

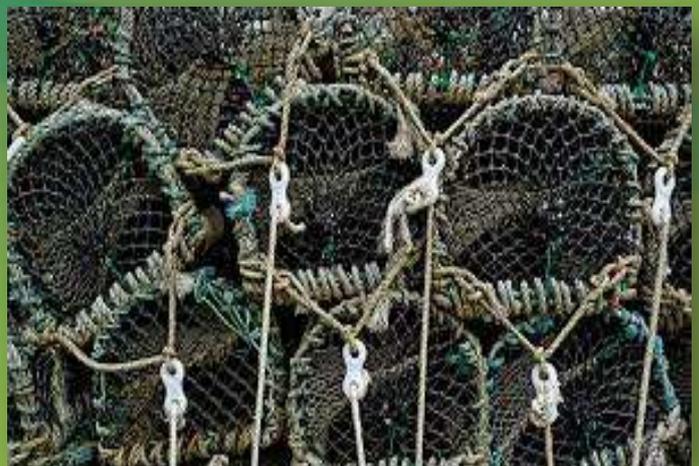
NATURAL CAPITAL AND LOCAL DECISION MAKING

WORKSHOP REPORT

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Summary

The aim of the workshop was to explore options for incorporating natural capital approaches into local decision making, providing the foundation for co-development of a natural capital decision support tool to aid decisions on the management of the marine environment in North Devon. The workshop was convened to support the objectives of North Devon Marine Pioneer, and was delivered as part of the NERC-funded South West Partnership for Environment and Economic Prosperity (SWEEP). The workshop brought together representatives from organisations including Local Authorities, the Marine Management Organisation, Natural England, the Devon and Severn Inshore Fisheries and Conservation Authority and the North Devon Biosphere Reserve. Discussions focussed on two contexts: individual developments (i.e. marine licensing, planning consents) and strategic planning of marine areas.

The strategic scale was considered the most appropriate for incorporating natural capital in the first instance because licensing and planning permission decisions respond to priorities defined at the strategic level. A clear statement about natural capital priorities is therefore required locally, with the aspiration for this to be a net gain policy, leading to overall improvement in natural capital. The North Devon and Torridge Local Plan was identified as an appropriate policy framework within which natural capital approaches could be adopted, particularly through the sustainability appraisal process. Participants proposed the use of an adapted sustainability appraisal and strategic environmental assessment to evaluate development plans in the context of natural capital and ecosystem services, giving particular attention to their implications for the wellbeing of future generations. The potential to enhance the impact assessment for marine planning was also highlighted. At the individual project level, participants perceived a role for the development of guidance for applicants to explain natural capital concepts and so raise awareness of the benefits of natural capital to society and the economy and encourage longer term thinking. Similar guidance for local councillors, planning officers and the general public was also proposed. Participants also discussed the potential importance of cost benefit analysis (using the term broadly) in the appraisal of proposals.

Spatial maps of the extent, condition, and risks to natural capital assets and ecosystem services was considered an essential foundation, and the ongoing work within SWEEP to compile a coastal and marine geodatabase and define a system of ecosystem services indicators will support this. A work plan will be developed to take forward the remaining outcomes from the workshop.

Purpose and structure of the workshop

The workshop was convened to support the objectives of North Devon Marine Pioneer, which (in support of DEFRA's 25 Year Environment Plan) is tasked with testing new tools and methods as part of applying a natural capital approach in practice; and demonstrating a joined-up, integrated approach to planning and delivery. The workshop was delivered as part of the South West Partnership for Environment and Economic Prosperity (SWEEP), which is funded by Natural Environment Research Council's Regional Impact from Science of the Environment programme to help deliver economic and community benefits to the South West, whilst also protecting and enhancing the area's natural resources.

The aim of the workshop was to explore options for incorporating natural capital approaches into local decision making, providing the foundation for co-development of a natural capital decision support tool to aid decisions on the management of the marine environment in North Devon. The specific objectives of the workshop were:

- i) to understand the constraints and opportunities for using natural capital approaches a) at the scale of individual developments (i.e. marine licensing, planning consents); and b) for strategic planning of marine areas.
- ii) to prioritise specific local decision contexts that could be supported by natural capital approaches.
- iii) to undertake preliminary scoping of the requirements for a decision support tool to be developed through the Marine Pioneer and SWEEP.

