



Response to the Welsh Assembly Government's
"A Living Wales – A New Framework for Our Environment Our Countryside and Our Seas"

The British Ecological Society
"advancing ecology and making it count"
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Introduction

The British Ecological Society is the oldest learned ecological society in the world, due to celebrate its centenary in 2013. Our members, who number close to 4,000, are drawn from the full spectrum of ecological research; which is reflected in the specialist groups within the Society on a variety of ecological research streams, including forest, freshwater, tropical, agricultural, aquatic and conservation ecology. For further information about the Society's work, visit the Society's website, at www.britishecologicalsociety.org.

This response from the Society has received input from a number of our members who hold expertise in nature conservation in Wales, commenting on some of the questions posed in the consultation.

Summary of Comments

- There is a lot of merit in proposing a new environmental framework for Wales, which is regarded as greatly needed to halt declines in biodiversity, and meet the new EU biodiversity targets by 2020.
- There is broad support for taking a more holistic approach to environmental protection, which naturally stipulates a move to a system underpinned by ecosystem services rather than a predominantly species-focused approach.
- Existing monitoring efforts focussed on species and habitats have not been misplaced; indeed any new approach focussing on ecosystem services must allow Wales to uphold its European commitments to monitor and protect species and habitats of national and international importance.
- Not enough is known about the linkages between species and habitats and the ecosystem services they provide. Ecosystems are extremely complex and the task of gathering information about Welsh ecosystems, their services and values should not be underestimated.
- The progress made to date by the conservation sector in mapping Welsh wildlife has been significant, however these data need to be better shared, distributed and made more accessible for landowners to enable more informed management.
- There is concern at the lack of clarity in the consultation document regarding how a new framework will deliver outcomes in the face of financial cuts to Wales' environmental delivery bodies.

Specific comments for the Evidence Base work stream:

What new forms of information and evidence do we need to help us to focus on ecosystems and their services?

The background paper identifies the need for better information on Welsh ecosystems including the services they provide and their market value. Our members regard Wales as having reasonably good Phase 1 habitat survey maps, showing species and habitat distribution, albeit with gaps, particularly in the marine environment. However the evidence base of ecological knowledge on the linkages between species and habitats and ecological processes is considered less comprehensive. More information on how ecosystem services are connected to species and habitats

is needed. This situation will hopefully be improved next year once the results of the National Ecosystem Assessment¹ are published. The interim report² published in October 2010 gives an overview of the ecosystem services that various species groups and habitats provide, which the final output will expand upon.

How might we best align collective scientific and monitoring effort towards an approach focused on ecosystems?

The background paper mentions the prioritisation of monitoring work by Government agencies as being driven by their own information needs and regulatory duties. Greater alignment would be welcome to make it more of a collective effort. The best approach could be to use the UK NEA to inform the focus of future monitoring, which allows ecosystems to form a collective focus. From the UK NEA should come outputs tailored towards different stakeholders, including industry, the public and Local Authorities³. The work underway mentioned in the background paper, to compile a national GIS-based resource to hold and share spatial information is commendable, especially given it will be categorised in a way consistent with the UK NEA.

To give just one of many examples of a collective scientific effort, the numerous Knowledge Economy Skills Scholarships (KESS) PhDs being run at Aberystwyth University involve partnership with a local consultancy 'Ecology Matters', the CCW and the charity RSPB to support doctorate research. By working in partnerships to share data and advice, this helps ensure academic findings are translated into practical habitat management outputs, which can inform land use decisions. This model could be used to organise future research which focuses on ecosystems.

The involvement of taxonomic-specific conservation charities, such as the BTO and Butterfly Conservation, who have a vast resource of volunteers collecting data on distributions and abundance of terrestrial species on a long term basis, is also important. Similar monitoring efforts for marine species are also occurring; Sea Watch, for example, has circa 3,000 volunteers undertaking monitoring, enabling them to produce the Atlas of the Marine Mammals of Wales last year. Getting these charities to adapt their work to include a greater consideration of ecosystem services would help the Welsh Assembly Government achieve this new focus.

