CAG CONSULTANTS

Developing a participatory approach to the management of fishing activity in UK Marine Protected Areas

WORKSHOP 4 – LONDON – OUTPUTS - DRAFT

INFORMING POSITIVE CHANGE

Developing a participatory approach to the management of fishing activity in UK Marine Protected Areas

Workshop 4 – London – Outputs

VERSION	DATE	VERSION SUMMARY	APPROVALS
RO	12/12/2019	V1	Principal authors: Anna Bullen
			Approved by:
R1	21/01/2020	V2 Incorporating comments from partners and stakeholders	Approved by: Gerard Couper
R2			Approved by:
R3			Approved by:

CONTENTS

1   Introduction

The last of our multi stakeholder workshops was held on 7th November 2019 in London. Its primary aims were :

- To bring back together both regional groups and the advisory group to consider variations in approach or solutions between the regions, seeking to achieve a shared understanding of the main outcomes of the work.
- To reflect on the project to date in terms of what has worked well, what didn't work so well and lessons for the future.
- To explore the potential legacy of the project, in particular how to disseminate the toolkit and lessons learned.

1.1   Our approach

The outputs were developed through a series of presentations that were followed by discussion sessions, whereby questions were posed and discussed in detail, led by independent facilitators. Representatives from the project partners were part of the discussion groups, available to answer project specific and regulation questions.

The outputs of the workshop are summarised in this report. They will be used in the development of the final project outputs.

1.2   Report structure

Section 2 of this report provides details of the workshop participants. The remainder of the report is set out according to the workshop sessions and specific questions asked and presents key discussion points. This report is not an analysis of the outputs but a presentation of everyone's input to the discussion, whilst also highlighting key themes that arose from those discussions.

2 Workshop participants

Name	Organisation	Stakeholder category				
		Fishing industry	Conservation / NGO	Scientific / research	Other industry	Regulator
Project partners						
Louisa Jones	JNCC					X
Declan Tobin	JNCC					X
Alice Doyle	JNCC					X
Lowri Evans	Bangor University			X		
Jan Hiddink	Bangor University			X		
Viv Roberts	Marine Management Organisation					X
Nick Greenwood	Marine Management Organisation					X
Mike Quigley	Natural England					X
Dale Rodmell	NFFO	X				
Project Advisory Group						
Edward Hind-Ozan	Defra					X
Stakeholders						
Gareth Cunningham	RSPB		X			
Emily Baxter	Cumbria Wildlife Trust		X			
Lydia Tabrizi	Cumbria Wildlife Trust		X			
David Ras	VisNed	X				
Carol Barbone	Aberdeen university			X		
Caroline Salthouse	North West Coastal Forum	X	X	X	X	X
Stephen Thompson	Eastern IFCA					X
Melanie Hartley	North Western IFCA					X
Rowland Sharp	Natural Resources Wales					X
Sarah Young	World Wildlife Fund		X			
Kenny Coull	Scottish Fishermen's Federation	X				
Harry Wick	Northern Ireland Fish Producers Organisation	X				

3   The MPA Toolkit – what's in it and how can it be used

3.1   Presentation on the toolkit

The toolkit is almost complete, and has come about as a result of the input of all the stakeholders involved in the project. A presentation was given about the toolkit elements and what is planned for it, which covered the following key points:

Who is the toolkit for?

- Regulators
- Advisors
- People and organisations involved in management reviews (relevant stakeholders)
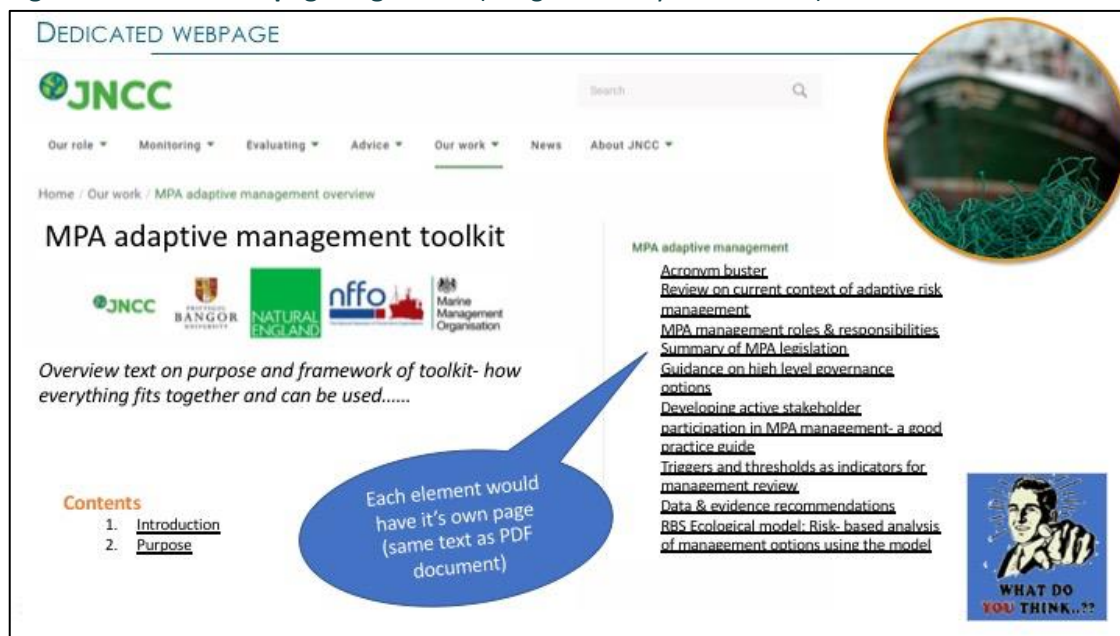
What is the aim of the toolkit?

- To explore the process of making management decisions;
- To produce a framework for delivery of an effective process for reviewing the management of UK marine protected areas (MPAs) that deliver the conservation objectives alongside sustainable use of marine resources;
- To establish mechanisms for all parties to bring information to the decision-making table;
- To build capacity within the fishing industry to contribute to the management process.

Where can you find it and what will it look like?

- The toolkit will be hosted on a JNCC project specific webpage as a combined PDF providing the framework and including all elements, and with all elements separated onto tabs/pages in the dedicated webpage.

Figure 1 How the webpage might look (image courtesy of ©Seafish)

Progress so far

Documents that are published and available on the website:

- [Acronym buster](#) (please note an updated version will be published in March 2020);
- [Review on current context of adaptive risk management;](#)
- [Workshop reports and presentations](#) (workshop outputs);
- [Summary of MPA legislation](#);
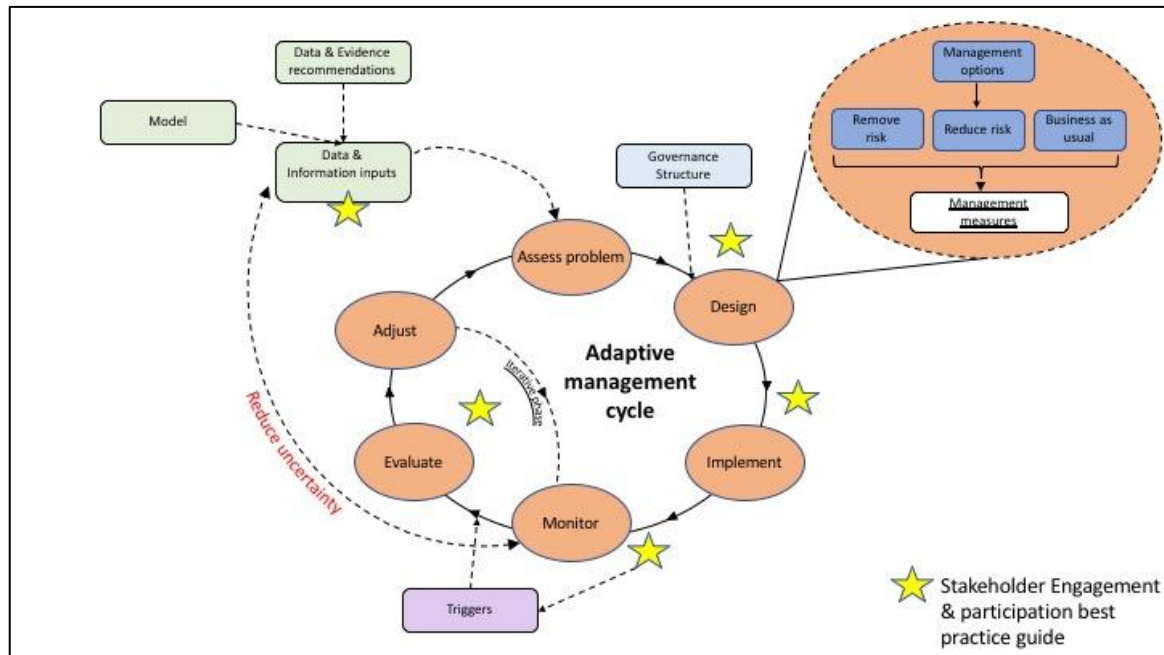- [MPA management roles and responsibilities](#).

