EVIDENCE STANDARDS, MANAGEMENT AND COLLABORATION

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JOINT NATURE CONSERVATION COMMITTEE

EVIDENCE STANDARDS, MANAGEMENT AND COLLABORATION

Paper by Paul Rose

1. Defra work on evidence standards, management and partnerships

1.1 In late 2010, Defra started to investigate evidence standards and management with Natural England and the Environment Agency. At this time they were already undertaking work on joining up evidence across the Defra network. Defra extended these discussions to JNCC in December 2010 when the work rapidly started to gain pace and profile. The trigger for the acceleration came as a result of an email to the Defra Chief Scientific Adviser (CSA) (Bob Watson) asking him how he assures himself about the quality of evidence used to inform policy decisions – one of his statutory duties. This resulted in a number of individually tailored questions being posed to Defra's Arms Length Bodies, including JNCC, about: how they quality assured their evidence and advice; the quality assurances policies and procedures they used; and the standards and guidelines they were signed up to. For JNCC, the main emphasis of the questions was around standards setting. The questions had a noticeable marine bias as the challenge to the CSA had its origins in a dispute over the adequacy of the evidence being used to justify restriction of fishing in the proposed Lyme Bay Special Area of Conservation (SAC). JNCC constructed answers to these questions in close collaboration with Natural England.

1.2 The Defra CSA also commissioned an independent review of the evidence used to underpin SAC designations in England[1]. This review used three sites as test cases (Lyme Bay, Prawle to Start Point, Studland to Portland), all on the south coast of England. The review concluded that the evidence underpinning selection of these three candidate SACs is sufficient to support the proposed designation of the sites, in the light of the requirements of the Habitats Directive. However, there were issues raised about aspects of the processes which Natural England and Defra followed. This was summed up in 13 recommendations made by the review (Annex 1)

1.3 On 10 October 2011 Defra issued a draft response to the recommendations from the CSA review. This response is still to be signed off by ministers, but states that Defra will be applying the broad principles recommended by the review to all its work, and will be encouraging members of the network to do likewise, but the precise way in which they are implemented will need to vary according to the specific circumstances in each individual area. Defra is currently reviewing its operating model and will ensure that the resulting guidance and processes take into consideration the review recommendations.

[1] http://www.defra.gov.uk/publications/files/pb13598-graham-bryce-independent-review-marine-sacs-110713.pdf

The response also suggests that though the review focussed on ecological and geological evidence, since the Habitats Directive selection criteria require that only this evidence is taken in to account, the general principles recommended by the review report will be relevant to all forms of evidence, including natural and social research, economics, statistics, operational research, surveillance and monitoring etc.

1.4 To support their desire to join up evidence work across the Defra network, and the prominence of evidence within the Defra change programme, Defra established a cross-network evidence group which met for the first time in July 2011 and extended its membership to the devolved administrations in recognition of the UK-wide implications of many evidence decisions. To date the group has focussed on quality assurance issues, including compliance with the Government Chief Scientific Adviser guidelines and the Joint Code of Practice for Research, rather than the original intention to address collaboration over evidence provision.

1.5 On 12 September 2011, Defra organised a workshop for Chief Scientists and Heads of Evidence across the Defra network. Representatives from the devolved administrations were also invited. The aims of the workshop were to provide an opportunity to identify:

i. the key challenges and opportunities for joint working on evidence in policy-making; and

ii. actions we can take to achieve the efficient and effective use of resources in the short- and long-term.

The group discussed evidence issues widely and recognised the potential for this type of gathering to influence and guide evidence collaboration and standards work. Consequently, it was agreed that further meetings will take place, perhaps quarterly.

2. Marine Conservation Zone protocols

2.1 In order to implement the recommendations of the CSA review with regard to ongoing work to identify and designate Marine Conservation Zones (MCZs), JNCC and Natural England are developing nine protocols to sit alongside the already agreed ecological network guidelines (Annex 2). The development of these protocols is extremely urgent in order to minimise any delays to the already tight timeline for delivery of the MCZ project.

