June milestone when the progress made so far (the first iteration) is presented to the Science Advisory Panel (SAP). Work presented in each iteration subject to change subsequent to more information or guidance being made available. The group were advised that the outcome of the tasks would be passed to the SAP and Stakeholder Advisory Panel (StAP) for feedback.

Following the briefing a query was raised as to why there appeared to be fewer representatives on the Hub. Steve Barnard explained that all previous Hub members had been invited along with new members. There had been a number of apologies, and also some members had not turned up. The query was made as to whether Net Gain has a policy on non-attendance. Steve Barnard explained that the TOR state that if members cannot attend they should have a nominated deputy for continuity and level of understanding. Steve Barnard will follow up with non-attendees to see if they wish to be removed from the Hub.

3. BACKGROUND TO THE MAPS AND OPTIONS

Chiara Polce provided Hub members with an update on progress made in developing the Regional Profile. The Regional Profile is presented in three broad themes, abiotic (non-living features), biotic (live features) and maps of human activity. Particular emphasis was placed on describing the Broad Scale Habitat Map as this was a key piece of information for the map work.

After looking at the Regional Profile, Steve Barnard gave a presentation (see Appendix 1) on the tools available to interpret the data. This presentation included:

- Plain English version of ENG
- Gap analysis – what it is – how it will help our deliberations
- Marxan – what it is and what it does – rationale for developing draft sites through Marxan in advance of this meeting
- Levels of protection
- Draft compatibility matrix

4. WORKING ON MAPS

This session presented the first opportunity for Hub members to make their mark on the maps and start to look at potential MCZ sites. It was stressed that this was the first draft, and therefore likely to change when more information is available, but that the outputs marked a milestone for the Net Gain project so would need to be communicated to the SAP.

Each group was provided with:

- The Regional Profile – all the mapped data to date, with an emphasis on using the broad scale habitat map in this session.
- A Marxan analysis – based on the broad scale habitat map, existing MPAs, existing windfarm developments, and Vessel Monitoring Data (VMS – information on over 15m vessels).
- A grid – to assist in working out the size of potential sites.
- A table of targets – based on the ENG this detailed the area (in km²) for each broad scale habitat that the Hub members should try to cover in their proposals.
- The Ecological Network Guidance in summary format.
- A compatibility matrix. This is an interim document based on Finding Sanctuaries work which suggests which activities may or may not be compatible with each habitat.

Each group first decided if they wanted to use the Marxan analysis to kick start discussions or start from scratch with the broad scale habitat map. Using this as a base other maps from the Regional Profile could be layered to allow multiple datasets to be viewed together to try to find suitable locations for MCZs while taking account of socioeconomics where possible.

Using the grid for scale, and the table to inform the size of sites, initial, first draft proposals were drawn on the maps. For each site the groups indicated how well supported the site may be using a traffic light system (Red, Amber, Green).

Then, on flipchart paper, notes were made for each site explaining the habitat, any possible impacts, and the level of protection suggested. In many cases it was difficult to come to real conclusions on the protection levels as the information was incomplete. In these cases a default protection level of B (Seafloor protection) was assumed.

Outputs:

No overall consensus on potential sites was reached between the Regional Hub members present at the meeting. This was largely because of the limited time that was available for members to become familiar with the materials and approaches, and to physically undertake the planning work with the maps. However, members also felt that they did not have full access to the key requisite data sets and/or did not have full confidence in the accuracy of the data that was presented. In particular, Hub members were concerned at the absence of

broad scale habitat data from the intertidal zone; the lack of Fishermap data and the consequent need to rely on Vessel Monitoring System (VMS) data; the lack of full information from the Gap Analysis; and the absence of detailed information on features' sensitivity to various pressures and on the activities that may give rise to such pressures.

In addition, many of our stakeholders expressed a lack of confidence in some of the key data available to them at this time. This was especially true of the broad scale habitat data, but was also the case for the VMS data that was presented. Notwithstanding the fact that the VMS data is only applicable to vessels greater than 15m in length (and consequently, by effectively missing out on the majority of the inshore fleet, both under-represents and biases the apparent distribution of fishing activity across the Net Gain project area) it was felt that, as the data was collected in 2007, it may not be an accurate representation of the distribution of activity as fishing patterns may well have altered in recent years in response to economic pressures such as rising fuel costs. For these reasons the outputs from the mapping work and planning cannot be taken as being representative of potential MCZs but rather only as Broad Areas of Interest (BAIs).

Additionally, as the plenary session did not provide group consensus on individual areas identified during the mapping session, specific examples of BAIs do not at this stage have any indication of their overall level of support within the Regional Hub. Given this, and concerns surrounding the basis for their initial identification, it is not feasible to reproduce the outputs here. It was agreed with the Regional Hub members that their outputs (both maps and associated narratives) will be made available to them to help facilitate on-going discussions and debates with their wider sectors.