Please note the above documents are currently available online, however some will be updated and all will be incorporated into the final MPA Management Toolkit so these links will become inactive.

Documents that are ready for final review and comment (*these will be incorporated into the final MPA Management Toolkit and published in March 2020*):

- Guidance on high level governance options;
- Triggers and thresholds as indicators for management review;
- Data and evidence recommendations;
- Developing active stakeholder participation management - a good practice guide;
- RBS[1] Ecological model
  - o Risk based analysis of management options using the model
  - o Legacy training materials
  - o Model application prototype.

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[1] Relative Benthic Status

Figure 2 How the toolkit elements fit together and feed into the adaptive management cycle

3.2 Feedback on the toolkit

Workshop participants were asked to provide feedback on the toolkit, taking into consideration how they are likely to use it and how it can be best accessed by others. It was noted that a combined PDF that incorporates all elements will amount to approximately 100 pages.

Feedback included the following:

Format

- Final file size is important; it needs to be easily transferable (e.g. by email).
- It might be better to have a summary document and then signpost readers to detailed documents online.
- The webpage and summary document need to draw people in and then signpost them to information relevant to their use.
- The reader should be able to answer the questions: 'what does this mean to me?' and 'How can I use this?'
- The webpage should have titled buttons to link to relevant sections in the full document, and make it clear who should be using them (regulators, fishers etc.).
- Consider use of colour coding.
- The document should be electronic based, with linkage between sections and elements.
- There will be complexity in maintaining updates so version control is very important with a clear audit of changes made.
- There should be one document for download and an interactive website. The document can then summarise and use examples written in plain English with the technical content on the website for experts.

- Link text and diagrams.
- Check figure numbers and footnotes.
- Better framing of a participatory approach as a context for adaptive management.
- It's good to have all the elements in one place.
- The presentational style is not problematic.

Navigating the document

There were a number of comments about the document being **hard to follow.** Suggestions made to address this included:

- Create a visual navigation tool (potentially using an interactive presentation to guide users through the various elements of toolkit).
- Create a summary document (2 page max) with links to more detailed sections, highlighted who the audience is, what information is provided and how / when the information should be used.
- Present more visually – start each section with a visual summary.
- Ensure that there is a consistent structure in how the information is laid out and language used.
- An interactive document and colour coding would be helpful.

Content

- The content of each section needs to be quickly and easily understood; first impressions count. Users need to know at a glance if it is applicable to them. This can be achieved using different weights of text / boxes etc. and is also applicable to the website. This avoids the potential frustration of wading through documents and unnecessary detail.
- Guidance is needed on how to interpret the conservation objectives of each site *(NB this is provided in conservation advice packages[2] [3]currently published by JNCC and Natural England).*
- The change log / audit of discussions will need to be managed for each site and presented clearly and simply, and accessible to all *(NB these are available on the site information centres / designated sites system under management measures, but a decision history/audit is a good idea to include).*
- Don't use the same image on all the documents, it is confusing.
- The MPA Management toolkit needs to have links to all the protected sites in the UK and their conservation objectives so they can be quickly accessed *(NB this is available on JNCC website (Site Information Centres) and Natural England designated sites system).*
- The toolkit needs more examples of agencies where this has been applied. These should be practical examples (and not sugar coated ones) to help stakeholders understand what approaches have been taken in what areas. The examples can then link to various documents for further detail on what each means.
  - NB: IFCAs already have their guidance documents and use participatory models

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[2] http://archive.jncc.gov.uk/default.aspx?page=6849
[3] https://www.gov.uk/government/collections/conservation-advice-packages-for-marine-protected-areas

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- http://www.association-ifca.org.uk/map/

Presentation

- Duplication is evident throughout the documents.
- If the document is publicly available, then it needs to be accessible to all. Plain English will allow this and also reduce text and size. (However, a regulator mentioned that sometimes plain English can disengage specialists who should be adhering to the guidance provided and following the steps etc., but because it is put too simply they ignore it or don't find it useful. You need to have a balance of detailed content in user friendly dialogue, but not patronising).
- Using colour coding is useful to separate out a document, e.g. biodiversity and conservation one colour and fisheries aspects another colour.

The audience

- Bear in mind the audience when supporting the development of a participatory framework. The responsibility of management sits with regulators, so the choice of how to manage the process sits with the regulators. Therefore, the key audience is the regulators. Once this decision is made, then the toolkit provides options.
- The audience seems to be quite nebulous at the moment. Each element needs a clearly identified audience.
- Provide a training session for key people who can then disseminate information further to colleagues.
- When reading the documents, it feels like the links between the components are not clear enough; highlight who the audience is and target the information to avoid what they probably already know (link to previous comment about signposting individuals more clearly to what they need).
- The toolkit is not only for regulators and advisors,[4] but also for stakeholders to see the background behind types of governance structures and processes and understand how they can be heard. Is it possible to separate this in the documents so there is advice on the process for regulators to engage stakeholders and then advice to stakeholders on how best to engage? This then makes the toolkit more accessible to a range of users, and clearer on how each user can get the information they need.

The website

- Use a diagram to structure for different audiences and offer ways in to different sections.
- Track the statistics on website traffic to gauge interest and future use.

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[4] An overview of the key bodies responsible for managing fisheries in English waters can be found here: http://data.jncc.gov.uk/data/f18ada77-4d03-4e15-9082-710a74e2ed2f/MPA-ManagementRolesResponsibilities.pdf

- Include a feedback portal for users to provide working feedback?
- For an example of an effective layout look at the DTA barrister website[5], which provides advice on how to use advice on MPA management. It is a good example of a means to set out a complex topic in a way that is accessible, and allows a user to identify which sections are relevant to them.
- The reader needs a quick understanding of what is in each section, so they know whether it applies to them or not. This can be achieved using different weights of text and boxes etc, and is also applicable to the PDF version.
- The website should provide a funnel to further detail (sensible title > clear message > further background> detail).
- Upfront should be bright, accessible etc. with a gradation of details.
- OSPAR set up a good example, with information at the top and drop downs to click through. It is essential that it is mobile friendly.
- The JNCC website is more Wikipedia search-based rather than a hierarchy. JNCC needs to adhere to accessibility rules (same colour font, same size font etc.) so there may be limitations in interactive ability. An interactive presentation or video could be used to guide people through.
- Getting people to the website is key; we need to raise awareness and identify whose behaviour we are trying to change. They need to be actively engaged and feedback sought.
- A communication strategy and dissemination strategy are key to presenting the tool externally - use links to other projects and sharing forums.
- Snippets of lessons learned (video format or written testimonials) can be put on social media, which can easily be shared and flagged. Using testimonials makes the site (and document) more interactive.
- If having lots of separate pages, please ensure there's an overview diagram to help with navigation (this is currently an issue on the JNCC website!)
- It would be useful to have one document that compiles the whole toolkit and can be used as a manual by regulators to develop a participatory approach.
- It would be useful to have stakeholder resources, e.g. the acronym buster, that can be easily accessed by stakeholders and downloaded as resources by regulators to use in meetings and workshops to ensure engagement and understanding.

In summary, it was agreed that it should be available as one document in full with a two page summary and links to further detailed documents.

