17th June 2010
Lowestoft

East of England Regional Hub Meeting 2 MEETING REPORT

H Jackson
Net Gain

1. INTRODUCTION

This is the report of the Regional Hub meeting held in Kings Lynn on 15th 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.

At the start of the meeting a request was made by four representatives from the recreational sea angling (RSA) sector for clarification on:

- the Regional Stakeholder Group Terms of Reference;
- the timescale for deliver; and
- the process for establishing StAP membership.

Correspondence had recently been exchanged between the RSA sector and the Net Gain Project Manager on these points, but responses and reassurances given were not felt to be adequate. The RSA sector members were not prepared to remain engaged in the meeting unless these points could be fully debated and answered to their satisfaction.

It was not felt to be appropriate to use the Regional Hub meeting to hold these discussions as it did not appear likely that the issues could be easily and speedily resolved. There was no clear support for any such open debate amongst the other Hub members present. The option to take the opportunity to discuss the points raised during scheduled breaks in the main business of the meeting was briefly visited but was not deemed to represent an acceptable way forward by those RSA members present. Accordingly the RSA members withdrew from the meeting.

Outside the meeting they reconfirmed their desire to remain engaged in, and to contribute to, the project and it is hoped that a speedy and acceptable resolution can be reached. A meeting will be convened between the RSA members from the East of England Regional Hub and members of the Net Gain team to attempt to bottom out the outstanding issues to the satisfaction of both parties.

3. BACKGROUND TO THE MAPS AND OPTIONS

Katerina Wojtaszekova and Stephen Donkor 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 km^2) 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 & Humber, North-East and Lincolnshire & The Wash Regional Hubs, using their discussions from the map work to help inform their input. Newly added indicators are shown in red; M shows whether Hub members thought the indicators would be measurable.

Socio-economic indicators developed at the East of England Regional Hub

Changes in:

- Travel distance and fuel costs, maintenance and equipment costs **M**
- Time away
- New income stream **M**
- Clients
- Port, suppliers, others
- Enjoyment / satisfaction
- Boat / equipment – permit schemes for plotting/trawling/dredging
- Income **M**
- Staffing **M**
- Emphasis of activities
- Cultural heritage
- Pressure on different species
- $C0_2$ emissions **M** – If offshore energy not allowed in areas then alternative energy sources will be required. Potentially carbon emitting
- Level of port activities **M**
- Throughput of commodities **M**
- GDP for local communities **M**
- Indirect social effects **M**
- Displacement of effort from one area to another **M**
- Distribution of activities **M**
- 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. and 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. **M**
- Carbon storage
- Climate change resilience
- Effects of Infrastructure – capacity(roads/parking)
- Regulation/Consenting
- More scuba diving
- More restrictions on local fishermen **M**
- Too far to go to work grounds – recreational fishing and jet skis etc need to be close to land area
- Sense of well being from knowing that the sea is being protected
- Uncertainty over near future impact of cumulative restrictions e.g. new SAC/SPA

- Understanding the absolute compatibility of activities with feature designations is critical to determining socio-economic impacts (management measures are not known)
- Displacement of effort from one fishing sector to another **M**
- Enforcement costs at sea/technology (e.g. VMS) – how many more days patrolling
- Certification of fish stocks "msc" **M**
- Costs of monitoring MCZ features **M**
- Increase in/stricter policing = better stocks for legitimate/licensed fishermen (+ve impact) **M**
- Increase in tourism (increase in level of holiday bookings) **M**
- Changes in fishing fleet characteristics and licenses (boat size as well as license) **M**
- Future development cost/opportunities (MCZ likely to limit development opportunities or at least increase development cost (e.g. windfarm sites)) . Could be measured by:
  - Energy loss of MW potential
  - Employment/Regulation aspects of offshore renewable and aggregates
  - Knock on effects
- Increased activities on non-designated areas = habitat degradation
- Quantify value of assets – aggregates
- Safety if vessels are having to travel further/familiarity of area
- In combination effects of all activities together
- Conflict between fishing sectors
- Quality of catch – premium prices
- Overall productivity of fishing grounds
- Ship building industry stimulated by need for protection vessels
- More, larger fish inshore would increase value of RSA, tourism and associated industry.

Conservation benefits

- Increase in size and quality – possible development of new climax biotopes
- 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
- Increased understanding of sea use, users, habitats, species present etc (+ve impact)
- More underwater monitoring by amateur divers
- More fish-more fishermen
- Protection of spawning grounds
- Sustainability of fish species
- Research opportunities
- Rehabilitation of degraded habitats – increase from current and stability (e.g. Blakeney Point seals and terns trips – protecting the spectacle)
- Contribution to ecologically coherent network
- Carbon storage
- Climate
- Increase significantly from baseline

Wider discussion points:

- Why are we focussing on socio-economics when it is the conservation needs (and, in turn, protection levels that are important in the initial discussions regarding the acceptability or otherwise of proposed MCZ sites.