How do we ensure that the full range of expertise is drawn on in accordance with the principles for ecosystem management, including different earth and social sciences?

Proper consultation of experts within civil society groups and the academic community is needed to ensure all bases are covered. By encouraging learned societies and NGOs to respond to consultations such as this, and by bringing together taskforces to draft legislation, a wide range of experts can be utilised. The involvement of professional and learned bodies such as the IEEM and the BES is also important in any process as they can draw on a diverse skills base.

In terms of academic input, the PhD programme mentioned above utilises both a university's geography and biology departments to ensure a full range of expertise is drawn upon, and that outputs can be both rigorous peer reviewed scientific papers and practical advice. This approach is welcome. By utilising input from Welsh based and other UK and international consultancies, interdisciplinary academic research programmes, NGOs and Government agencies, tools can be developed which are directly used by decision makers, land owners and planners.

How do we provide the information tools that decision-makers, land owners and planners can apply locally?

¹ The UK National Ecosystem Assessment: <http://uknea.unep-wcmc.org/Home/tabid/38/Default.aspx>

² Watson, R. and Albon, S. (2010) Draft Synthesis of Current Status and Recent Trends: <http://uknea.unep-wcmc.org/LinkClick.aspx?fileticket=UIQr0mgTWWU%3d&tabid=82>

³ Developing the National Ecosystem Assessment: Report of a joint workshop between the British Ecological Society (BES) and the UK Biodiversity Research Advisory Group (UK BRAG) (2009) http://www.britishecologicalsociety.org/documents/policy_documents/policy_meetings/BES_BRAG_Session_Report_final.pdf

Data that are both academically rigorous and practically applicable is greatly needed. Data dissemination also needs to be improved, as recognised in the background paper. Environmental Record Centres are helping to do this; this network of centres provides information on Welsh biodiversity, albeit in formats which are not as accessible as they could be. Using the record centres in a more effective way, for example by ensuring that they hold condition monitoring information and copies of all environmental statements produced for major projects, would assist with monitoring.

To equip land owners and planners, the work of the Wildlife Trusts in working with them is valuable. In providing land owners with evidence and best practice guidance, the Trusts can encourage land management practices which respond to nature conservation needs. Planners would specifically benefit from having dedicated ecologists close at hand. Local Authorities should have access to ecological expertise despite the budget cuts to district and country councils.

What might be the approach we adopt to measuring progress and what constitutes success?

The background paper mentions the need to identify new ways to measure environmental change, which is one some members have questioned, given the successes resulting from existing legislative mechanisms such as the Birds and Habitats Directives. Measuring success against these existing targets seems sensible, especially given that many Directives specify reporting requirements to assess progress towards achieving these common goals.

This said, our members have expressed a need to properly define the objectives in Wales, especially given the new focus on ecosystems is not necessarily reflected by existing European Directives. The new 2020 target agreed by EU Ministers does now stipulate a halting of ecosystem services degradation. National policy must reflect that healthy, functioning ecosystems need to be delivered alongside the original targets of halting biodiversity declines.

The Welsh Assembly Government needs to consider whether it is prepared to accept potential changes in the composition and extent of species and habitats if it pursues the Convention on Biological Diversity's Ecosystem Approach laid out in the consultation appendix⁴. Achieving healthy ecosystems is difficult to measure, especially given the information gaps that persist in understanding the linkages between species and habitats and the ecosystem services they provide.

How do we handle risk and uncertainty?

Risk and uncertainty is inherent given our lack of knowledge of how many ecosystems function. A precautionary approach should be taken, which combines robust monitoring with adaptive management, especially where current techniques are not getting results. This requires some improvements in the linkages between scientific monitoring and land management; currently the decline in species and habitat condition is not triggering sufficient management actions, which suggests adaptive management isn't being pursued, perhaps as a result of uncertainty in the data. Risk assessment needs to take uncertainty into account.

What can we say about absolute environmental limits?

The Welsh Assembly Government (WAG) could usefully consult the forthcoming briefing from the UK Parliamentary Office of Science and Technology on Environmental Limits when formulating their thoughts on this⁵.