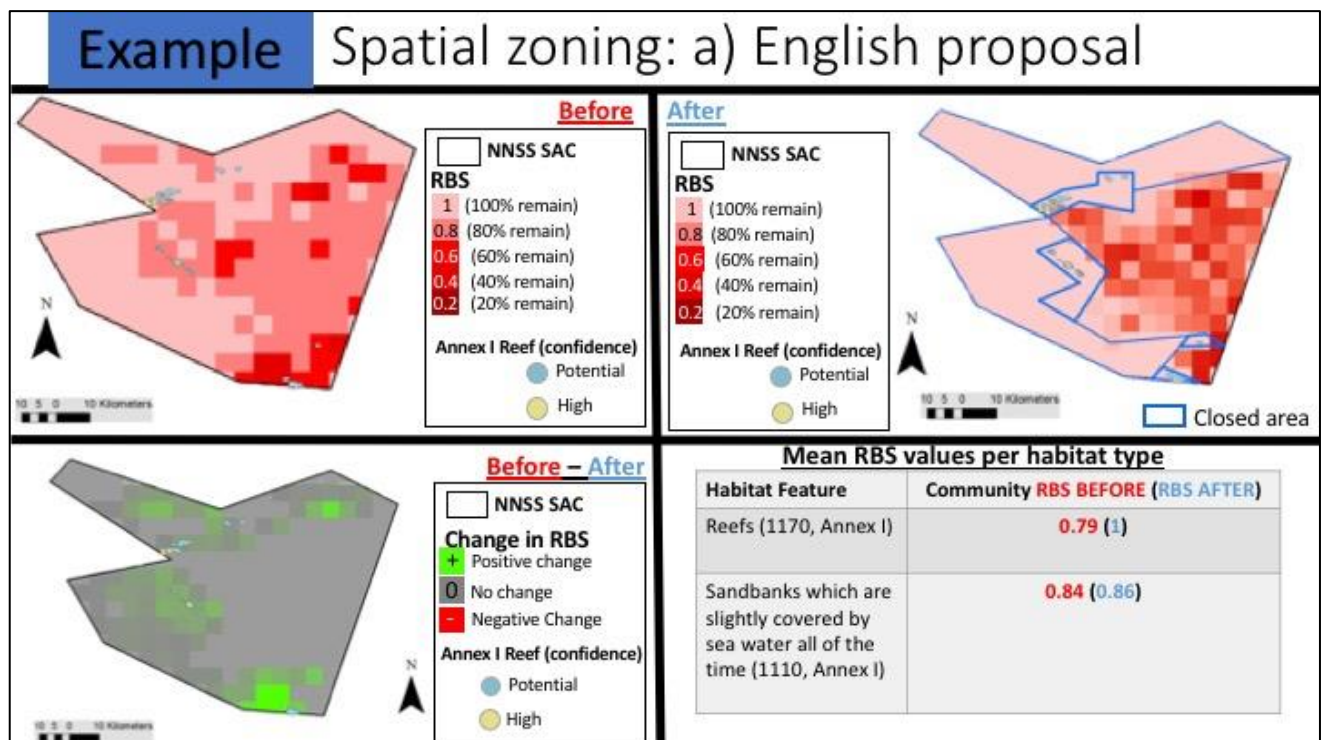[5] https://www.dtapublications.co.uk/

4 How to use the ecological model for participatory management

Lowri Evans (Bangor University) gave a presentation and ran an interactive session on how the ecological model might work.

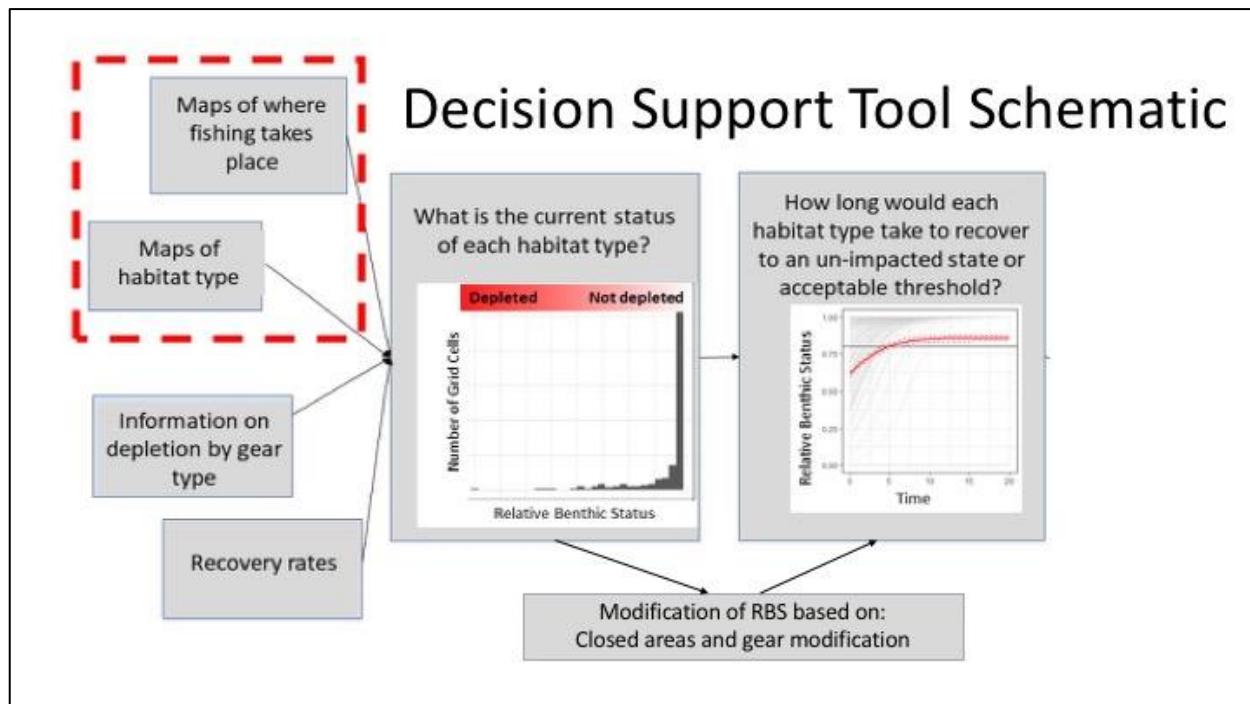In workshops to date, the main ideas for modelling have been based on:

- Complete spatial closure;
- Partial-spatial closure (with and without displacement);
- Partial-spatial closure focussed on the most sensitive habitats;
- Gear modifications.

Figure 3 Example of spatial zoning for modelling[6]

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[6] NNSS SAC: North Norfolk Sandbanks and Saturn Reef Special Area of Conservation

RBS: Relative Benthic Status

Figure 4 Decision support tool schematic

Lowri explained that updates have been made to the functionality of the application, and by January 2020 the Benthic Impacts Tool (BIT) will be able to modify RBS based on potential management scenarios of spatial closures and modification to gear types.

In February technical training will be delivered on how to use the tool. This will be available to 10 participants, with the focus likely to be regulators / advisors. A user manual (guidance) will be provided to give background, context and caveats associated with the Benthic Impacts Tool. This will also provide guidance on how to sort data formatting.

The tool is written in 'R' open source software so is good for accessibility. However, this is not what the regulator will be working with, they will use a background code for application which is web based. The tool is user friendly with announcements to guide users through the tasks

Questions and summary responses
If working with non-VMS data (small boats) how do you get and process the data?
In order to process fishing effort data through the tool, we need the area swept by gear, the longitude, latitude and gear type. By early next year, the user of the tool will be able to specify the spatial resolution of the data they have. The tool then uses this information to calculate the swept area ratio (SAR).

The Swept Area Ratio provides a mean value across an entire cell, therefore the spatial resolution chosen by the user is very important and will relate to the coarseness of the data input and the data output from the tool. Data may be missed if a coarse resolution is chosen by the user, however, the

smaller the cell size (i.e. finer the spatial resolution), the more detail will be captured by the tool. We are unable to isolate single tracks within the tool.

The Benthic Impact Tool (BIT) gives you information to feed into discussions for the participation model. It is by no means the only answer. The danger of having a tool is it makes people think that it is providing the final answer; so, this needs to be highlighted in the training etc. Also, you need to acknowledge this is an indicative tool; it relies heavily on the expertise of the person using it and what information that person has access to as well as how they interpret the results. Misinterpretation or errors in data that are unchecked can lead to very negative inputs to discussions and subsequent distrust.

Data (like VMS) has a level of fuzziness, which initiated some debate on the level of detail in the model and how this can be used. Consensus was reached on the importance of caveats and training and ensuring the correct level of detail is provided to discussions. This links to roles and responsibilities, e.g. who writes and informs the discussions? (regulators and advisors), so it is perhaps better they operate the tool and feed into the stakeholder discussions, ensuring transparency around the model outputs and methods etc is always made clear.

Longevity of species used in the model has been taken from existing literature, looking at community analysis, and reviewing species and entering longevity/life span. There was a suggestion that this could be automated using a database of baseline longevity to ensure consistency when using the model.

Instead of using species could biotopes be used?
The reason we focus on species, is that we require information / data on the lifespan of species. Biotopes can be used for the habitat map input. If detailed species information is not available, no problem. We also have a default option for users that do not have species information – this default value is a precautionary recovery rate based on a meta-analysis of global studies (Hiddink et al., 2018)[7]. You can run the tool at a range of resolutions, but you need an assumption of 'non-fished community' data, which is problematic to source.

By using individual species, the tool is reductionist, but what about the ecosystem approach, exploring and presenting the connections between species?
The tool is not ecosystem approach based; we need to make sure this is clearly included in any caveats. It looks at the effects on total benthic organism biomass after certain fishing pressures, with variations in the assessed effect depending on the type of sediment for which the assessment is done. The tool feeds into discussions, where other information (such as ecosystem linkages etc) can be brought to the table. It should also be noted that the tool does not include fishery target species.