  RESPONSE – We are not placing socio-economic impacts ahead of conservation needs – the exercise is intended to begin to illicit ideas regarding potential impacts to help inform debate in subsequent sessions. Also, whilst we have clear conservation-based drivers for site selection we currently have less information on socio-economic impacts and need to begin to focus on where most work will need to be done by the Net Gain team. Stakeholder guidance and input on this is very important.

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 primarily with offshore data and the Marxan output
- Identified an area of chalk based on the group's local knowledge and suggested a draft site accordingly (details for this habitat type was not included on the mapped data presented)
- Only considered Round 1 and Round 2 windfarm locations when identifying potential MCZ sites that would not have significant impacts (i.e. they effectively ignored the Round 3 sites and dredging areas) – consequently many of the offshore sites that they identified may be highly contentious (so coloured RED in their deliberations)
- Not sufficient fishing expertise at the table so it was not considered during deliberations - but acknowledged that this information is crucial

Table 2

- Tried to take as many issues as possible into account – used as much of the available data as possible to try to avoid impacting on ongoing/current activity; displacement effects also considered
- Also took local knowledge around the table into account
- Made reference to Marxan outputs on several occasions as a way of ground truthing the selection process that the group had followed using the original data sets

Table 3

- In general terms the group picked the easiest or most obvious sites first – these tended to be spatially distinct and relatively confined areas
- Used other activity restrictions shown in the Regional Profile (e.g. Sea Fishery Committee byelaws such as no-trawling zones) to piggy-back on – and combined this with local knowledge on potting activity and the compatibility matrix information to help identify sites which would have only minimal impact on current activity
- If looking at larger areas there is a need to be pragmatic and to accept that there will be some disruption to current activity
- All recommendations are subject to the proviso that the underlying map data is accurate – in many cases aspects of this data needs to be ground-truthed
- Suggested a possible 'corridor' approach of designating relatively long, slim (e.g. approx. 10km wide) rectangles rather than squarer zones – thought that this approach may capture sufficient areas of habitat whilst reducing the

likelihood of designation being totally restrictive on activities in any one single area
- Concluded that local information was of great importance

Table 5

- Marxan used on 'sparingly' in discussions
- Found some key clashes between Marxan output and Round 2½ wind power developments
- Struggled with a lack of local 'expertise' round the table – especially relating to commercial fishing
- Based on assumption that fishing vessels could go through the draft areas (not deploying fishing gear) whilst on their way to other fishing grounds
- Assumptions made regarding possible impacts (and hence contention) were based on limited knowledge base – didn't have a clear picture of what they would need to 'avoid' in terms of delineating areas so built up their recommendations on a more pragmatic basis (e.g. using big square boxes)
- Also, simple draft boundaries (consisting of few straight lines) were drawn for easier management
- Because of concerns over the quality of data would want data to be signed off as being fit for purpose (especially before it is used in a Marxan run) although who would do this (sector reps/all members) was not immediately clear

Wider discussion points:

- Limitations on the use of VMS (Vessel Monitoring System) data where discussed.
  RESPONSE – The site selection exercise was preliminary and would be revisited in the next meeting. Subsequently, more detailed information will be available from the Fishermap questionnaire process that our Liaison Officers are currently engaged in. Once collated and verified this data will supplement the VMS data that was used in the Marxan output examples tabled in the meeting. Subsequent rounds of planning will therefore be able to revisit any preliminary decisions made at this meeting and make decisions based on what we acknowledge will be more detailed and sound fishing activity data. Nothing from this initial planning exercise will be written in stone.

- Maps show Round 1 & Round 2 consented windfarms, and also Round 3 licensed areas – they don't have Round 2½ (effectively revised Round 2) consents. Need to get this data set – coordinates for the locations that are currently available from The Crown Estate, were provided to the Net Gain GIS team by a Hub member
  RESPONSE – accepted and we will move to confirm and present the data.

- Perhaps Net Gain could consider producing separate maps showing locations for those activities that are RED on the draft compatibility matrix – might help

focus debate by assisting in identifying those areas that could be identified as potential sites without the risk of conflict with current activity
RESPONSE – agreed that it might help & would consider and add to ftp site if appropriate (although in effect that is what the Marxan outputs could be used for).