5. SOCIO-ECONOMIC IMPACTS AND CONSERVATION BENEFITS

When Net Gain makes the final recommendations on the proposed location of MCZs to Government on 1st June 2011 it must include a formal Impact Assessment detailing the environmental, social and economic impacts of designating the sites compared to a baseline situation if no sites were designated. As this is an iterative process, the impact assessment work is ongoing, and progress will be reported to the SAP along with the draft proposal at each iteration. In the early stages of the process the information provided to the SAP will be qualitative, or descriptive in nature. As more detailed information becomes available to the project the impact assessment will be more quantitative, with values attached to indicators as far as appropriate.

Net Gain's impact assessment work has just begun, and this session aimed to gain feedback and advice from Hub members on what impacts we should be considering. Hub members were asked to consider what indicators might be important to their sector to measure impacts should an MCZ be designated. The indicators in themselves are neutral, but can measure positive or negative change.

Hub members were asked to add to the list of indicators developed at the Yorkshire and Humber Hub, using their discussions from the map work to help inform their input.

The results of this exercise are shown overleaf.

Socio-economic indicators developed at North East Hub

Changes in:

- Travel distance and fuel costs
- Time away
- New income stream
- Clients
- Port, suppliers, others
- Enjoyment / satisfaction
- Boat / equipment
- Income
- Staffing
- Emphasis of activities
- Cultural heritage
- Pressure on different species
- CO₂ emissions
- Level of port activities
- Throughput of commodities
- GDP for local communities
- Indirect social effects
- Displacement of effort from one area to another
- Distribution of activities
- Income for ports
- Skills, education, training, knowledge requirement
- Productivity of fishing grounds
- Health & Well being
- Resource Availability
- Change to target species
- Displacement costs – for example restrictions on aggregate dredging may mean that, because the displaced activity would be less efficient and more expensive, the commodity (e.g. sand or gravel) would increase in price. Equally if an activity is restricted the availability of the commodity would be likely to be reduced – traditional economic forces then increasing its market value.
- Management regimes would be 'tested' - there would be additional costs/strains put on management organisations post-MCZ designation.
- Carbon storage
- Climate change resilience

Conservation benefits

- Increase in size and quality
- Maintain – reduce destruction
- No significant decrease from baseline
- Presence and abundance – range and distribution
- Productivity / overspill (to adjacent areas)
- Connectivity – especially for mobile species
- Whole / wider ecosystem benefits (e.g. mobile species / birds) e.g. California
- Provides reference
- Recovery
- Social / economic benefits
- Visitors
- Wider benefits than just biodiversity, including food, energy & climate
- Education & awareness
- Ecotourism
- Management regime opportunities
- Tourism – holiday lets / levels of bookings.
- Fishing tackle shop trade (as a measure of angling activity).
- Overall productivity of fishing grounds.
- Wider ecosystem functioning

6. PLENARY

Each group described the work they had done during the map session, commenting on any positives, practicalities of the session, and any difficulties they had in starting to plan the MCZs.

Table 1

- Worked from the perspective of the people round the table.
- Selected areas guided primarily by fishing activity, with other factors (e.g. oil & gas; windfarms) being considered.
- Found some agreement on many sites.
- Went over target for some broad scale habitats to allow room for manoeuvre.
- Would like maps at a consistent scale.
- Some of the difficult inshore rock habitat selection can be put into existing EMS – there are rock habitats identified as features within the EMS designation; most activities are compatible and have continued post-EMS designation without major impacts.
- In terms of the method of working they felt that they had a well balanced group.
- Using the maps in this way worked well but would like to have them at a consistent scale.

Table 2

- Was able to agree on one area of inshore habitat that hit multiple objectives.
- Focused on offshore areas after that.
- Some geological sites are listed in the ENG such as Swallow Hole so had to be included, but there is no information on activity compatibility for geological sites so the group coded it red (potentially highly contentious).
- After lunch looked at larger targets in offshore areas.
- Based large offshore area (using Marxan as a starting point) for sand/gravel in middle of North Sea, using VMS data to help minimise impact on fishing activity; then moved main site to Dogger Bank but recognised that large offshore sites may not be necessary if other Hubs are able to contribute more of certain habitat types.
- Need to be able to zoom into the coastal area much more.
- Working as a group was fine – found they were 'bonding' and were getting used to working together.
- Suggestion for spreading good sources of local knowledge between the groups so that each group could benefit from the detailed knowledge that some particular people had.
- Suggested grouping people geographically
- VMS Fishing data is considered inaccurate

Table 3

- Again, focussed on offshore areas – outside of 12nm due to lack of inshore data and low confidence in data.
- Sites flagged as red (contentious) by default unless it could be demonstrated that they were otherwise.
- In practical terms the group agreed some 'ground rules' before starting work – some members not happy to commit to putting lines on maps and so did not actively contribute.
- Rulers would be a useful resource – along with calculators.
- Made use of the scaling grids – converted targets to 'squares'.
- Some suggested areas are the only example of occurrence in the Hub area – e.g. the 'little pink sausage' of circa-littoral rock – so would be obliged to consider them irrespective of information on possible impacts.
- May take some time for them to develop, but obvious that there are potentially multiple benefits that may arise at some sites.
- The group pointed out the need to know about habitat quality not just presence or absence to help them pick good locations.
- Nursing and spawning areas needed.
- There was tension when drawing initial lines on maps.
- Group work was helpful in enabling people from different sectors to see others points of view - Reality of other peoples livelihoods was helpful.