The workshop brought together representatives from organisations including North Devon Council, Torridge District Council, Devon County Council, the Marine Management Organisation, Natural England, the Devon and Severn Inshore Fisheries and Conservation Authority and the North Devon Biosphere Reserve. The discussions were structured around four main sessions, which sought to address a series of questions:

1. *The scope for Natural Capital approaches*
What are the main components of the decision making process?
How could natural capital approaches be incorporated at the different stages of these existing frameworks and processes?
2. *Reality Check*
What are the quick wins? Where can benefits be maximised?
What are the main barriers? How can these be overcome?
3. *Making it happen*
What support is needed? How could new tools help?
What would a decision support “tool” look like?
4. *Next steps*
What are the most appropriate decision contexts and topics to become the focus of ongoing work?

The Scope for Natural Capital Approaches

Individual developments

At the scale of individual developments, the processes for marine licensing and planning permission applications are clearly defined. The key stages of the licensing process were summarised by the workshop participants as: i) pre-application enquiries, ii) pre-application engagement and agreements, iii) screening, iv) scoping, v) decisions on whether an Environmental Impact Assessment (EIA) is needed, vi) submission of an Environmental Statement, vii) appraisal of the evidence, and viii) issuing (or otherwise) of the licence with or without conditions.

For planning applications, the key stages are similar but with significant differences particularly in terms of public consultation and decision making: i) pre-application enquiries, iii) screening, iv) scoping, v) decisions on whether an Environmental Impact Assessment (EIA) is needed, vi) application submitted and validated, vii) public consultation and analysis of consultation responses,

viii) balance all considerations by case officer/committee, ix) issuing (or otherwise) of the licence with or without conditions.

Discussion focussed on the pre-application stages, and the need to shape applicants' thinking prior to their making formal submissions. Participants identified the need for improved education and awareness of natural capital, to help applicants and decision makers fully understand the benefits natural capital provides to society and the economy, the possibilities for alternative options with lower impacts on natural capital, and to consider the longer term. It was acknowledged that this would require a change of mind-set amongst applicants, who would need to see the benefits to them (in terms of reduced costs or other clear incentives) or to be compelled by regulation in order to act.

In terms of incorporating natural capital approaches into the screening, scoping and appraisal of licensing/planning applications, participants felt that this needed strategic support to provide a clear framework for the context in which decisions were to be made, rather than changes to the process itself. The need for a clear policy statement about natural capital priorities was identified, but it was suggested that this guidance was unlikely to be a single document as it would need to consider all policies and activities (fisheries, navigation, water quality, and habitats were referred to as examples). The aspiration that such a statement should reflect a net gain policy (i.e. that developments should result in an overall improvement in natural capital) was also discussed.

The development of a natural capital risk register to highlight vulnerable assets or activities likely to be harmful to natural capital was also identified as being of use, particularly if this could be spatially mapped and so indicate to applicants those areas in which development would or would not be considered favourably. Participants discussed the potential for cost benefit approaches, including the idea of a natural capital calculator to evaluate gains and losses. However, it was felt that this could quickly become complicated due to the scope of factors to be included, and that decisions required a careful balancing act rather than relying on a single summative figure. The potential for a more strategic cost benefit analysis was also suggested, particularly if this could be used to increase societal awareness of trade-offs. Participants also felt that the effective implementation of such approaches would require place-based planning, which is more integrated and streamlined, involves all agencies and key actors, shares a common understanding, utilises a shared evidence base and common standards, and is supported by appropriate strategies for compliance and monitoring.

Strategic Planning

Strategic planning covers many contexts and so does not follow a single formalised approach in the same way as marine licensing. Certain key components of generic processes were nonetheless identified, namely: i) inventory/evidence gathering; ii) prioritisation; iii) option appraisal (including sustainability appraisal); iv) option selection; v) public consultation (which occurs at all stages of the process); vi) consideration of representations received and review of policies (which can continue iteratively); viii) submission and examination.