- When undertaking a similar exercise the Balanced Seas MCZ Project had encouraged the groups working on maps to take brief breaks from their own work to review the work of the other groups
  RESPONSE – will consider this process detail for inclusion in the design for next round of Regional Hub meetings

- Commented that the Balanced Seas MCZ Project had produced a form of words to convey the 'health warning' that would need to accompany any reproduction of initial draft suggestions for possible MCZ locations
  RESPONSE – Net Gain will try to use a similar 'health warning' and will approach the Balanced Seas project accordingly.

- Worry that digitised versions of the outputs from the meeting may, because they look more 'official', assume a greater look of finality.
  RESPONSE – this can be countered by use of 'health warnings' (see above) and also possibly by using soft edges to delineate sites (helping to give impression of 'uncertainty' and future flexibility).

- It was suggested by members that Marxan could be useful when fed with broad scale habitat data including detailed information on coastal areas and better activity ('cost') data (such as from Fishermap). Someone (Regional Hub members?) would have to decide how to 'weight' the different sector activities.
  RESPONSE – acknowledged. This issue will be addressed at the forthcoming StAP meeting.

- If Marxan is used, the input layers would have to be considered by the Regional Hub members and they would also need to sign-of data as being fit for purpose.
  RESPONSE – noted. The approval of data layers could be done by StAP members to ensure consistency across the Hubs.

7. NEXT STAGES

Apart from highlighting the details of the next Hub meeting, this brief session was an opportunity to pick up on other points raised during the day.

- It was agreed that contact details for all Hub members could be usefully shared around (strictly between the East of England Regional Hub members). It was also decided that names of Hub members, and their organisations (but only those contact details agreed in advance with Net Gain) would be placed on the Net Gain website. There was also a suggestion about changing the sequence of meetings so that the North East Hub does not always happen first!
- 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.
- A proforma will be circulated to help Hub members liaise with their sector for input before the next round of meetings.

PARTICIPANTS

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

Net Gain East of England Hub – invitees for meeting on 25th March 2010

Hub member			
First name	**Surname**	**Sector**	**Notes**
John	*Abbott*	*Recreational angling*	***
Jane	Burch	Councils	
David	*Chambers*	*Commercial fishing*	*Unable to attend this meeting*
Helen	Chappell	Heritage	
Hester	Clack	Natural England	
Katie	Critchley	Environment Agency	
R J	*Docwra*	*Commercial fishing*	*Unable to attend this meeting*
Phil	Durrant	N Sea Marine Cluster	
Roger	Hipwell	Commercial fishing	
John	Hiskett	Wildlife Trust	
Aaron	*Howe*	*RSPB*	*Unable to attend this meeting*
Iain	*Johnston*	*Ports/Harbours*	*Unable to attend this meeting*
Roger	*Knights*	*Yachting*	*Unable to attend this meeting*
David	*Little*	*Commercial fishing*	*Unable to attend this meeting*
Dave	Lock	Diving	
Darren	*Marriott*	*Commercial fishing*	*Unable to attend this meeting*
Keith	*Mountifield*	*Recreational angling*	***
John	*Noble*	*Marinet*	*Unable to attend this meeting*
Graham	Pickett	Academic	
Tom	*Pinborough*	*Recreational angling*	***
David	*Richards*	*Commercial fishing*	*Unable to attend this meeting*
Mark	Russell	Aggregates	
Roger	Seago	Commercial fishing	
Hugh	Sims	Processing	
Barrie	Smart	MMO	
Rob	Spray	MCS	
Doug	*Stewart*	*N Sea Marine Cluster*	*Replacing Jim Hind this meeting*
Judith	Stoutt	SFC	
Kirk	*Stribling*	*Processing*	*Unable to attend this meeting*
Gillian	Sutherland	Renewables	
Chris	*Thaxter*	*Other NGO (e.g. NT)*	*Unable to attend this meeting*
Bob	*Thompson*	*Recreational angling*	*Unable to attend this meeting*
Helen	Thompson	Offshore renewables	
Kate	Tibble	Offshore renewables	
David	*Vicary*	*Recreational angling*	***
Ralph L	*West*	*Commercial fishing*	*Unable to attend this meeting*
Chris	*Wightman*	*Commercial fishing*	*Unable to attend this meeting*
John	*Winter*	*Commercial fishing*	*Unable to attend this meeting*
Jessica	Woo	ESFJC	

*** Withdrew from the meeting during the initial briefing session

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

- Steve Barnard – Stakeholder Manager
- Katerina Wojtaszekova – GIS & Data Officer
- Tammy Stamford – Liaison Officer
- Becky Radford – Liaison Officer
- Stephen Donkor – GIS Support Officer