Our members have shown concern for the concept of 'shifting baselines', which allows undesirable environmental change to be perceived as 'normal' by successive generations. We should certainly not measure success against a

⁴ The Ecosystem Approach as defined by the Convention on Biological Diversity: <http://www.cbd.int/ecosystem/>

⁵ The Parliamentary Office of Science and Technology work is being led by Dr Jonathan Wentworth: <http://www.parliament.uk/mps-lords-and-offices/offices/bicameral/post/current/environment/>

baseline which is based on the current situation of a much-depleted nature. Absolute environmental limits need to take historical data into account. Principle 9 of the Convention on Biological Diversity's definition of the Ecosystem Approach is relevant here, which states the need for management to recognise the inevitability of change. There needs to be consideration of how much change to landscapes is acceptable (and how much has already occurred), when drafting the new framework and setting a baseline.

Long-term monitoring, for example through the Countryside Survey⁶, is vital to counter the 'shifting baselines' effect. The Survey should continue to monitor biodiversity in Wales to quantify declines and highlight long term trends. However, setting absolute limits for the degradation of ecosystem services could be challenging. The quantification of these services is a relatively new undertaking, especially in terms of assigning economic value to ecosystems, which means the baseline for economic value will be one based on already depleted ecosystems.

What is and isn't working well?

The background paper highlights the focus in recent years on identifying, selecting, designating and monitoring sites which contain concentrations of species and habitats prioritised under the UKBAP. This has required a huge amount of work in terms of collating evidence, however the paper questions whether this has been a useful focus in light of the emerging prioritisation of preserving ecosystem function and resilience. This suggestion fails to recognise that ecosystems are composed of species and their habitats, which can only be fully comprehended if the species themselves - and the way they interact - are understood. The Society therefore feels that using the UKBAP targets (which focus on species and habitats of European priority) as a guide for effort *has* been worthwhile. The role of keystone species in defining and shaping some ecosystems (despite their identification being somewhat subjective) lends well to the argument that a total departure from the focus on species in evidence gathering work could be premature.

Regarding future work, the Society's members have stressed the need to make decisions based on the best available science, while also recognising that there will arguably never be 'enough' evidence. The medical model of evidence-based practice recognises that in the absence of rigorous peer reviewed scientific data and analysis, expert judgement is a valid form of evidence. This could form a common sense basis for environmental decision-making where published evidence is lacking, alongside an approach based on competing risks and adaptive management techniques.

The background paper highlighted the Glastir agri-environment system as an example of a major step in the direction of the ecosystem management approach. This system has been the subject of much criticism amongst the farming community, and has been highlighted as something which will not work by one of our members. Specifically, the generalised level of evidence presented in target guidance purportedly often fails to reflect local knowledge of specific conditions, which should play a bigger role. Glastir could arguably be guided by more detailed evidence. If the WAG is going to cite Glastir as an example of a successful step in the direction of the Ecosystem Approach, the evidence for its success should be outlined, especially if we can expect this to be used as a model for good practice.

In terms of what doesn't work in marine conservation, the Society's members have noted the lack of evidence to inform policy decisions, asking that the Welsh Assembly Government and statutory agencies resist the temptation to focus resources upon literature reviews, when it is basic surveys and research that are actually needed. Generally speaking, baseline surveys can fill gaps in evidence, which can be undertaken by universities and NGOs as long as they are supported.

What are the implications for future goals or targets?

⁶ The Countryside Survey: Wales results from 2007: http://www.countrysidesurvey.org.uk/welsh_reports2007.html

The targets presented in the Wales Environment Strategy are still valid, and any new framework will need to clarify whether these will continue to be pursued. The input received from this consultation exercise is likely to report a need for evidence gathering to take priority when future targets are set. Given there are a number of taxa and biota about which we have inadequate knowledge (in terms of their status, patterns of distribution and abundance, and ecological linkages), new targets may be needed to remedy this.

Specific comments for the Valuing Ecosystems workstream

Many of the questions under this workstream relate to the merits of the Ecosystem Approach in general, which do not warrant detailed discussion here. It is assumed the consultation document uses the Convention on Biological Diversity's definition of an ecosystem⁷, and that all references made to the Ecosystem Approach are to the CBD's approach referenced earlier in this response.

