

Practical Framework Outlining the Integration of the Ecosystem Approach into Marine Planning in England

Aim

This project aims to explore and develop a method so that marine plans take an ecosystem-based approach to managing competing demands on the marine environment, as outlined in the Marine Policy Statement. The study should outline a framework that demonstrates how this can be applied for marine planning in England.

Introduction and methodology

This study's proposed framework will be used intended to help prepare and implement marine plans in England, and aims to amalgamate the ecosystem approach principles with MMO's marine planning process.

The starting point of this project was to review the ecosystem approach principles outlined through the Convention on Biological Diversity (CBD) (the 12 Malawi Principles¹) and suggest a modified set of ten principles that were regarded suitable for application in marine planning. Furthermore, the report described a framework through which to demonstrate implementation of the ecosystem approach and identify actions to make improvements.

To assist with development of this framework, the project held two workshops: one in September 2013 with MMO to understand requirements and the marine planning process; and one in November 2013 with stakeholders to gain views on the draft principles and framework and influence the framework development. The second workshop reviewed the proposed framework and a draft assessment of whether, and to what extent, existing marine planning activities led by MMO implement the ten proposed principles. This assessment looked at current marine

management practices and evidence, and also at a case study of the East Marine Plans.

Results

This study identified that work is underway by MMO to progress the implementation of the ecosystem approach in marine planning. However, some aspects of the ecosystem approach are not being fully implemented. Some elements of this can be taken forward through improvements to marine planning practices and through existing processes, which can contribute evidence and analysis to the marine planning process. For example, the Sustainability Appraisal (SA) and potentially Impact Assessment (IA) can play a role in marine plans' implementation of the ecosystem approach, conditional on data availability and future requirements.

A number of gaps in full implementation require better evidence and assessment tools before meaningful progress can be made. In particular, better spatial data are required on important ecosystem elements, together with improved information on the spatial distribution and intensity of human pressures to facilitate spatial assessment of cumulative impacts. These gaps relate particularly to principles 3, 4,5,6,7 and 8.

Conclusions and recommendations

The majority of the principles of the ecosystem approach are already incorporated in the existing planning process, although some require further development. Realistically, it will only be possible to address some of the data gaps in the medium to long term, and in the meantime risk-based approaches incorporating expert judgement will be necessary to deal with uncertainty. It is recognised that full application of the proposed framework for applying the ecosystem approach is potentially costly and

¹ <http://www.cbd.int/ecosystem/principles.shtml>

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time consuming. It is therefore important that any effort applied to more detailed assessments of impacts is done in a proportionate manner.

The recommendations are related to both the implementation of the ten principles defined in this report and to MMO's planning process. Key recommendations relate to improving the availability of data to support implementation of the ecosystem approach, such as:

- (i) better understanding of ecosystem thresholds and limits,
- (ii) qualitative analysis (in the absence of quantified social and/or economic values) of the impacts of marine planning on human activities and of human activities on marine ecosystem services,
- (iii) better developed analysis of the cumulative impacts of human activities on the marine environment and (iv) developing knowledge of marine ecosystem services and how these will change in response to marine management, particularly marine planning.

Finally, further recommendations for actions in stakeholder engagement were identified across different time scales. It was noted that these relate to all engagements for marine planning, not just those led by MMO. There will be some challenge in ensuring that all marine management processes and authorities implement the ecosystem approach in marine planning in an integrated and consistent way.

MMO comments

Worldwide there are few practical examples of implementing an ecosystem approach in marine planning. However, the national Marine Policy Statement and the European Marine Spatial Planning Framework as well as the

international Convention on Biological Diversity require that the marine environment is managed in this way.

Studies have been carried out to pilot the implementation of an ecosystem approach and there are some examples of specific applications in some industries and locations internationally that can be drawn from.

Due to the nature of the ecosystem approach principles some implementation has occurred in England however further communication is required to ensure all stakeholders are aware what is in progress and what is still to do. An assessment of current implementation in the English marine planning process has revealed some strengths and weaknesses.

It should be noted that implementing the ecosystem approach fully in marine planning will be an ongoing process that involves meeting demanding medium to long term data and evidence requirements. In order to fulfil those requirements, MMO will continue working not only with stakeholders but also relevant government agencies involved in marine management since implementation requires coordination across space, time and organisation.

This is expected to promote the achievement of sustainable development through an adaptive, participatory process which the ecosystem approach advocates.

Further information

Please direct any correspondence to the Evidence Team by emailing evidence@marinemanagement.org.uk