Table4

- In terms of procedure, they worked through habitat by habitat.
- Recorded all suggestions as contentious – may not be in reality but felt it safer to consider them as such for the first draft.
- Used straight lines as far as possible for simplicities' sake.
- Marked A5.4 as being moderately contentious.
- Differentiation of broad-scale habitats problematical – inshore data doesn't match with local knowledge.
- Need more detail and clarification on the compatibility matrix.
- Calculators available for each table would be useful.
- Need all detailed inshore data (Fisherman, habitat, recreational angling, etc.) to consider before making decisions – which is why the group focussed mainly on the offshore regions).
- Good to familiarise and 'practice' – good to draw lines; feel like they're getting experience of incorporating data from a wide range of sources.
- Difficult whilst still lacking data, particularly when representing other people.
- Some problems with data and scaling.
- There are inaccuracies in data when compared with local knowledge.
- Pressures matrix needs to be totally understood.
- Data is terribly patchy but it is good to try the process.
- The group queried if the SAP have data that the Hub does not have access to? – Answer No.

Table 5

- Had problems with the scaling of the maps (or the scale guides) – looked like they couldn't find enough of certain habitats.
- To try to meet the highest target the group went for large blocks, using VMS data to help avoid areas of main fishing activity.
- The target for Broad scale habitat A4.2 couldn't be met. Local knowledge says that the data presented was wrong – large tracts of sand/gravels where hard rock is shown – especially in the 2-3 mile coastal zone.
- Request (again) for War Grave information to be provided. Chiara explained we are expecting more information on wrecks soon and then these will be mapped. We are waiting for more data which will be present by the September meetings.
- Inshore detail is masked by scaling problems.
- The group and no problem in working together across the sectors – which included commercial fishing, recreational sea angling, other leisure users, conservation interests.
- Felt it was very important to have the input from the commercial fishermen.
- Some colours too hard to read – particularly – green.
- RAMSAR sites were difficult to find.
- Overlaying information was difficult.
- Not as much correlation between broad-scale habitats and fishing grounds as was expected.
- Most stakeholders know the coast – could written descriptions be an advantage?

7. NEXT STAGES

- The group requested that a URL (web-link) for the FTP site be put onto the main Net Gain web site.
- Draft map outputs would be collated and digitised, and would be presented to the StAP (to provide an overview comment on how the Regional Hub's deliberations fit to the Net Gain project overall) and, by the end of June, the Science Advisory Panel (to provide comment on adequacy). It was agreed that any suggested possible MCZ sites would carry strong 'health warnings' in that they had been produced with reference only to limited, and in some cases incomplete or draft, datasets, and had not been discussed with the wider stakeholder community.
- It was agreed that map outputs from the meeting would be made available through the members-only FTP site and that they would carry a similar health warning to the versions passed to the StAP and SAP.
- A proforma will be circulated to help Hub members liaise with their sector for input before the next round of meetings.
- Next meeting was potentially scheduled for the w/c 20th September to allow for the southern Hubs to lead the next round of meetings.

Feedback from the SAP is anticipated by the end of July.

PARTICIPANTS

The list below includes all invitees. We have also included those who sent apologies; they also will be receiving this report.

Net Gain North East Hub – invitees for meeting on 11th June 2010

Hub member			
First name	Surname	Sector	Notes
Jonathon	Armstrong	Commercial fishing	Unable to attend this meeting
Niall	Benson	Coastal forums etc	
Michael	Bould	Commercial fishing	
Ronnie	Buglass	Commercial fishing	
Bob	Casson	Commercial fishing	Unable to attend this meeting
Ned	Clark	Commercial fishing	Unable to attend this meeting
Jane	Delany	Academic	Unable to attend this meeting
Paul	Dent	Commercial fishing	Unable to attend this meeting
Sean	Douglas	MMO	Unable to attend this meeting
Mick	Edwards	Recreational angling	Alan Charlton deputised this meeting
Russell	Gadbury	Northumberland CC	
Jon	Green	Northumberland SFC	
Mike	Hardy	SFC	Unable to attend this meeting
Sam	Harris	Recreational angling	
Andrew	Hunt	Offshore renewables	Unable to attend this meeting
Jacqui	Huntley	Heritage	Unable to attend this meeting
Roxana	Jackson	Diving	
Martin	Kerby	RSPB	
Aisling	Lannin	Natural England	
Billy	Lawrence	Commercial fishing	Unable to attend this meeting
Maeve	Lee	Durham Heritage	Unable to attend this meeting
Paula	Lightfoot	MCS	
Steve	Lowe	Wildlife Trust	
Jill	McCormick	Environment Agency	Unable to attend this meeting
Peter	Nicholson	Yachting	
Bob	Pailor	Tees INCA	Unable to attend this meeting
Jeremy	Pritchard	Processing	Unable to attend this meeting
Bill	Rariety	Commercial fishing	Unable to attend this meeting
Alexander	Ritchie	Commercial fishing	
Sally	Rogers	Diving	Unable to attend this meeting
Mike	Sands	Recreational angling	
Catherine	Scott	Natural England	Unable to attend this meeting
David	Shiel	Angling charter boat	
Paul	Stevenson	Recreational angling	Unable to attend this meeting
John	Thomson	Northumberland SFC	
Rachel	Turner	Academic	Alex Caveen deputised this meeting
Steve	Walker	Recreational Angling	
Phil	Walsh	Commercial fishing	