2.2 While the MCZ protocols are very specific to the MCZ project, they will inevitably touch on a few areas that could potentially have wider implications for evidence standards and advice. The Chief Scientists Group has established an inter-agency group of experts, supported by JNCC, to advise them on evidence quality assurance standards, recognising the need for consistency in some aspects of our work. Chief Scientists advised that consistency would not be required for processes and procedures but might need to be considered where thresholds were being set. Consistency would usually need to be achieved across the UK and between marine and terrestrial/freshwater work. It will not be possible to fully scrutinise MCZ protocols for areas in which consistency is desired without causing significant delay, but it should be possible to identify major areas where it is important for the MCZ protocols not to be seen as setting wider precedents.

3. Other relevant evidence work

3.1 There are several other ongoing strands of partially overlapping evidence work in which JNCC is involved or interested, and which might usefully contribute to Defra's ambitions for cross-network evidence partnerships or help to achieve appropriate evidence quality assurance standards. At a UK scale, these include:

i. the UK Biodiversity Research Advisory Group is a Defra-chaired group with broad representation from statutory bodies and the UK research community that aims to:

- identify, promote and facilitate biodiversity research to support UK and individual country biodiversity action plan commitments;
- co-ordinate effective and efficient UK engagement with European biodiversity research issues, fulfilling the role of a national biodiversity research platform;
- contribute to effective biodiversity research networking in the UK, leading to increased interdisciplinary capacity;
- support knowledge transfer activities in relation to biodiversity research.

ii. the UK Earth Observation Framework strives to change the way the UK perceives, values, archives and uses information from observation activities by working across public departments and agencies, the voluntary sector, industry and academia;

3.2 Other relevant work exists at a devolved scale within the countries. Examples include:

i. a group with the objective to achieve a more collaborative approach to the management of England's biodiversity research was established by Defra in 2010 with membership from Defra, JNCC, Natural England, Environment Agency and Forestry Commission. The objective of the group is to achieve greater transparency, avoid duplication and establish common priorities for research and development spend across the five organisations;

ii. the Co-ordinated Agenda for Marine, Environment and Rural Affairs Science (CAMERAS) in Scotland aims to ensure that marine, environment and rural science in Scotland supports the Government's single purpose of "creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth";

iii. Natural England are developing organisation-wide standards in response to the CSA review recommendations and a group of these relate to evidence. A strategic evidence standard has already been finalised which sets out the ambitions for a further nine operational evidence standards covering issues such as analysis, quality assurance and peer review, consultation, and monitoring and surveillance.

4. JNCC work on Evidence standards and management

4.1 JNCC included a priority performance measure in the 2011/12 business plan to take forward work on the development of science and evidence standards and aligned the work of its internal Science Quality Task Force to start the process of developing corporate policies guidelines and standards for JNCC. The Task Force was first established in 2009 so it has already undertaken a review of internal evidence quality assurance practices, referring to the principles set out in the *Government Guidelines on Scientific Analysis in Policy Making (2005).* Existing procedural approaches were reviewed for gaps, risk assessment undertaken and a prioritised action plan for improving internal practices was established. A corporate position statement on evidence quality assurance and an operational handbook are products scheduled to be produced in the first half of 2012/13.

4.2 It is difficult to assess accurately what implications the development of evidence standards will have for JNCC work programmes. For many of the heavily evidence-based programmes such as surveillance and monitoring, data access and marine protected areas work, quite rigorous evidence standards are already applied even though corporate policy is lacking. This would suggest implications are likely to be low but in other programmes there could potentially need to be changes to the way JNCC works.

ANNEX 1

INDEPENDENT REVIEW OF THE EVIDENCE PROCESS FOR SELECTING MARINE SPECIAL AREAS OF CONSERVATION

Chair: Dr. Ian Graham-Bryce CBE FRSE

List of conclusions and recommendations

The following lists the specific conclusions and recommendations discussed in chapter 3 of the report. Chapter 4 discusses some more general points.