The conceptual framework around natural capital was identified as being a useful approach for framing strategic planning, particularly when defining the scope of the initial inventory and evidence gathering stage and for communicating during consultation phases, especially in terms of the potential for identifying new stakeholders. It was noted that this framework had been used in the development of the North Devon and Torridge Local Plan without subsequent challenge to its applicability or efficacy, and that the links to the ecosystem service approach within the 2012

National Planning Policy Framework (para 109) provides a broader policy context for the adoption of these concepts at the local level. The Marine Policy Statement also provides a suitable framework. A natural capital-based inventory should include the location, extent and condition of habitats, but should also map the beneficiaries of the resulting ecosystem services recording both who they are and their location.

Again, the potential role of a natural capital risk register was identified, particularly in terms of its usefulness in prioritising those assets on which to focus when allocating limited resources. It was noted that a risk-based approach may be limiting, but participants agreed that it was the best approach in the absence of robust evidence and supported the precautionary principle. Cost benefit analysis was also discussed, but participants felt that monetary analysis was complex and were concerned about the difficulties in effectively monetising certain cultural values. Critical environmental assets must be retained and paying /compensating for their replacement is not an acceptable or achievable option.

Instead, participants favoured the incorporation of natural capital into sustainability appraisal, as sustainability appraisal has been widely tested and applied in strategic planning and provides benchmarks across social, environmental and economic indicators. Participants also highlighted the lack of evaluation of marine impacts within sustainability appraisal, and hence the opportunity for more holistic assessment. The sustainability objectives and indicators in the sustainability appraisal framework would need to be updated for natural capital to be recognised more explicitly.

Identifying Priorities

Barriers

Barriers to the uptake of natural capital approaches included a lack of awareness of the concepts, and the need for a change in mind-set for licence/planning applicants, local councillors and the public, as well as the frequent changes in policy, and the short tenure of elected representatives. The difficulties in effecting change where there is no statutory requirement, and funding the implementation of changes in practice were also noted. Building natural capital into licence and planning conditions would be challenging, as it would require compliance to be monitored, needing additional resource. Uncertainty around appropriate baselines against which to measure change was considered a further barrier, as was an absence of understanding of thresholds and the levels of acceptable change in natural capital.

It was noted that a lack of evidence at the appropriate resolution could hamper the implementation of natural capital approaches, but that the ongoing work within SWEEP to develop a geodatabase will streamline access to data and support better spatial marine planning. Alternative methods for data collection such as remote sensing, citizen science, and using fishermen's data were also proposed as ways of overcoming data barriers. Current regulations and approaches were also seen as barriers, particularly that fisheries management takes a species, as opposed to ecosystem, approach and regulations such as the Habitats Directive can be limiting due to their very focussed nature that does not facilitate a broader approach. A lack of alignment of planning and economic strategies as well as a lack of integration between county and district level planning was also identified. Finally, in terms of consultation, the need to ensure stakeholders were educated and informed but not overburdened was noted, as was the need to make decision making attractive to those who are not engaged in order to overcome the current self-selection by consultees.

Quick Wins and Maximising Benefits

Participants proposed communicating the aspiration for net gain policies to councillors and the chief executives of the statutory natural conservation bodies as an important first step in the adoption of natural capital approaches and in changing mind-sets. It was further suggested that quick wins could be had through providing guidance, particularly in terms of easy access to information for applicants and through reviewing and updating existing guidance from a natural capital perspective. However, it was also noted that for guidance to be adopted it would need the appropriate approval and integration within current processes. Training for each new intake of councillors was also proposed to support their understanding of natural capital, and of evidence-based decision making more widely.

Further quick wins could be had through aligning natural capital into existing policies. The development of a risk register was considered as something that could be quickly taken up, particularly as planners are conversant with landscape sensitivity assessments, which take a similar approach. A qualitative approach to cost benefit analysis, to identify whether the effects of developments on natural capital will be positive, neutral or negative was also suggested as an initial way forward in providing simple but effective outputs, with the caveat that suitable baselines would be required. Participants felt that a focus on coastal areas would be sensible, due to the greater data availability. The importance of focussing efforts on issues where change can be effected and where the greatest benefit can be had was also emphasised.