John	Walton	Heritage	
<i>Tim</i>	<i>Watson</i>	<i>Marinet</i>	<i>Unable to attend this meeting</i>
Les	Weller	Recreational angling	
<i>Kathy</i>	<i>Wood</i>	<i>Offshore renewables</i>	<i>Unable to attend this meeting</i>

In addition to the invited Hub members, the following members of Net Gain staff were present:

- Φ Joanna Redhead – Project Manager
- Φ Steve Barnard – Stakeholder Manager
- Φ Chiara Polce – MCZ Planner
- Φ Dani Sewell – PR & Communications Manager
- Φ Stephen Donkor – GIS & Data Officer
- Φ Gary Tinsley – Liaison Officer
- Φ Pete Hansell – Liaison Officer

Independent facilitation support was provided by:

- Φ Steve Smith (Icarus Collective)

Slide 1



Slide 2



Slide 3



Today's objectives - what we hope to achieve

- Provide updates
 - information available
 - work undertaken
- Provide understanding of available tools
- Production of initial list of potential MCZ sites
- Development of draft sets of socio-economic and conservation benefit indicators
 - delivery of first iteration - how & when
- Communication to wider community & feedback

Slide 4



Running order

- Introductions
- Data & mapping – progress update
- Tools for data interpretation
- Briefing on site selection (break)
- Group work evaluating & developing draft proposals (incl. lunch & break)
- Socio-economic indicators & conservation benefits
- Plenary
- Next stages

Slide 5

Agreements for a productive meeting




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- Allow us to keep us all to time and to task
- If it doesn't make sense – do ASK
- Maximise everyone's chance to participate
- Please speak one at a time
- Write clearly, fully, big fat pens
- All questions / queries will be written up and answered
- Mobiles off please (or on silent)
- Whole team approach

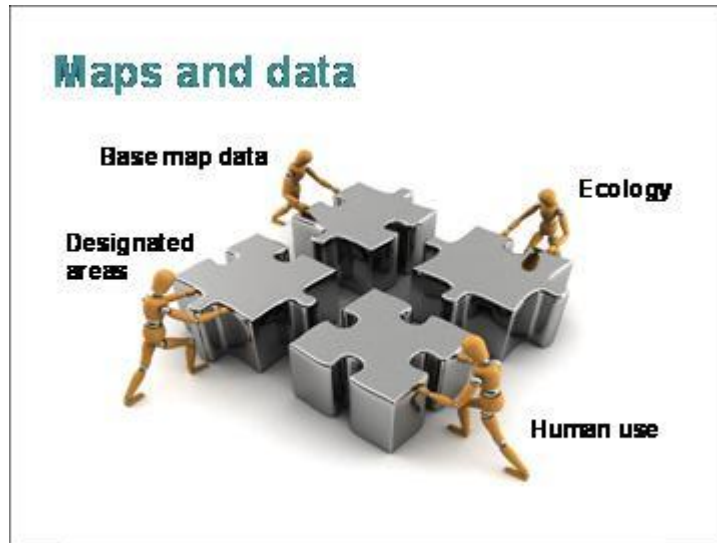
Slide 6

**Data & mapping
- update on progress**



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Slide 7



Slide 8



Slide 9



Outline

- **Ecological Network Guidance**
- **Data use / tools**
- **Gap analysis**
 - coverage by MPAs
- **Marxan**
 - use of outputs as initial options
- **Protection levels & compatibility matrices to inform debate**