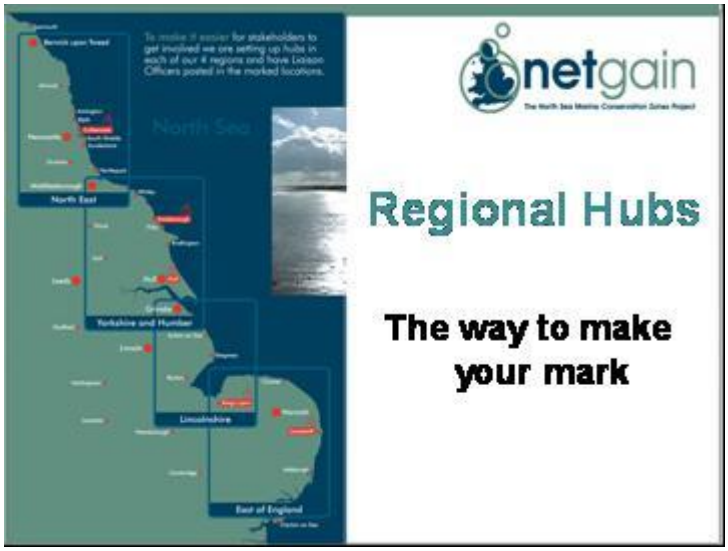
Independent facilitation support was provided by:

- Jeff Bishop - BDOR

APPENDIX 1

Slide 1

Slide 2



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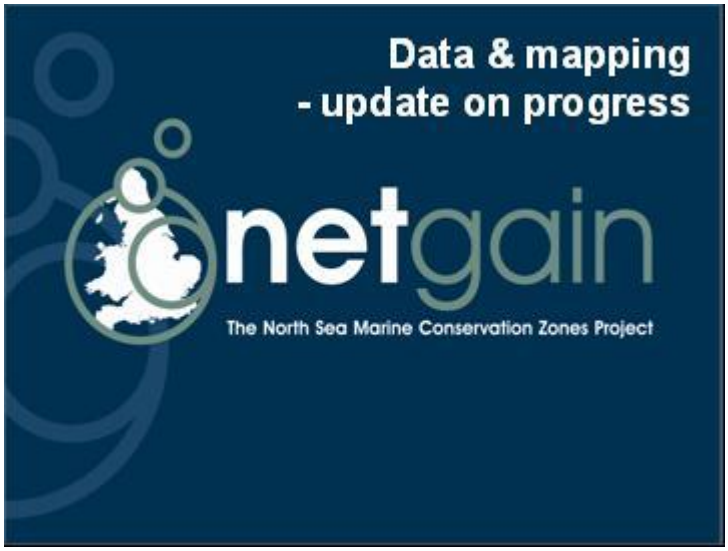

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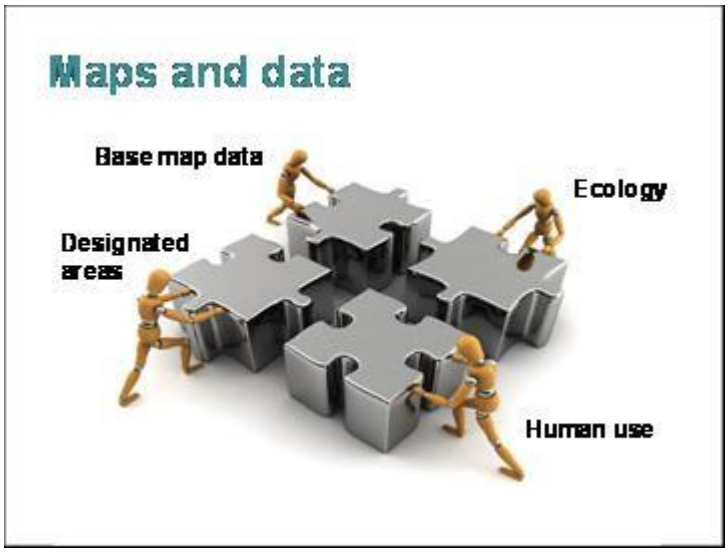