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[7] Hiddink, J. G., Jennings, S., Sciberras, M., Bolam, S. G., Cambiè, G., McConnaughey, R. A., and Parma, A. M. (2019). Assessing bottom trawling impacts based on the longevity of benthic invertebrates. *Journal of Applied Ecology*, *56*(5), 1075-1084.

How does the removal of targeted species affect the recovery rates - are there ecological links between target species and community?

Recovery rates presented in the tool are predicted and included in the metadata. No modification (i.e. to make the recovery rates site specific) is not possible as estimating recovery rates at this scale is tricky and open to contention.

The recovery rates of target species are typically modified by human activity – as humans do not allow target species to achieve their potential lifespan. Therefore, it is best to not include target species when processing data through this tool.

Why does the tool not use EUNIS - then you would automatically know the sediment type?

With EUNIS you would know habitat / sediment type, but the tool has been developed to be applicable worldwide, so it can accommodate data where sediment type is unknown for the habitat.

Previous feedback that has been taken onboard in developing the model

The maps produced through the tool are interactive - you can click on cells for individual values and zoom into areas etc. This provides a good level (and range) of detail, which was suggested in previous workshops.

Recovery over years was another suggestion from the workshops, which has been incorporated into the BIT.

Further modifications are being developed for the Benthic Impacts Tool which will be ready in February for testing and further targeted training, including:

- Recoverability is calculated based on the cessation fishing, which is calculated after RBS, whilst RBS is calculated based on the current status quo.
- Consider closed areas / modify gear type (values that form the depletion value)
- A user manual will be produced alongside the training course and will highlight the science behind the model and include all questions raised in the workshop as well as any limitation, assumptions etc.

The baseline data considers areas that haven't been fished, so recoverability considers how long it would take to get back to a non-fished community. This needs to be included in the caveats since, if using an ecosystem approach, you would need to ascertain the level of recoverability which is suitable to achieving the conservation objectives of the site. We are aiming for favourable conditions (probably not the same as completely unfished). *[This led into discussions about what are favourable conditions for each feature, which is not an easy thing to pin down.]* Conservation is about ensuring that the natural environment and its supporting functions are maintained into the future. As such, we need to manage activities to ensure their impacts do not negatively affect our natural assets long-term. The natural environment is incredibly complex, making it difficult to determine to what scale it will respond to management. However, based on our understanding of resilience and recoverability, we can assess whether management is likely to result in a positive change and it is

important to impliment measures where activities are having sustained negative impacts even in the absence of a management 'target' (i.e. the precautionary approach).

Short lived species recover faster and this could affect longer lived species' recoverability. The tool works on the biomass of the whole community and correlates to age structure and food web processes etc. We are looking for RBS to improve within the assessed area, if this is the desired outcome, and this will be linked to the original age structure. The RBS model does not consider any further food web dynamics, offering a simple insight to potential recoverability based on age structure. The simplicity of the RBS model allows for the simplicity and low-demand for data layers – the more complex the model, the higher the demand for data will be.

How robust is the model if you're lacking data - default values for longevity options and depletion options?
The default options available in the Benthic Impacts Tool have been peer-reviewed in the scientific literature. These peer-reviewed default values are the best estimates that have been developed so far and are based on global meta-analyses (Hiddink et al., 2018[8] and Hiddink et al., 2017[9]). These values are also considered to be precautionary, as they are taken from the lower confidence intervals of the mean value, rather than the mean itself.

In the future, we hope to open this up further, so if certain depletion values are available for specific gear types these can be processed through the tool. However, these will need to be justified by the user.

Future development suggestions:

Would it be possible to tweak the parameters on a site by site basis?
Customisation to a site occurs through unfished community data - what and where this is.

Can the penetration depth be changed?
Seine netting data always appears as the highest impact and this isn't necessarily true. Changing the penetration depth could be used to estimate depletion. Penetration depths are built into the swept area calculation so penetration depth doesn't apply; however, there are caveats around gear type etc. and additional information (expert judgement / experiential data would be incorporated into discussions).

What are the confidence intervals - overall recovery rate for assessment area / habitat type?
We need confidence intervals around that recovery rate, as the model does not depict reality; the difficulty is what confidence level to choose – it is generated in uncertainty of depletion and

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[8] Hiddink, J. G., Jennings, S., Sciberras, M., Bolam, S. G., Cambiè, G., McConnaughey, R. A., and Parma, A. M. (2019). Assessing bottom trawling impacts based on the longevity of benthic invertebrates. *Journal of Applied Ecology*, *56*(5), 1075-1084.

[9] Hiddink, J. G., Jennings, S., Sciberras, M., Szostek, C. L., Hughes, K. M., Ellis, N., ... & Collie, J. S. (2017). Global analysis of depletion and recovery of seabed biota after bottom trawling disturbance. *Proceedings of the National Academy of Sciences*, *114*(31), 8301-8306.

recoverability values. The range of uncertainty propagates from values. So, the model can give a 'most likely' result but it needs associated confidence intervals i.e. a range of RBS scores within that.

5 Stakeholder Engagement – principles and best practice

Louisa Jones (JNCC) provided a presentation on stakeholder engagement: principles and best practice; summarising the document that has been drafted by project partners (see presentation). The document collates previous discussions from the workshops around stakeholder engagement, referencing more general stakeholder engagement principles and best practice and providing case studies. The document was circulated ahead of the workshop to participants for their review.
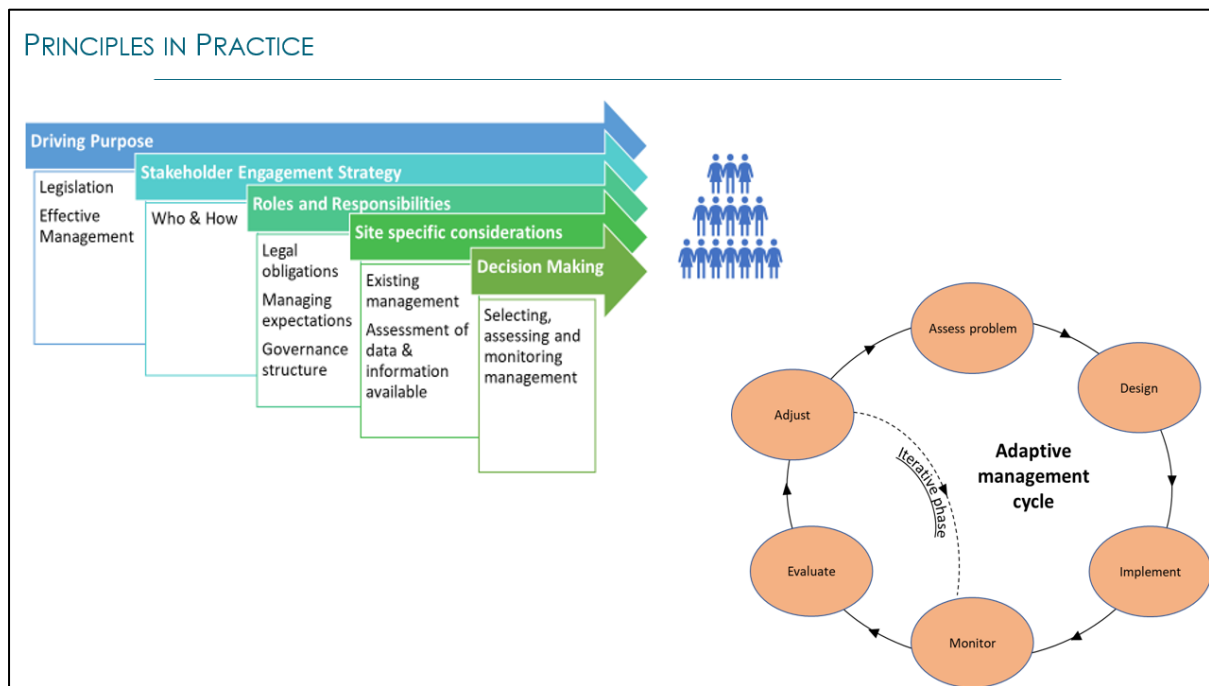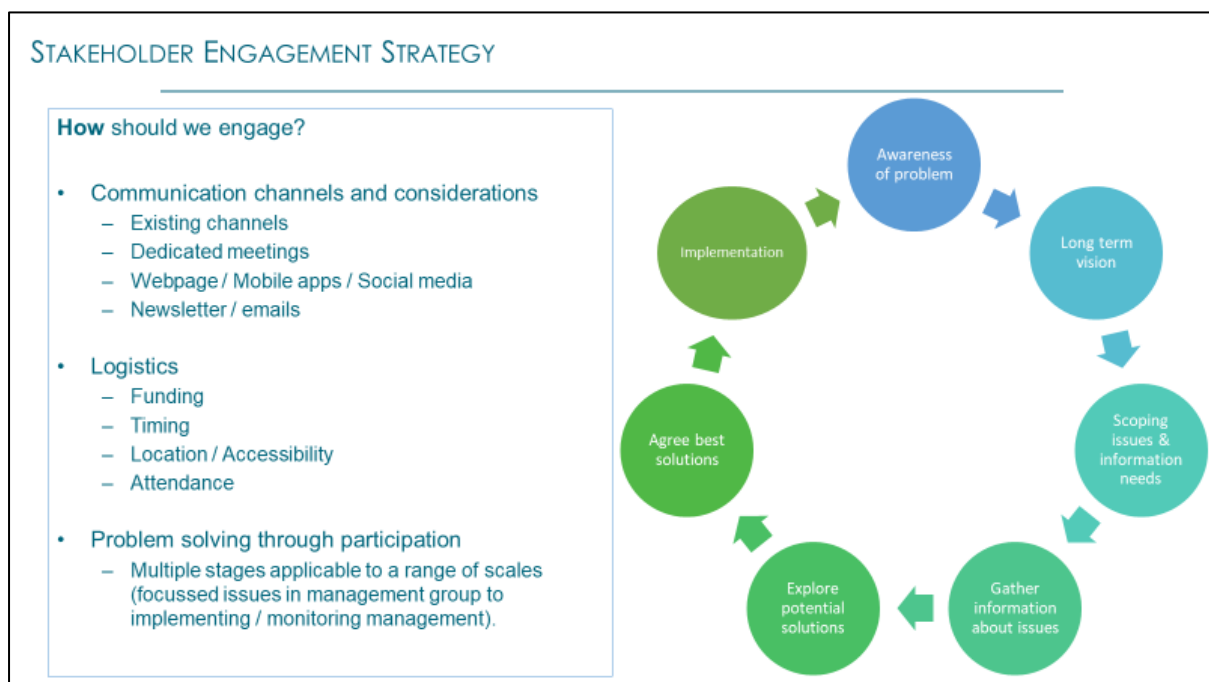
Figure 5 Principles in Practice slide