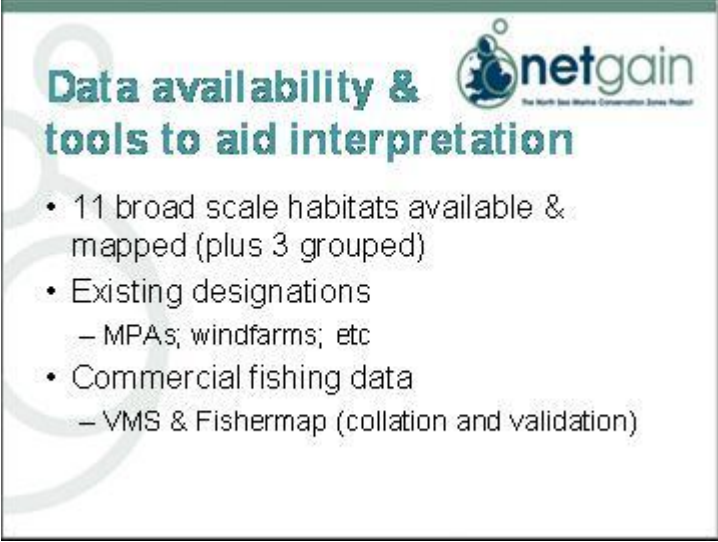
Slide 10



Ecological Network Guidance

- Seven guiding principles & additional design considerations
 - Representativity; Replication; Adequacy; Viability; Connectivity; Protection; and using Best Available Evidence
- Final version signed off
 - minor changes since last version
- Summary available on Net Gain website

Slide 11



Data availability & tools to aid interpretation

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- 11 broad scale habitats available & mapped (plus 3 grouped)
- Existing designations
 - MPAs; windfarms; etc
- Commercial fishing data
 - VMS & Fishermap (collation and validation)

As Chiara has explained, information on 11 broad scale habitats is available and has been mapped.


This needs to be combined with other data sets as part of the planning process.

With this in mind I'd like to spend the next 15 minutes or so talking to you about how we can use the broad scale habitats data and other information, and what tools we can use to help make sense of it all.

Just to set the scene: in the examples I'll talk about I will, in addition to the broad scale habitat data, use information on existing MPAs (SACs, SPAs and SSSIs) and on the locations of developed areas such as windfarms.

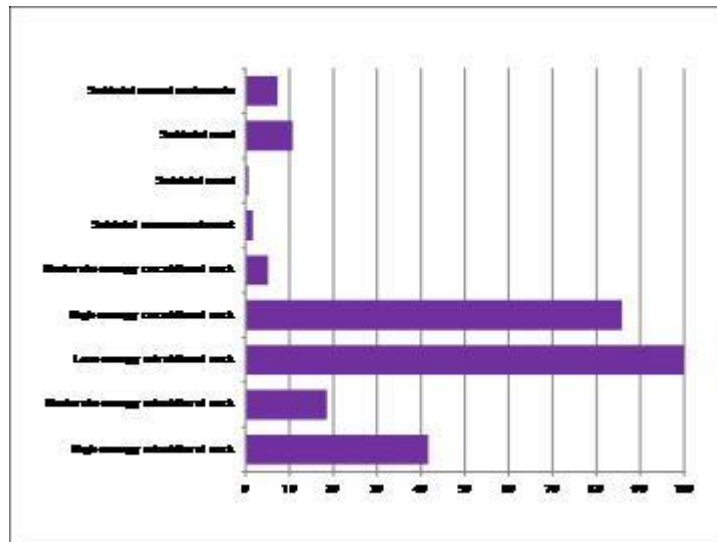
We are in the middle of collating and verifying our Fishermap data. As you will know, this is interview based information collected by our liaison officers from individual fishermen. This data will give use detailed information on fishing gear types, fishing locations and the relative importance of different fishing grounds. Unfortunately this data is not available to use yet and so, in its place, we have provided VMS data from the period 2006-7. I'll just say now that we recognise the limitations of this dataset (both in terms of its coverage and its level of detail) but it provides a rough surrogate for the more detailed information we will be using later on the project.

Slide 12

Gap analysis 



- Target areas from ENG
- Some potential for positioning MCZs coincident with existing MPAs - coverage?
- Initial gap analysis:
 - 9 broad scale habitats in Net Gain area coincident within designated MPAs
 - Varying percentage of total habitat covered
 - No detail on feature management within MPAs
- Phase II gap analysis due later this summer

Slide 13



Three habitats – high energy circalittoral rock, low energy infralittoral rock and high energy infralittoral rock – are all very well represented within existing MPAs. Indeed, if the management measures in place in these MPAs provide protection for these broad scale habitats then they already satisfy the requirements as laid out in the ENG. However, other classes of broad scale habitat are not very well covered by existing MPAs in the Net Gain area and will need to be specifically protected by new MCZs. More detail on this initial Gap Analysis is available in a briefing note.

Slide 14



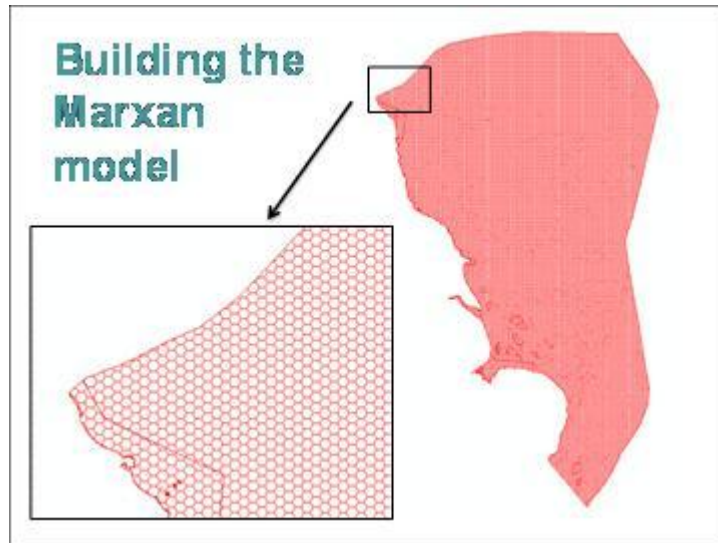
- IS a decision support tool to help guide the selection of conservation networks
- IS the most widely used conservation planning software in the world
- IS a way of showing how resources can be efficiently allocated across a range of different uses (conservation, commercial, recreation)
- IS NOT a way of providing 'the answer' - in most cases it will provide many good solutions to the problem at hand