Roles and responsibilities

1. We recommend that Natural England should adopt and embed the good practice principles set out in the Government Chief Scientific Adviser's (GCSA) Guidelines on the use of scientific and engineering advice in policy-making.

2. We recommend that Defra's Chief Scientific Adviser (CSA) should ensure that policy makers in Defra, specifically Senior Responsible Owners (SROs), are aware of and apply the GCSA's Guidelines on the use of scientific and engineering advice in policy-making. We further recommend that the CSA provides SROs with guidance on their responsibilities in circumstances where Defra relies on Natural England (or other arm's length bodies) to provide evidence-based advice.

3. We recommend that Defra's CSA should adopt a proactive and risk-based approach to identifying and intervening on specific policy issues. We also recommend that the CSA should clarify his remit with regard to the work of the Department's arm's length bodies.

4. We recommend that Natural England should put in place and publish formal guidelines and principles to ensure that the gathering, selection, analysis, and use of evidence are not compromised by its commitment to its statutory purpose to ensure conservation, and that greater transparency and opportunities for independent, expert review and scrutiny are incorporated in order to maintain public confidence in the integrity of complex, science-based projects.

The approach adopted by English Nature and Natural England

5. We conclude that the approach adopted by English Nature, relying on initial broad-scale desk studies and then focusing detailed investigation on areas of interest where reefs were most likely to be present, was appropriate given the remit it had been given by Defra.

The management of the process by Defra and Natural England

6. We recommend that in future for evidence-based projects of this scale and length, Natural England and Defra should put in place clearer and more robust project management, better able to manage risks and cope with change, and they should ensure that accountabilities are clear and recorded.

7. We recommend that Defra and Natural England should ensure that independent, expert review is built into processes which rely significantly on the gathering, synthesis and interpretation of evidence. Reviews should be transparent: the reviewers' comments and Natural England's response to them should be recorded and published.

Science and the use of evidence

8. We recommend that for major evidence-based projects, Natural England should establish and publish at the outset protocols setting out the key evidence needs, the principles against which evidence will be evaluated, and indicating the quality and quantity of evidence which is likely to be required to make robust decisions at different stages of the process. There should normally be consultation on the protocols before they are finalised.

9. We recommend that when independent, expert review is used, Natural England should be clear, and make clear to reviewers, the purpose of the review and its expectations.

10. We conclude that Natural England has built up a substantial body of evidence which supports the presence of reef habitats, as defined by the Habitats Directive, in each of the three case studies.

Engagement, public scrutiny and access to information

11. We conclude that Natural England went to considerable lengths to offer a genuine opportunity for stakeholders and interested members of the public to comment on the proposals and to provide new or better evidence during the public consultation stage, and that the comments received were taken seriously and appropriately, without bias.

12. We recommend that Natural England should routinely publish background material and consultants reports, to show how evidence has been gathered and synthesised.

Can there be confidence in the decisions in the case studies?

13. In summary, we therefore conclude that the evidence we have seen is sufficient, in both quantity and quality, to support the proposed designation of the three case study sites as SACs, in the light of the requirements of the Habitats Directive. However, we have concerns about aspects of the processes which Natural England and Defra followed.

ANNEX 2

MARINE CONSERVATION ZONE PROTOCOLS IN DEVELOPMENT BY NATURAL ENGLAND AND JNCC

1. Strategic protocol - the principles by which we will formulate our advice
2. Document style and language – using existing MCZ Project guidance
3. Audit trail –version control, record keeping and evidence panels
4. Quality control, assurance and peer review
5. Assessing scientific certainty of recommended sites and features
6. Assessing scientific certainty of conservation objectives
7. Interpretation of stakeholder data/fisheries for exposure assessment (This protocol is a subset of number 6)
8. Assessing risk to features
9. Contribution of existing sites to the network
10. Ecological Network Guidance