The North Devon and Torridge Local Plan (and the associated infrastructure delivery plan) was identified as an existing policy basis through which natural capital approaches could be adopted. In particular, participants highlighted the potential for building natural capital into the option appraisal stage of decision making through the sustainability appraisal process that is already undertaken within the Local Plan framework. Sustainability appraisal was considered particularly appropriate because it directly informs the Local Plan, provides a framework for the comparison of options (and the selection of the most acceptable), and links back to the inventory/evidence gathering stages. The marine planning process also requires sustainability appraisal, as well as impact assessment, which was considered a further policy pathway through which ecosystem services and natural capital could be incorporated.

Participants also identified the opportunities presented by natural capital and ecosystem service approaches to support bringing new ideas and ways of thinking into the decision-making process. These included calls for a more ecosystem-based approaches to fisheries, with concepts such as essential fish habitat identified as ways forward in modifying management strategies. There was also strong support for improved consideration of intergenerational equity within a modified sustainability appraisal, following the lead of the Wellbeing of Future Generations (Wales) Act 2015. Engagement of young people with the decision-making process through social media and the formal education system was also discussed.

What is needed to move forward?

High level statement of aspirations

A high-level document should be created stating aspirations for a shift towards policies requiring a net gain in natural capital, and suggesting how this could be integrated into decision making. The need to support this by understanding existing losses, identifying where gains could occur, and detailing metrics was acknowledged, but other tools and process (described below) could address these issues.

Guidance notes

Guidance on natural capital and ecosystem services is required, particularly for planning/license applicants, elected council members and planning officers, which should be supported by training. This guidance should be appropriately targeted to the end-users, describing, for example, 'what this means for you', 'how to use it', or 'translating into process'. Guidance on the methods for, and use of, any specific tools and processes developed would also be required.

Natural Capital Character Assessments and Risk Register

Natural capital character assessments need to be developed that identify factors such as any thresholds, sensitivity and the key types of environmental improvements for the assets. These can be broad level statements or more detailed for local level decision making. Risks to the assets can also be included, linking to the risk register concept.

Mapping ecosystem services and natural capital

Spatial mapping would support visualisation, allowing decision makers to see where natural capital assets are and their condition, demonstrating over time whether areas are expanding or decreasing, and assets improving or being degraded. Such maps could also show pressure points and activities, and highlight where there may be opportunities to develop or where activities should be restricted. The scale of this task should not be underestimated given the range of habitats, species, activities and their interactions.

Natural capital character assessments and ecosystem services maps can then be used in the appraisal of policy options or licence applications.

Cost benefit analysis for natural capital

Participants used the term cost benefit analysis broadly, to describe any means for assessing the scale of the losses and benefits and considering trade-offs, potentially using metrics other than monetary values, including indices, weightings, and a relative value scale. They re-iterated that tools of this type were important, to allow the full range of benefits to be considered alongside the costs and to provide a fair, consistent and transparent means of illustrating the relative merits of different options. It was further suggested that a cost benefit approach could be part of licence/planning permission applications. However, the specifications for a cost benefit analysis were less well developed at the workshop than those for other potential approaches; the details of appropriate methods and how they would be used require further consideration.

Sustainability Appraisal

Participants proposed using the sustainability appraisal process to carry out a strategic environmental assessment of growth strategies for North Devon, where growth was defined more broadly than in purely economic terms; it should include factors such as quality of life and should emphasise the wellbeing of future generations. Ecosystem service baseline assessments should then be carried out for the preferred options identified within the sustainability appraisal, and spatial guidance should be provided on where particular activities are likely to be more or less acceptable through the provision of a local marine plan. Within this framework, an improved impact assessment for local marine planning was also proposed.