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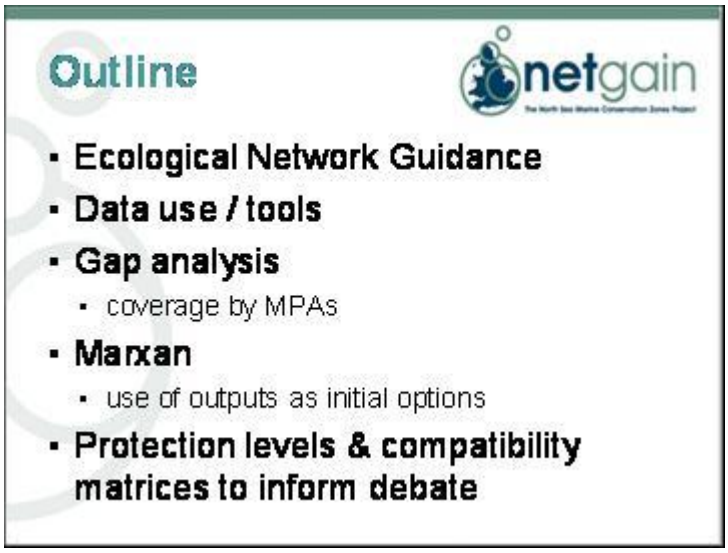

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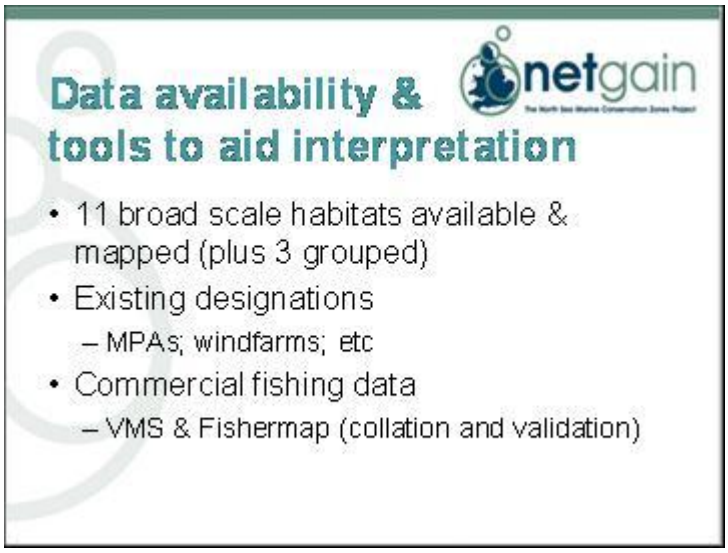

As Chiara has explained, information on 11 broad scale habitats is available and has been mapped.
This needs to be combined with other data sets as part of the planning process.
With this in mind I'd like to spend the next 15 minutes or so talking to you about how we can use the broad scale habitats 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.

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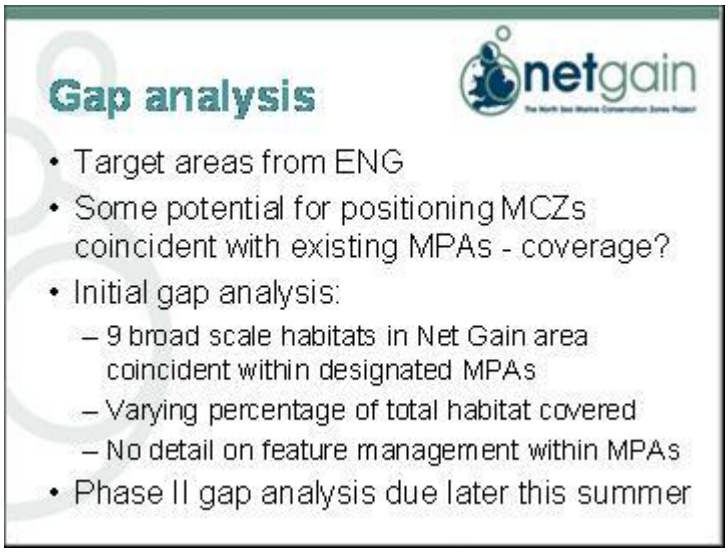

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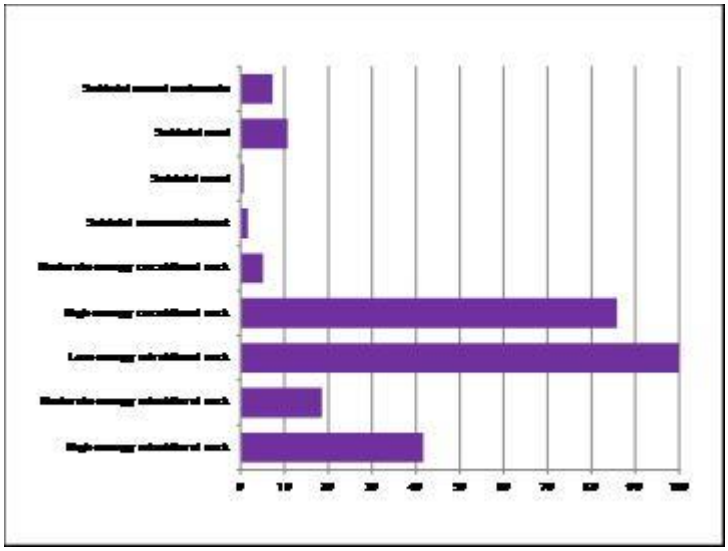

Three habitats – high energy circalittoral rock, low energy infralittoral rock and high energy infralittoral rock – are all very well represented within existing MPAs. Indeed, if the management measures in place in these MPAs provide protection for these broad scale habitats then they already satisfy 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.