In using Marxan we are not moving away from our original idea of not drawing lines on maps but instead are responding to ideas and suggestions from stakeholders. In part, its adoption is the result of suggestions made by members of planning groups in the other regional MCZ projects and from some members of our own Regional Hubs who called for some initial areas to be suggested and made available for debate.

As a project we need to develop a means by which you, the stakeholders, can come to terms with multiple sets of geographically coincident data and rationalise the placing of potential MCZs such that the resultant network meets the requirements of the ENG. This is clearly and enormous task and we believe that we can help you in this process by providing a form of starting point to kick start debate and discussion. At the end of the day however, we will not force the Regional Hubs to use Marxan outputs – it is simply an attempt on our part to provide you with another tool to help you in your deliberations.

I think that the use of Marxan will prove to be a useful way of looking at the data in the Hub meetings and with that in mind I'll walk you through how Marxan comes up with its initial options.

Slide 15



Marxan can be operated at different scales so if we want to be able to make use of inshore data at a more refined level we can do.

This might be because:

- our data is more detailed in the first place, and
- is where a lot of stakeholders activities take place.

But to simplify this initial Marxan example we have used the same resolution inshore and offshore (both 5km² cells).

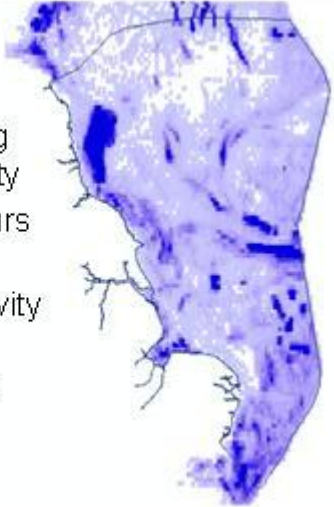
In the simple scenario presented here each cell in the Marxan model is checked against current data sets to see whether it is already within an existing MPA. Such cells would be automatically selected in any possible selection scenarios – in Marxan-speak they would be 'conserved'.

Conversely, areas that are, for example, under current windfarm developments will be excluded from the possible selection scenarios.

Slide 16

Fishing activity data

- Initial example using overall fishing activity
- Total number of hours per year (VMS)
- Areas of higher activity 'avoided'
- Lower activity areas 'preferred'

A map of a coastal region, likely the North Sea, showing fishing activity data. The map is color-coded in shades of blue and purple, with darker colors indicating higher activity. The activity is concentrated in the central and southern parts of the coast, with some lighter areas in the north and west.

The example we have today is based on VMS data – an amalgamation of all gear types and all sizes of vessel – taken from the period 2006-7.

The actual units are, for this example, irrelevant – what is important is that the use of VMS in this way provides a measure of the relative intensity of fishing effort at any given site.

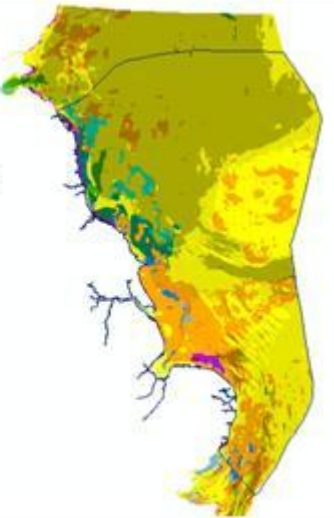
Once we have collated and verified a representative sample of commercial fishing data (derived from the fishermap questionnaires that our liaison officers are working hard to complete with commercial fishermen from across the area) then this data can be used to provide fishing activity data in far more detail. Such data would give a breakdown in terms of different gears for example.

The Marxan software uses this data on fishing effort to identify areas to be avoided, or areas to favour, when it comes to locating possible MCZs.

Slide 17

Habitat data

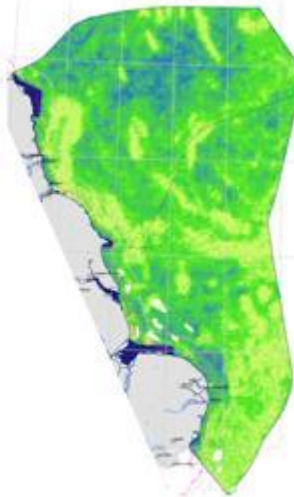
- This example uses broad scale habitat
- Also uses existing MPAs, existing windfarms
- Can also use:
 - habitats FOCI
 - species FOCI
 - geological features

A map of the same coastal region as in Slide 16, showing habitat data. The map is color-coded in shades of yellow, orange, and green, with darker colors indicating higher habitat value. The habitat is concentrated in the central and southern parts of the coast, with some lighter areas in the north and west.