The need for a planning interaction map was identified as a first step, to understand the landscape of national policy (e.g. the 25 year Environment Plan, Marine Policy Statement, South West Marine Plan, Fisheries Act, Clean Growth Plan) and local and regional policies that were currently in

preparation or under review (including those related to the North Devon and Torridge Local Plan, Local Enterprise Partnership, Shoreline Management Plan, Area of Outstanding Natural Beauty, Exmoor National Park, and Marine Conservation Zones). Clear definition of the indicators against which options would be appraised was also considered essential, as was understanding the ecosystem services and the contexts in which these were valued, particularly in terms of understanding the benefits and beneficiaries at different scales in order to support the case for public investment.

The sustainability appraisal and local marine plan should consider key blue economy sectors particularly fisheries, aquaculture, energy (and its coastal infrastructure), tourism, and short sea shipping (in response to the clean growth strategy), and explore more pioneering concepts such as the development of carbon sequestration and bioremediation as economic activities. The process should assess how activities affect ecosystem services and natural capital and generate clear statements for planners on the acceptable limits for impact, as well as suggesting mitigation measures to overcome risks. The approach to risk assessment should be interdisciplinary, to provide social and economic as well as environmental perspectives. Cumulative impacts, thresholds and key triggers should be considered (at least through qualitative scoring), although the challenges in doing so were noted, and the means by which the outcomes of the sustainability appraisal could link to natural capital accounts and investment plans should also be identified.

The approach should incorporate external best practice and tools (such the National Ecosystem Assessment Toolkit) and supporting guidance notes (on, for example, how natural capital approaches interact with environmental legislation and concepts) should be provided. It will be necessary to provide outputs in different formats for different users, and these should be short and kept simple, with clear signposting to supporting information. Addressing uncertainty and providing visual outputs will also be important. A key output will be describing lessons learned for National Government and the Planning Inspectorate.

Next steps

The collation and spatial referencing of data on natural capital and ecosystem services and the definition of appropriate indicators is already ongoing within SWEEP. A work plan will be developed to take forward the outcomes of the workshop, which will focus on developing a natural capital based approach to sustainability appraisal and a local marine plan, including exploring the mechanisms for a natural capital character assessment and risk register based on existing sensitivity assessments. The potential for seeking high level support for a “net gain” policy approach; providing information and guidance on natural capital and ecosystem services (particularly through signposting existing resources) to increase awareness amongst local councilors, planning/license applicants and the general public; and exploring cost benefit analysis options will also be considered.

Participants

Name	Role	Organisation
Andrew Austen	Lead Officer Planning Policy	North Devon Council
Andy Bell	Reserve Co-ordinator	North Devon Biosphere Reserve
Isabelle Bromham	Watersports Development Officer	North Devon Council
Ruth Calder-Potts	Project Manager	Plymouth Marine Laboratory
Katrina Davis	Postdoctoral Research Fellow	University of Exeter
Dominie Dunbrook	Senior Economic Development Officer	North Devon Council
Andrew Edwards-Jones	Social Science Researcher	Plymouth Marine Laboratory
Mike Ford	Project Officer	Torrige District Council
Neal Gray	Marine Planner (South West)	Marine Management Organisation
Tara Hooper	Environmental Economist	Plymouth Marine Laboratory
Chrissie Ingle	Marine Pioneer Coordinator	North Devon Biosphere Reserve
Mike Kelly	Chief Planning Officer	North Devon Council
Aisling Lannin	Marine Pioneer Lead	Marine Management Organisation
Kathryn Ludford	Senior Marine Licensing Manager	Marine Management Organisation
Mel Parker	Devon Marine Team	Natural England
Sian Rees	Senior Research Fellow	Plymouth University
Ian Rowland	Senior Planning Policy Officer	Torrige District Council
Mark Saunders	Sustainability Officer	North Devon Council
Jo Traill Thomson	Landscape Pioneer Lead	Natural England
Rachel Tuckett	Assistant Planning Officer	Devon County Council
Libby West	Senior Environment Officer	Devon and Severn Inshore Fisheries and Conservation Authority
Ed Wright	Marine Planner (South West)	Marine Management Organisation