Figure 6 Stakeholder engagement strategy slide

General comments

- The aim should be to make this a 'go-to guide'.
- The document is too long, but the content is good.
- Fix the title, e.g. 'Basic principles'.
- Fit the narrative to the readers' needs.
- A focus is needed – there are lots of other guides (e.g. IFCA's guidance documents[10] – it needs a selling point (such as producing resources (leaflets / posters etc) which can be used as handouts).
- Lots of guidance already exists – for example, Scotland has a participation law[11].
- In terms of the question (put up on the slide) about Government principle-based standards, there are none relating to stakeholder engagement, apart from the one about biological diversity which mentions stakeholder engagement.
- ARHUS convention – UK is signed up, this could be included as a Government-based principle.
- Who is it aimed at? You need to define the target audience, e.g.:
  - Regulators
  - Competent/relevant authorities
- The problem with engagement is not necessarily a lack of documentation; capacity building and training is more important than supporting documents.
- Quite a bit of duplication *(to be addressed when the documents are combined).*
- Navigating the document was an issue in the current format.
- Cut it down – the purpose is stakeholder engagement not governance; roll the two together.
- Need an end point – rather than increasing what we want, we need to be realistic about what can be achieved.
- Expand the framework into figures – decision making vs management review.
- Evidence – score on participation and outcome measures.

Content

Why engage?

- Include why you should engage right at the beginning of the document (rather than the current intro), drawing on evidence that is in the case studies.

10

http://www.associationifca.org.uk/Upload/Reports/The%20IFCAs%2020112015%20Achievements%20and%20Success%20Report.pdf
http://www.association-ifca.org.uk/map/

11 https://www.gov.scot/policies/community-empowerment/

- In presenting the benefits of engagement, it would be good to mention what would happen if you don't use a participatory approach. It's important to mention that while there is effort involved in engagement, there is also a benefit.
- Provide feedback on how it affects people – what are the objectives?
- 'Why engage' is laboured – 'how' is more important.

How to engage

- Provide a statement of community participation.
- If there is uncertainty/high stakes on the outcomes, push type of engagement up the ladder of participation.
- Think about what the factors are that drive what participation levels are appropriate.
- When stakeholders have got lots of information to contribute there is a degree of impact; think about how to weight the information and not leave anyone out but not end up with varying views where it is difficult to reach consensus?
    - In response: it's inevitable that there will remain differences of views. I know there is in some quarters a feeling that with more information, everyone will come around to the same point of view. I think this is unlikely to happen except in the most blatant of cases (e.g. "dynamite fishing in small ponds is not a sustainable method of fishing" – and actually, even then, someone would do it).
- Conflicts - objectives vs outcomes.
- Provide an independent chair/facilitation for the process.
- How to maintain stakeholder engagement?
- Liaison groups – links back to Government bodies.
- You need a central point of contact (person)
- Results based management:
    - Provided by stakeholders
    - Regulators play more of an audit role
- Flag logistical/practical constraints of co-management.

Expectation setting

- Manage expectations – honestly / clearly.
- Highlight legal standings
    - What is possible
    - Defined outputs
- Defining the boundaries is important.
- Expectation management needs to be more prominent – if compromise is not possible it's got to be evident.
- One size doesn't fit all; you can't please everyone all the time.
- Increased involvement brings increased possibilities to influence, but also increased obligations to participate. People cannot expect to be fully participating if they do not attend the meetings.
- Be clear on the status of outcomes and process.

- Stakeholders must understand the process/timeline.
- Be clear, regardless of the site, difficult decisions need to be made.

Stakeholder mapping

- Stakeholder review/mapping is an ongoing process – needs refreshing periodically.

Consensus

- Consensus unachievable? Be realistic?
- Building consensus (as opposed to consensus decision making) – clarify what you mean.

Case studies

- The case studies are accurate, but what about updating/including new examples as appropriate?
- CWT suggest mussel/cockle bed management – see the Morecambe Bay example.
- One participant felt that Shell Lune Deep is a bad example due to poor engagement/participation.
- The case studies need to provide a complete picture, not cherry picked.
- The case studies need to be mindful of the challenges.
- Need to be more forthcoming on mistakes made.
- More case studies.
- Like the description of engagement in current context – what can and is being done.

What's missing?

- Provide a section for further reading – combine with references.
- Include the principles of data collection.
- NGO links?
- Need data on people's perception of how the process has gone, lessons learned- create an evaluation process?
- Need a mechanism to capture lessons learned over time.
- Include information on Procedural justice theory [12].
- A mechanism is needed for considering socio-economic impacts; make the trade-offs clearer.
- Offshore focus not evident (other MS and offshore fleets).
- Be more explicit on lessons learned.

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[12] **Procedural justice** is the idea of fairness in the processes that resolve disputes and allocate resources. Procedural justice concerns the fairness and the transparency of the processes by which decisions are made.

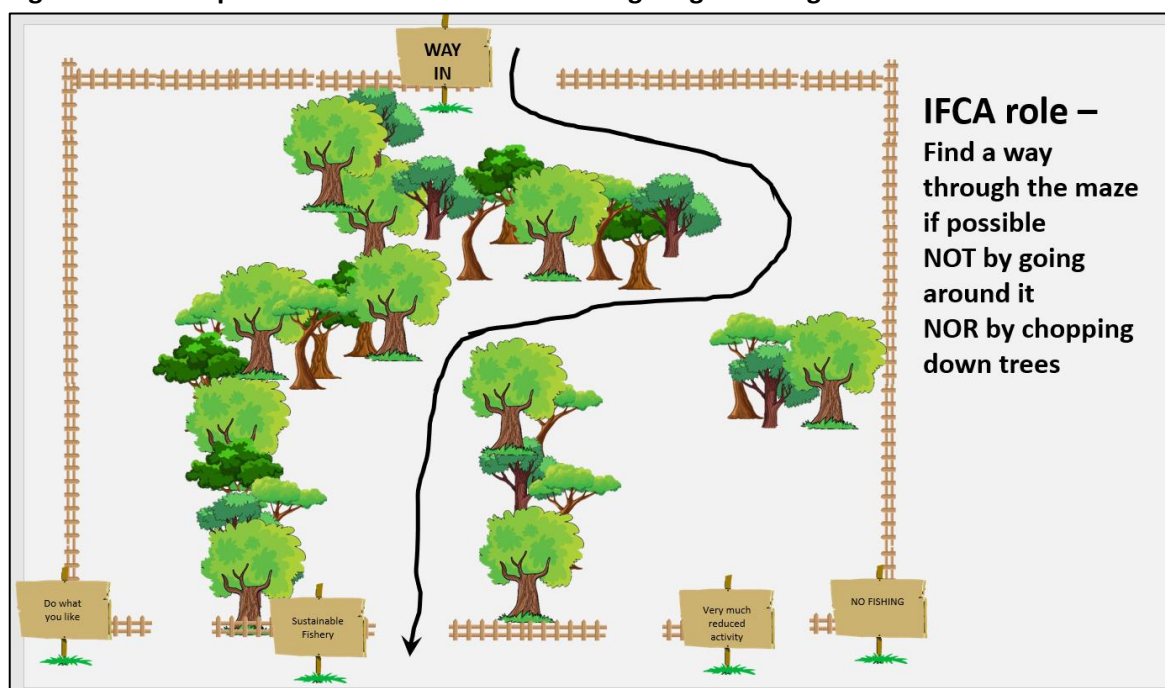# 6   Project reflections and thoughts for the future