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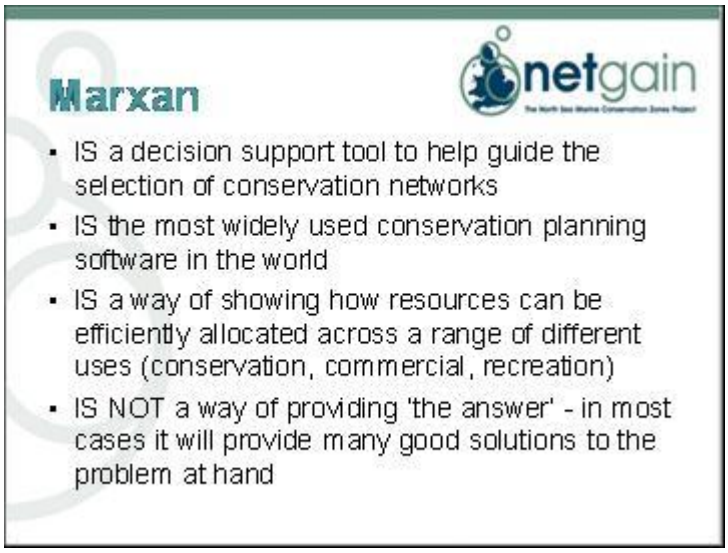

In using Marxan we are not moving away from our original idea of not drawing lines on maps but instead are responding to ideas and suggestions from stakeholders.
In part, its adoption is the result of suggestions made by members of planning groups in the other regional MCZ projects and from some members 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.

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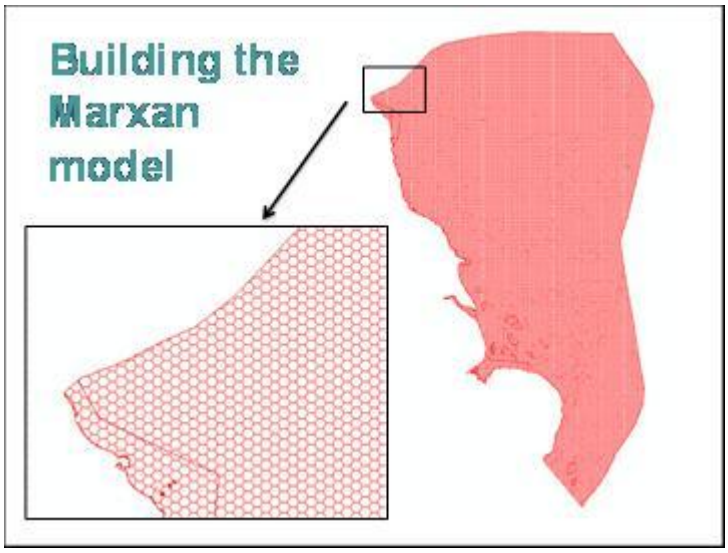
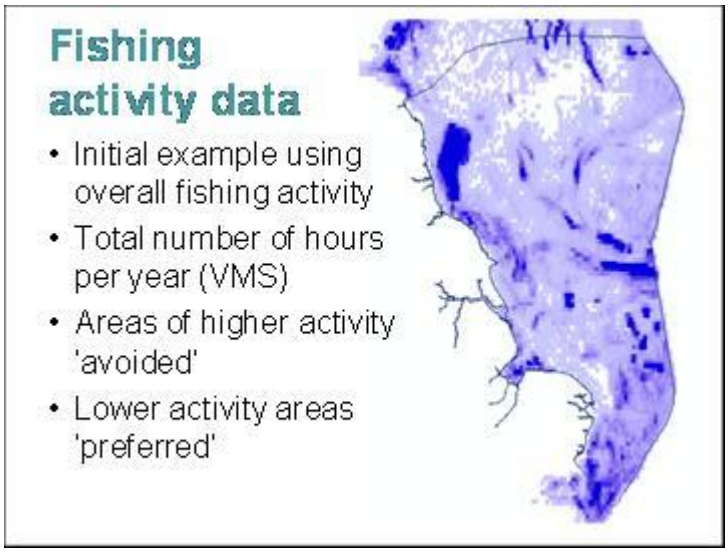