Slide 18

Selection likelihood

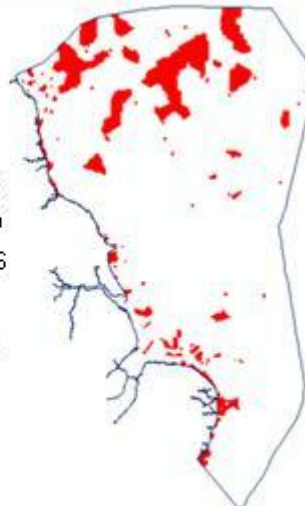
- Each Marxan 'run' consists of many thousands of trials
- Existing MPAs increase the likelihood of cell selection by the model
- High fishing activity or windfarm presence reduce likelihood of cell selection
- Multiple runs (100x) used to produce density map



Slide 19

Initial selections

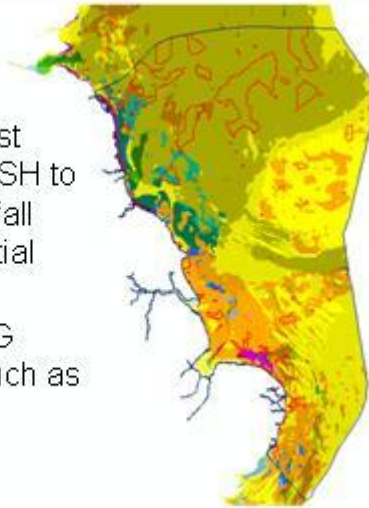
- Selection scores (density map) used to derive 'best' portfolio of areas for MCZ sites (shown in red)
- Can be used as initial starting point for selecting potential MCZs



Slide 20

Selections by habitat

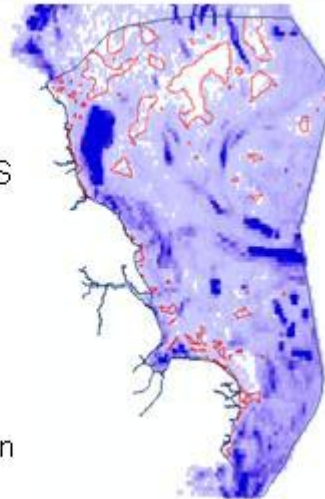
- Can overlay 'best portfolio' over BSH to see how BSHs fall into each potential site
- Apply other ENG requirements such as connectivity



Slide 21

Selections by impact

- Overlay of 'best portfolio' with VMS fishing intensity
- Site options from Marxan
 - meet ENG requirements
 - seek to reduce potential impact on fishing activity





Protection levels
- an aid to discussions

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- Although not recommending management measures, stakeholders need to understand implications of site selection
- Ultimately will be provided with detailed matrix relating:
 - features to be protected;
 - sensitivities; and
 - pressures

It is the formal role of regional projects:

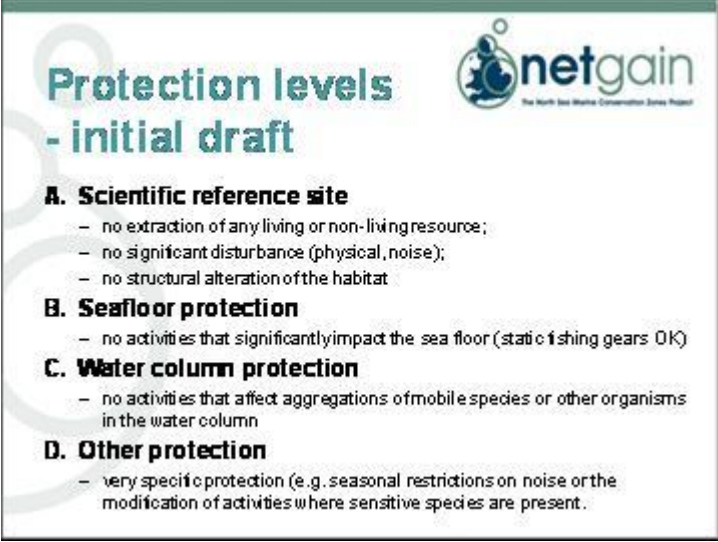
- to make recommendations on the size and location of Marine Conservation Zone (MCZ) sites (i.e. the boundaries of each site);
- to produce conservation objectives for each site; and
- to produce impact assessments.

It is not the role of the regional projects to recommend what management measures are required in order to achieve the conservation objectives. However, when developing an opinion on a proposal to recommend a given area or site as an MCZ, stakeholders need to understand how their sector, their activities and the features within the site would be affected.