6.1   Case study – Eastern IFCA Community Voice Method

Stephen Thompson (Eastern IFCA) opened the session with an overview of the community voice method project, which took place three years ago. A handout was provided for more detail and further information about the project can be found in the following links:

- Eastern IFCA's film - https://vimeo.com/191148781
- Overall method link to the CVM method film – https://vimeo.com/150885111
- The 'Common Ground Report' identifies desired outcomes arising from the project http://www.eastern-ifca.gov.uk/wp-content/uploads/2015/05/Common-Ground_final-report1.pdf

Stephen gave a presentation sharing his views of how the process works, and visually demonstrated through a pen (representing an MPA) with trees in it (representing what the Statutory Nature Conservation Bodies (SNCBs) advise needs to be protected). Please note these are Stephen's impressions and opinions he shared with us and, as noted in his presentation, these were not presented as the position of Eastern IFCA, nor of the IFCAs in general.

Figure 7 Visual representation of IFCA's role in navigating SNCB regulations

Regulators need to find a route through the trees that will result in sustainable fishery. However, the trees keep moving (as new information on sensitivity / protected features etc. becomes available) so the objectives change and it becomes harder to find a route through the trees to reach sustainable fishery and actually results in more and more exclusion rather than sustainable use.

Stephen believes standards of how to assess feature condition are needed. The Infaunal Quality Index (IQI) was used, however, this is now deemed not accurate enough.
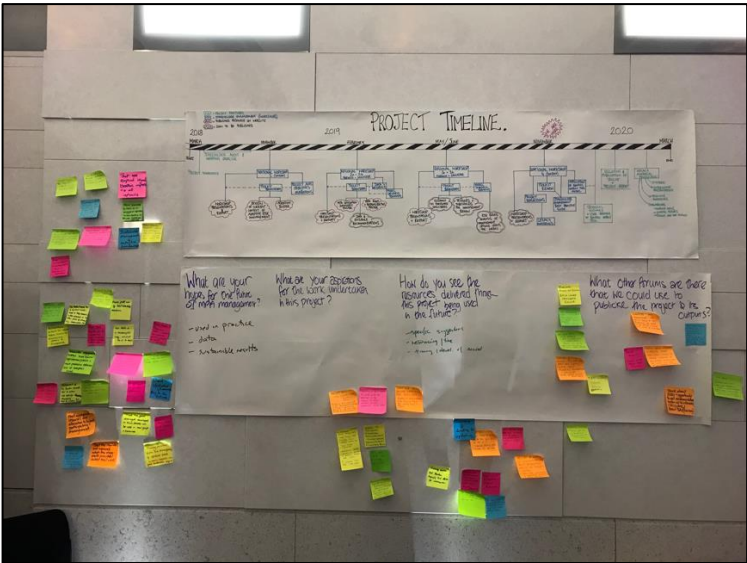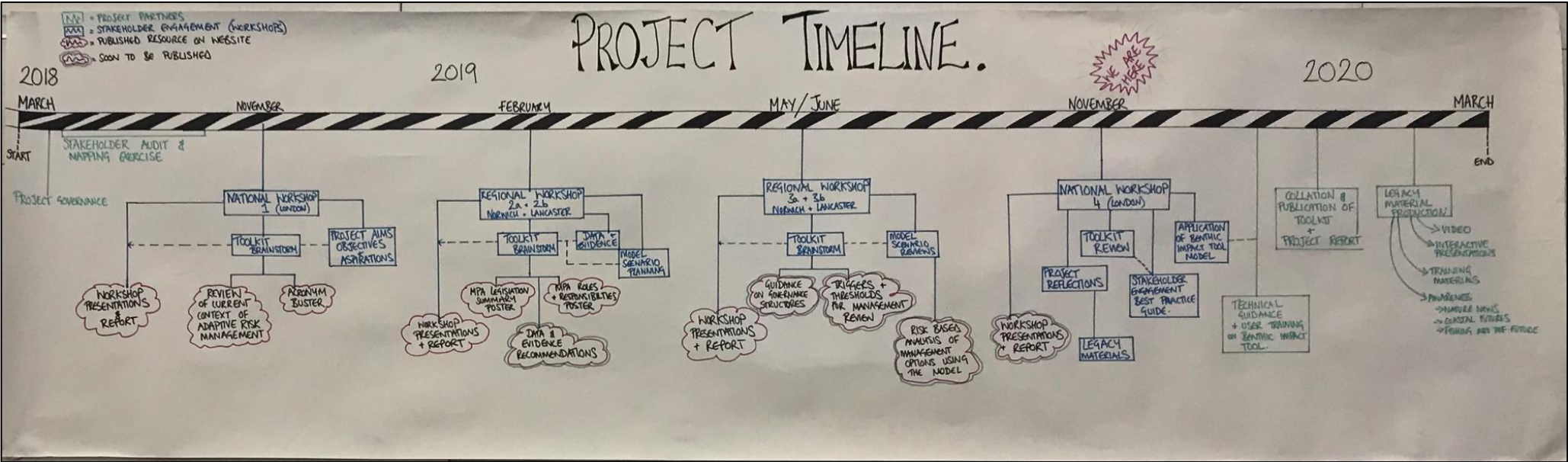
- While the method is expensive in terms of time and resources – it does deliver results and is therefore better value for money than doing consultation "on the cheap", which usually doesn't deliver anything.
- Heavy on resource time to collect and process the information
  - Processing the footage and coding what was said: summarising what people said and weighting it took a lot of time and effort.
- Difficulty in getting people involved:
  - It is essential to use a comfortable / accessible environment which may be remote.
  - Difficulties in arranging and maintaining commitment from participants.
  - Despite best laid plans you are still relying on participants giving up their time - they will probably go fishing rather than attend the pre-arranged interview if the weather is good.
- Expectation management is crucial
  - Caveat and explain what can be influenced and what can happen early on and ensure this is made clear throughout.
  - Timings - explain how long everything takes, if people not aware of this it can lead to disappointment and disengagement.
- Main messages – it was encouraging that there were a lot of repeated messages with the same values being identified as important by varied stakeholders, who might have been expected to be at opposite ends of the spectrum, including:
  - Sustainable utilisation
  - Importance of data
  - Shared understanding
  - Collaboration.

6.2   Reflections on the project

Anna (CAG Consultants) provided a summary of the process we have been through, demonstrated in the project timeline in figure 5, explaining the approach of the project as an iterative process with an overarching principle of inclusivity. Participants were invited to provide feedback on different elements of the project.

Figure 5 Project timeline

Figures 6 & 7
Participants gave feedback on the different ways in which the project outcomes could be carried forwards.

6.3   Project reflections

RBS Model

- The model needs to be used by those who understand its limitations.
- How do you connect the model with a participatory approach? If the model is truly shared, it creates a common language.
- There is real life importance of agreeing the evidence base, e.g. the Dogger Bank process would have benefitted from the model.
- Different languages are used in the conservation advice and the model.
- The model is very useful and a positive starting point for decreasing uncertainty. However, it relies heavily on the experience of the user and it is essential that the caveats are clearly understood.
- Having a shared model that others can use and adapt is very useful. Having commonality within different groups means lessons learned are more transferable and examples easier to follow.

Participatory approach

Positives

- Useful information from the workshops – it is helpful to understand how fishers think.
- Through discussions with fishers we could find a way forward.
- Having a transparent approach makes it more acceptable – importance of communications.
- The participation aspect has worked well, we have managed to capture a range of views and highlight the difficulties in negotiating a path that accommodates the views in a variety of approaches.
- Having information from different parties has been useful and Natural Resources Wales (NRW) has used these in current negotiations with fisheries management. This has been thanks to participating in the workshops and the sharing of information.
- Attendance at the meetings makes the information memorable - disseminating the information to people not at meetings is difficult without the context.
- It is useful to get further understanding on how fishermen think and use this in reviewing a site and the impacts and what options can be considered (e.g. stopping or restricting activity).
- Engaging with fishermen has opened up a dialogue in using adaptive ways to progress which has been very positive.
- It was very positive to be involved in the workshops which have been made as easy as possible to attend giving everyone the opportunity to input and providing a welcome space for people to present their views, even when negative. It's easy to concentrate on what is wrong, but through discussions answers are available.