Marxan can be operated at different scales so if we want to be able to make use of inshore data at a more refined level we can do.
This might be because:

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

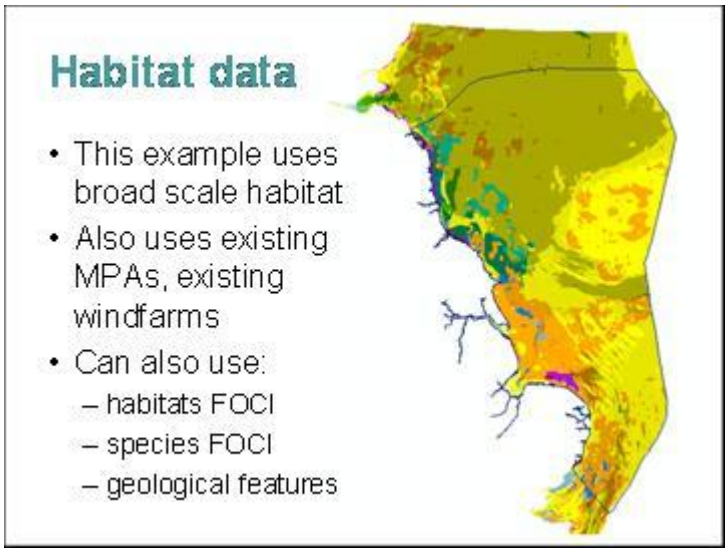
But to simplify this initial Marxan example we have used the same resolution inshore and offshore (both 5km^2 cells).
In the simple scenario presented here each cell in the Marxan model is checked against current data sets to see whether it is already within an existing MPA. Such cells would be automatically 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



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.

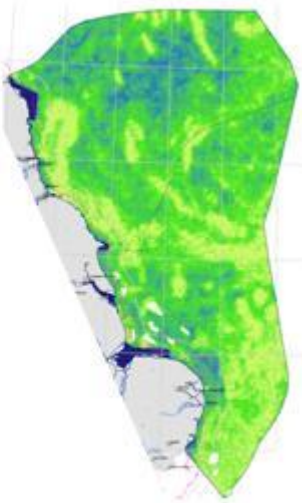
Slide 17



Slide 18

Selection likelihood

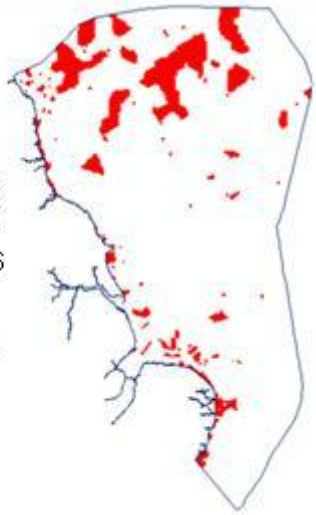
- Each Marxan 'run' consists of many thousands of trials
- Existing MPAs increase the likelihood of cell selection by the model
- High fishing activity or windfarm presence reduce likelihood of cell selection
- Multiple runs (100x) used to produce density map



Slide 19

Initial selections

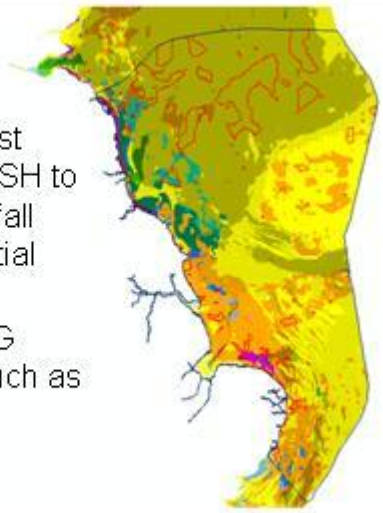
- Selection scores (density map) used to derives 'best' portfolio of areas for MCZ sites (shown in red)
- Can be used as initial starting point for selecting potential MCZs



Slide 20

Selections by habitat

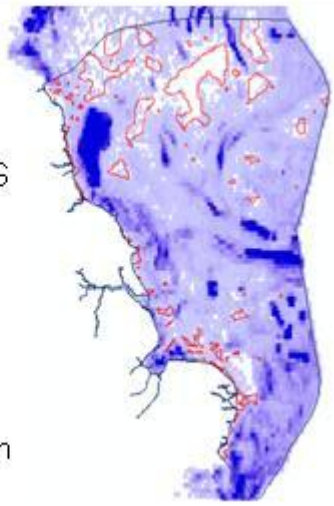
- Can overlay 'best portfolio' over BSH to see how BSHs fall into each potential site
- Apply other ENG requirements such as connectivity



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



Slide 22

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.