This means that they need to be able to talk about the likely management *requirements* for a proposed site.

In its simplest terms guidance to support these discussions will need to relate 'what feature is being protected' to 'what processes could potentially affect the feature' and then relate these process to the activities that could give rise to them.

This guidance is being produced and will be available later in the year. However, because you need to have an understanding of the likely implications of site selection, there is the need in the mean time to provide some interim guidance on protection to help support discussions. An initial draft of four levels of protection has been produced to support this and is available to you all today to help in your discussions.



Protection levels
- initial draft

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A. Scientific reference site

- no extraction of any living or non-living resource;
- no significant disturbance (physical, noise);
- no structural alteration of the habitat

B. Seafloor protection

- no activities that significantly impact the sea floor (static fishing gears OK)

C. Water column protection

- no activities that affect aggregations of mobile species or other organisms in the water column

D. Other protection

- very specific protection (e.g. seasonal restrictions on noise or the modification of activities where sensitive species are present).

So we have provided you with an interim protection level framework (which has been adopted from the scheme developed and used by the Finding Sanctuary project). An alternative approach is to go the more detailed compatibility matrix. This is currently only in draft form (it doesn't provide the detail on sensitivities but just relates features – in this case broad scale habitats – to activities). To help with your deliberations today and to help you understand more about the tools that are available to help you I have supplied copies of this draft.

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Compatibility matrices

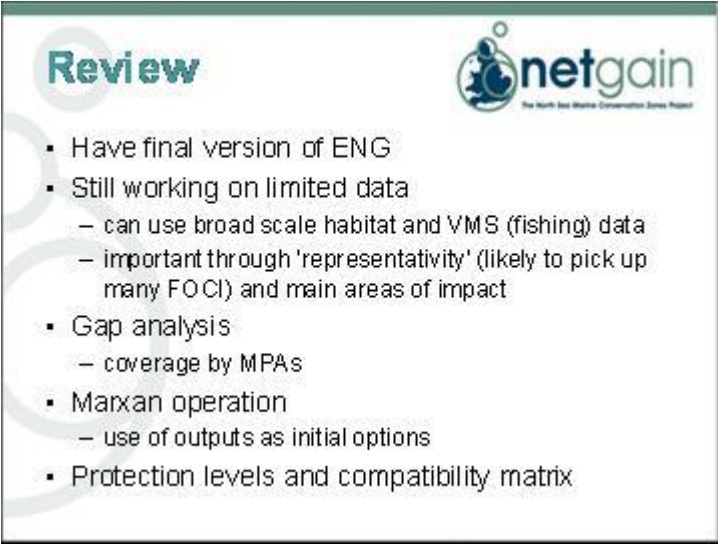
- Protection levels will be replaced by linked matrices detailing:
 - features to be protected;
 - their sensitivities; and
 - relevant pressures (activities)
- Draft for broad scale habitats available
 - traffic light colour-coding for compatible activities

Protection levels will be replaced by linked matrices detailing:

- features to be protected;
- their sensitivities; and
- the pressures (activities) that may have a bearing on the given sensitivities.

Draft for broad scale habitats available – has a traffic light colour-coding for compatible activities

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Review

- Have final version of ENG
- Still working on limited data
 - can use broad scale habitat and VMS (fishing) data
 - important through 'representativity' (likely to pick up many FOCI) and main areas of impact
- Gap analysis
 - coverage by MPAs
- Marxan operation
 - use of outputs as initial options
- Protection levels and compatibility matrix

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Maps
Option selection & assessment

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**Briefings &
Main mapping exercises**

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Main mapping exercise - suggestions 

1. Overlay Marxan with broad scale habitat acetate
2. Focus on which areas could be used to satisfy the ENG targets for broad scale habitat – mark these on chart with **black pen** - Give each possible MCZ area a unique letter
3. Indicate level of contention for each site:
 - **Green – broad support;**
 - **Blue – moderately contentious; or**
 - **Red – highly contentious.**
4. Starting with red sites complete impact/benefit table

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Socio-Economic Indicators

- Travel distance and fuel costs
- Time away
- Maritime stress
- Costs
- Fuel, supplies, others
- Employment / satisfaction
- Boat / equipment
- Income
- Skilling
- Employment of activities
- Cultural heritage
- Presence of different species
- CO₂ emissions
- Level of port activities
- Throughput of communities
- GDP for local communities
- Indirect/total effects
- Displacement of other businesses or activities
- Distribution of activities
- Income for ports
- Skills, education, training, knowledge, equipment

Conservation benefits

- Increase in size and quality
- Habitat — reduce destruction
- No significant decrease from baseline
- Presence and abundance — range and distribution
- Productivity / overyield (in adjacent areas)
- Connectivity — esp for mobile species
- Wildlife/public ecosystem benefits (e.g. mobile species / birds) e.g. Cullivores
- Parasites reduction
- Recovery
- Eased / economic benefits

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**Evaluation &
feedback**

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Next steps

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Reporting / sector feedback
Future meetings
w/c 13th or 20th September

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