- It is essential to look at a situation from the other person's point of view, which was a driving principle of the workshops through consensus building techniques.
- Allowing people to take their time in expressing their point of view takes the heat out of the moment and helps to build and gain trust.
- The participatory process is easier to deal with in smaller communities / areas. When you try to extend regionally / nationally / internationally it gets harder to provide that personal touch. We need to break it down into smaller groups to be effective and achieve a working feedback mechanism.
- Having a transparent process means a decision is more acceptable, even if it is not in your favour.
- Communication is key throughout; using a common language / baseline of understanding.
- Initially there was some division on what this project was actually about with feedback seemingly preconceived around stakeholders' own concerns. Throughout the process these pre-conceived ideas have opened up.
- Drawing on other experiences suggests it is easy to get bogged down in the detail like the evidence base and ensuing conflictions on using an evidence base to suit individual needs and arguments.
- Getting everyone around the table has been very positive although this can still lead to disappointment with the process and not all will buy-in to the outcome. In MPA management there are always winners and losers - it's about balance and managing expectations.

Negatives

- Entrenched views take a long time to unpick. This work has been great but isn't the only answer.
- Despite entrenched differences all want to participate, so therefore it is possible to find common ground. When you have a real problem people will spare the time to get involved; the difficulty comes in sustaining that level of engagement, especially when it becomes more and more reflective (and circular discussions).
- Because this was theoretical:
  - It made it harder to get fishers' engagement
  - Scenarios were not so believable/not tested in reality
- Industry is currently not well represented and so it's difficult to engage productively.
- Fishers are represented but still disengaged as they are not seeing the participation efforts higher up in the process. We've done good work, but haven't solved the issue of the impression that fishers are disenfranchised.
- Using a common language is difficult as there are two sets of language; SNCBs providing conservation advice and the model outputs use potentially different language. Marrying the two will be difficult.
- Some NGOs didn't get involved as they had concerns about ARM (adaptive risk management).

One participant (post workshop feedback) felt that the majority of attendees at the workshops had scientific backgrounds and therefore tended to use a language and arguments which they were unable to engage in. As a consequence, the industry was placed at a severe disadvantage, which was compounded by the much greater presence of NGOs representatives and regulators compared to fishermen.

Project outputs

Positives:

- It was a positive process in creating them.
- Really positive to have so much input into the outputs of the project.
- There are lots of good products coming out of this; the key is raising awareness of these products and who to use them.
- The process is about evolution not revolution. It is not the case of doing something completely different. Stakeholders are already engaged at consultation stage. This project has produced useful guidance to draw on in a resource limited time, highlighting how best to engage effectively and efficiently, judging the right level for those involved and for the outcome.
- Teresa Johnson's work[13] was referenced, which includes ideas on gatekeepers and boundary spanners in fisheries management; it provides some good guidelines and could be included in the guidance.
- The idea of gatekeepers works well, however, you can have a lot of conflicting parties to deal with.

Negatives

- The guidance documents don't reflect the way people should be reviewing adaptive risk management and the consideration of stakeholders. They don't give a clear direction on exactly what to do, so the information is left open to misinterpretation.
- There is an underlying negativity within the documents; they focus on difficulties and challenges etc. We need to flip these into opportunities. Highlight the procedural justice element more, using Bayesian belief networks. There are lots of new technologies and global examples so you need to take the chance to be more positive and 'shine the light that the future is bright'.

Project concerns

- There was frustration in this project being conceptual; it would have been useful to have a proper pilot study to see exactly how the process would work in reality; how to make this project meaningful and real.

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[13] https://www.tandfonline.com/doi/abs/10.1080/08941920802545800

- There is a difference in doing the process in theory rather than in practice. There are pros and cons associated with this; it is possible to miss out on key lessons such as effective participation in a true process.
- It is hard to see how this relates to real life from a technical aspect. For example, the scenarios used in the process were hypothetical. It would have been better to apply real life situations. Many of the proposed scenarios looked at with the model in this process would have been illuminated as not realistic or impractical. If we had accommodated a more real life pilot study it would have resulted in a better test of model capabilities.

Lessons learned

- We need to better understand the social impacts of management.
- This work helps regulators with understanding the situation better.
- We should be more positive in the language used.
- We need a well-managed change log when advice changes, otherwise it creates misunderstandings.
- There were good links to the adaptive risk management throughout the project as the driving format / approach.
- We have done well in what we have established but we need to be realistic in what to expect happening next.
- These principles can be applied more widely – we need to explore this in relation to the project legacy.
- It's hard to win over and then keep the trust of active fishers.
- Some circumstances are difficult to achieve a good result for all – there will always be winners and losers.
- Lessons from this project are applicable in when to engage and how and this could have resulted in a better outcome for other projects such as the Dogger Bank Steering Group. In that case participants were underprepared for discussions due to an insufficient evidence base. The model would also have helped these discussions.
- Visualising the links between the engagement process and current byelaw process was useful. It is key to present this information well in order for it to be used moving forwards.
- What evidence is there of the effectiveness of the participatory approach? Evaluation of the approaches and lessons learned are needed.

Moving forwards

- What about putting this into practice?
- We need a real situation, but one not too controversial – e.g. the NRW example of engagement with cockle processors.
- Tools are better than what we had before.
- This has been good work, but hasn't solved the issue of disenfranchisement of fishers.
- We are at the mercy of policy changes, this isn't just about getting the right evidence.
- The focus now needs to be on the legacy, how to make sure this project works for future use and is most fit for purpose.

- We all need to take the positives and lessons learned through this process and introduce and use them in our work now and moving forward.
- Changing advice around management needs to be clearly presented and accessible through a well-managed change log. Fishers' confidence is hard won and easily lost and doubly hard to win again. It is important to encourage a simple, easy to understand log of changes.
- We need to get discussions closer to the quayside and the relevant communities affected; think about how to get the message to the commonplace. Key is to decrease distance between deliverables of this product and rest of the community affected; it comes back to having a common understanding, culturally and in regards to process etc.
  - There were similar discussions with the Celtic Seas project, we never get to the bit of implementing / putting into practice what has been learned, which is inherently risky and creates a reluctance to engage in pilot studies. However pilot studies are needed, otherwise conversations start in the same place again and we need to move these conversations forwards.
  - It is essential to start at a middle ground, for example, using intertidal case studies where there is more certainty in evidence, with smaller communities of relevant stakeholders and so this makes implementation more realistic. For example, in conversations with cockle fishers and processors, getting the processors onside and raising their awareness has taken on its own life. Smaller area case studies are easier to control.
  - The Marine Pioneer project in North Devon, which was testing the Natural Capital approach, was told the project would test approaches but, in the end, it was not given the resources or permissions to do this. We need to devolve responsibility and actually test these theories.
- When presenting links between engagement and byelaw processes, information needs to be presented clearly and logically so the links are highlighted and obvious (i.e. what type of engagement is relevant to each stage in the byelaw process).
- There was a suggestion that technical language is welcome in these projects and associated deliverables, but we need to target the audience and have multiple impacts of documents for a variety of users.
- We need to get politicians to step away from environmental agendas. Otherwise engagement with industry just results in people feeling their views / concerns are not heard as political agendas are followed instead of a participation agenda
- Traction from Government increases support in building the evidence base. Fisheries have had a good track record of influencing thinking and this is sometimes lost in discussions.
- There are three key areas:
  - The political / policy element - these can change the game and are seemingly in a state of flux
  - The legislative side follows policy. Everything can be set up and then the law changes so we go back to the drawing board
  - Responding to change in evidence and legislation.
- Taking the idea of the model forward could be more important and useful than the toolkit.

- We have the awareness, we now need to enable regulators to engage better. The resource and ambition is set, we need to highlight the trade-off between achieving more in participation and the effects this has on resources.
- Ultimately, what regulators want to know is if the policy is effective. It was recommended that some form of evaluation of a process was included within the guide, so project examples (implementation) can be recorded and learned from in the future.
  - The Community Voice Method project has changed the way Eastern IFCA operates, although there is no control (i.e. scientific control where the experimental manipulation is done) to show if it has resulted in changes to management.
- The target audience of this work is bridging the gap between social science and NGO / Industry / Government.
- Include gatekeeper ideas into guidance.
- We need a common understanding of the issues.

7 Legacy

7.1 Key legacy materials from the project

Dale presented the current options for raising awareness of project (see presentation).