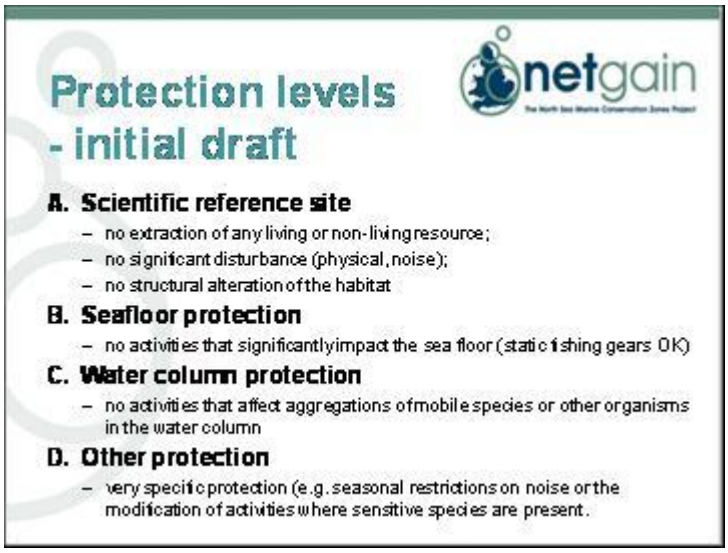
It is not the role of the regional projects to recommend what management measures are required in order to achieve the conservation objectives. However, when developing an opinion on a proposal to recommend a given area or site as an MCZ, stakeholders need to understand how their sector, their activities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

Slide 23



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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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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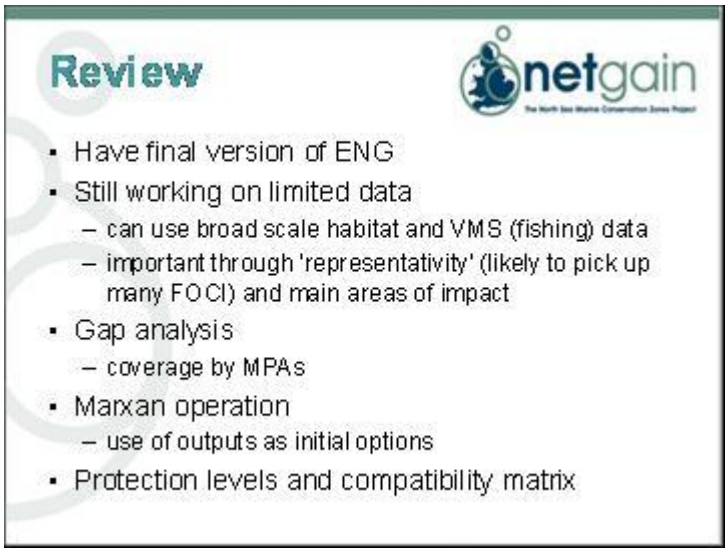
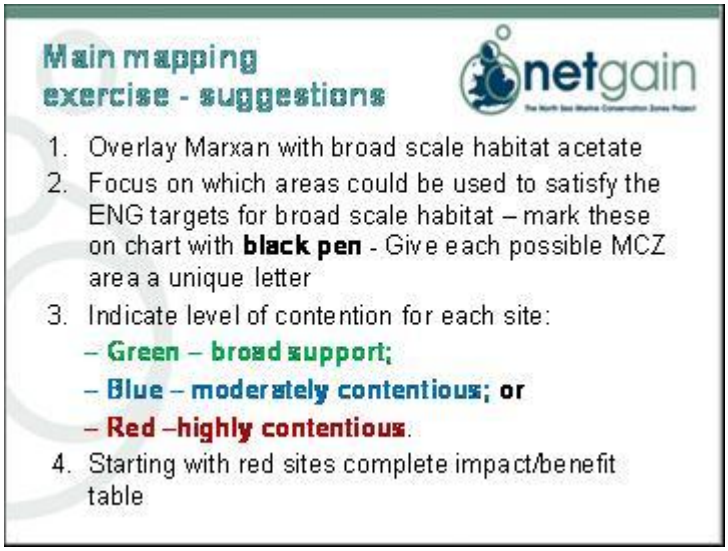
Slide 25



Slide 26

Slide 27



Slide 28

Slide 29

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Slide 30

Slide 31

Slide 32


Thank you for your contributions today
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The North Sea Marine Conservation Zones Project