Figure 8 Supporting stakeholder participation in future MPA management slide

The litmus test of this project will be if the products are actually put into practice. The project will produce a series of educational materials for stakeholders to ensure the legacy of the project experiences and learning continues beyond the end of the project into future MPA management review processes. These materials will be targeted at stakeholders that may be involved in projects in other geographical locations, and who don't have prior knowledge or involvement in the process. They will be delivered in an accessible manner using a variety of tools including short videos, webinars, social media and printed material, and will form part of the Management Toolkit

Raising awareness

The project has been raising awareness around the work through social media (Facebook and Twitter) and producing accessible resources such as the posters. The dedicated webpage will be a one stop shop for all the project's work, hosting the MPA Management toolkit and all associated products.

Next steps

- Realistic next steps include trying the process out in the right circumstances and ensuring it is properly evaluated.
- Legacy material needs to set expectations and highlight the importance of communication.
- Getting this project to the quayside is crucial; the motivation is there but it is difficult to implement due to inherent costs and resource restrictions etc.

- Through the help of the participants at this workshop JNCC will compile a short video summarising the key messages of the project which will be available on the webpage.
- An interactive presentation will also be available in video format to summarise how the MPA Management toolkit elements work together and can be used in future projects.
- A training workshop and technical guidance / user guide will be delivered to produce a training package for third parties to use the ecological model.
- The project report, published on the webpage will present the process (framework) of the project along with recommendations and limitations
- An article summarising the project will hopefully be published in the next edition of Nature News.
- Working in collaboration with Fishing into the Future, an information stand is planned for the next training course January 2020.

Participants were asked to answer the following questions:

7.2   What are your hopes and aspirations for the future of MPA management?

That the participatory approach will be used in practice

- Used, updated (if necessary) – ensuring buy in for the future.
- Ensure something happens; that the process is used in practice.
- We need solutions and resources to make this happen.
- To get some in place! (offshore).
- Stakeholder engagement becomes more normal (e.g. with fishers) and easier and more productive (efficient use of everyone's time).
- A network established so we can really see what the full potential is, and assess the knock on benefits for fisheries etc.
- That appropriate resources are allocated to support participatory management.
- The project provides a toolkit to be used as appropriate. Not all situations will use the same tools, so the project should provide tools, training and a resource (report) to refer to.
- That the regulators and agencies adopt the engagement principles across their work.
- Moving forward with the management of offshore sites, legally compliant with good stakeholder buy-in.
- Identify easy wins and pursue them.[14]
- That the good dialogue developed in this process can be used in real groups and scenarios.
- Used to inform new ways of managing MPAs and fisheries.
- Resources need to be used by regulators, but it is hard to do this as they are so busy.

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[14] A response to this from another participant when reviewing the outputs: *I hear this a lot in similar contexts – and the search for "win-win" scenarios. Although these are of course highly desirable and should be taken up when they present themselves, I think that now we're looking more and more at situations where management will result in pain for some and gain for some others. We (as in "UK PLC") need to have an honest and open conversation about how this is to be managed.*

- Early engagement is trust building.
- A stakeholder engagement strategy established for all management projects.
- To apply what we have learned, apply the toolkit to real MPA/fishing situation.
- To make stakeholder engagement the norm.
- Integrate this work into MPA management and include in policy moving forward. Through the Fisheries Bill?

Sustainable results:

- Incentivise industry for impact reduction.
- Can a results based approach work in MPA management?
- That we expand beyond benthic impacts to all impacts.
- Move towards an ecosystem approach – from benthic to fish population, the wider environment and food web.
- A mechanism to find solutions that meet the requirements of both fisheries and conservation. Maybe only rarely are both interests incompatible.
- Truly sustainable – biological, legislative, socio-economic and fish stocks.
- Sustainable management – activities and environment.
- The biggest benefit would be retaining sustainable fishing activity without hindering conservation objectives of protected features.
- Start considering displacement – build a proportionate response.
- MPA management looked at on a wider area basis, not just site by site given that it's supposed to be a network, and displacement of activity from one MPA may impact adversely on another
- Can we have sustainable fishing and achieve conservation objectives?

Data:

- Further development of how stakeholders/industry can contribute data into decision making process.
- Make full use of the best available evidence.
- Effective monitoring of impacts of changes in management to inform future decision making.
- Use data in a meaningful way, not just for it to exist.
- Make better use of alternative data sources from industry and the public.
- Hope to use the data better-relates to model development

Other

- Development of fisheries management through consensus building could reduce political interference or influence.
- Productive seas – acceptance that sometimes management is needed to ensure legacy.
- For the benthic impacts tool to be most useful, we need to bring quantitative elements into other parts of the process, e.g. conservation objectives.

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- Refinement of the benthic tool to allow site specific flexibility, but it must be evidence based.
- A model of the participatory process rolled out to encompass other activities that impact MPAs.
- MPA network properly future proofed re climate change and site boundaries/species mix-changes which will also have impacts for sea users such as fishers' adaptive management!

7.3 How do you see resources delivered through this project being used in the future?

Dissemination

- Have resources been identified for dissemination? (or do they have to be bid for?), then you should develop a delivery sponsor scheme for rollout.
- Ownership requires funding for updating.
- Don't put tactics before strategy for rollout: scattergun dissemination risks missing those you really need to reach. It needs a focussed approach to the audiences etc. (focus on regulators).
- Target activity – who is a priority to reach, who secondary, who tertiary? Identifying these groups will enable development of a strategy to target and methods for doing so (e.g. face to face briefings for the primary audience).
- Champions and ambassadors who can be trained to disseminate the detail of the toolkit/model and value of using them.
- Could JNCC create a portal that includes links to other linked or related materials or case studies?
- Think about 2020 and the opportunity to get recommendations taken up to influence CBD/COP26/Brexit bills (fishing and environment).
- Social media, links with other case studies.
- Use existing conferences, e.g. Fishermen's Innovation Scotland conference.
- Time and money are important for transferability of products to facilitate recycling of information in future.

Development of materials

- How to combat time pressure (the need for brief overviews) while providing detailed steps?
- For regulators, you should develop 'Land Rover' tools, i.e. flexible and tough; not Rolls Royce tools - checklists, reference sources, continually developing and expanding models; alongside a very simple form for wider users.
- Using plain English can disengage specialists.

- Benthic impacts model is ground-truthed to refine it so it becomes less uncertain and people (including fishers) feel more confidence in generated figures.
- Provide a means of benchmarking and measuring the value of the toolkit and model e.g. before/after questionnaires in stakeholder guidance to gather perceptions.
- JNCC seismic survey guidelines are a national/regional standard for that area. What can be learned, used to make these guidelines the standard for MPA management?

Forums where the outputs could be publicised

- Depending on the final agenda, this work could be presented at the Fisheries Innovation Scotland annual Conference summer 2020.
- Part of fisheries management planning and review process – e.g. via Regional Advisory Councils (Brexit-dependent) or other inshore engagement forums.
- Marine Social Science Network Newsletter
- IFCAs
    - Association of IFCAs meetings
    - IFCA websites
    - IFCA chief officers' group
- Quay Issues magazines
- Coastal Futures Fishing News
- Coastal Futures 2020
- Society and the SEA 2020
- MASTS AGM (again)
- Royal Geographical Society Annual conference
- Defra fora
- Fisheries conferences and workshops
- APPG (all party parliamentary group) fisheries session
- Conservative Environmental Network
- Northwest Coastal Forum and other coastal partnership websites. Coastal Partnerships Network is about to launch a new national site: we all have multi-sector interests and a web audience
- Use community groups – highlight information on how people can engage effectively

7.4   Presentation by Edward Hind-Ozan

Edward Hind-Ozan finished off the workshop with a presentation on the scope for links between this project and the wider policy environment. He explained that there is a place for this project to feed in at policy level via Defra. It fits particularly well with the 25 Year Environment Plan, which, whilst high level, does reference bringing stakeholders together.

The fisheries White Paper 'Partnership Working' sets out a future vision in which industry takes a greater, shared responsibility for sustainably managing fisheries. It details a fisheries management with increased engagement and participation; **co-designing,** for example**,** is a key word.

There are at least 3 research projects which Defra have undertaken in the field of participation. The fieldwork is all completed and outputs will be made available shortly.

1) Assessing participation of the fishing sectors in UK science and management.
    a. Assessing degree and nature of participation, setting a baseline for where participation is within this country.
    b. Contractor talked to fishers / anglers- about history of participation in management AND science. How to participate in future- look at appetite of that to present an objective view about partnership working
2) IFCAs evaluation
    a. Working with IFCAs to look at delivery of vision statement and informing future governance and management.
    b. Looking at lesson learnt and best practices to inform the future governance and management of UK fisheries and marine environments (including management of offshore waters).
3) Fisher survey
    a. Inform social sustainability and incorporate social objectives in fisheries policy
    b. Co-design approach.
    c. Published report. Feasibility study for a survey of fishers - how to integrate more and have a stronger voice.
    d. Designed with fishers not scientists etc.
    e. Feasibility study to look at a potential future example of co-design n practice- already doing this,- fully worked through example of co-design in report.

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