Through the Natural Capital Initiative (NCI), the Society has addressed these issues through our high-level 2009 symposium, 'Valuing our Life Support Systems', and revisited them again on 7th December with a workshop examining the potential for ecosystems to be protected using an offsetting scheme. The Natural Capital Initiative website⁸ has more details, and a report of the 7th December workshop will be available in the New Year.

To make a general comment on this approach, our members have expressed a concern at the implied assumption in the consultation documents that high levels of ecosystem services delivery and high biodiversity are synonymous. There is no evidence presented for this assumption. Indeed our members have pointed to examples where this is not the case; many highly productive ecosystems have low biodiversity – for example low diversity monocultures cultivated for agriculture.⁹ As mentioned earlier, the knowledge gaps require a balance to be struck between an approach that delivers protection for biodiversity *and* ecosystem services.

What is the societal value of ecosystem services in Wales?

The concept that ecosystems provide benefits and societal value to the human population is not new, albeit it is one that is attracting increasing popularity amongst policy makers in the last decade. The Millennium Ecosystem Assessment¹⁰ gives a good overview of the value of ecosystem services, many of which will be applicable to the ecosystem services Welsh society benefits from. The UK National Ecosystem Assessment (UK NEA), due to report in early 2011, will give more specific information for the UK, including Wales. An interim UK NEA paper published in October¹¹ presents a good example of the value of services provided by Welsh agricultural land, and discusses the value of this land use choice compared to alternative options such as woodland cover. This, and the future outputs of these initiatives, should be consulted when the workstream considers this question.

Which services could be captured financially and how?

This needs to be done with caution and consideration, based on the best available evidence. There also needs to be care taken to ensure the less tangible benefits and services ecosystems provide are valued, including cultural and existence values. Here the whole concept of valuing services monetarily can be questioned; in a civilised society we should be able to value nature for its intrinsic as well as its economic value. One member has asked, what happens to a site, species, habitat or ecosystem that we can't find an economic value for? Do we accept it is to be lost? There

⁷ CBD definition: "Ecosystem" means a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit" - <http://www.cbd.int/ecosystem/description.shtml>

⁸ Natural Capital Initiative website: <http://www.naturalcapitalinitiative.org.uk/>

⁹ Fitter, F. *et al*(2010) An Assessment of Ecosystem Services and Biodiversity in Europe. *Issues in Environmental Science and Technology*, 30. *Ecosystem Services*. Royal Society of Chemistry.

¹⁰ The Millennium Ecosystem Assessment: <http://www.maweb.org/en/index.aspx>

¹¹ Bateman *et al* (2010) Economic Analysis for Ecosystem Service Assessments in [Environmental and Resource Economics](#) 47

is a danger that the seemingly utilitarian nature of the ecosystem services approach may distort our evaluation of ecosystems towards only those elements that can be priced.

In terms of the new framework, entrenching environmental legislation with ascribed monetary values based on current evidence presents a risk, as values are likely to change over time as new discoveries for the human uses of nature are made, and also because different cultures within the human population value nature differently. Putting prices on ecosystems now risks overlooking the benefits and future options they could provide.

The work of the Natural Environment Research Council's Valuation Network¹² can inform decision making on how ecosystem services can best be valued financially. This network aims to 'facilitate the development of an integrated inter-disciplinary research community' by helping develop research capacity in valuation techniques, which will be greatly needed if an Ecosystem Approach is adopted.

How do we best factor costs and benefits into decision-making?

Decision-making must not be guided solely by economic metrics, despite the strained financial situation the UK is facing. Whilst it is important to recognise the value of the environment in supporting society and the economy, nature has intrinsic value above and beyond the benefits it affords humans, which needs to be factored into decisions.

Given this however, we recognise that pragmatically, unless an economic value is placed on nature, we risk it being priced as worth zero, in any cost or benefits calculation. Building on current work around value transfer and 'willingness to pay' measures and the coming work of the NERC Valuation Network (mentioned above), techniques to value nature can be refined. Alongside this must come a reform of policy appraisal guidance to make sure that cost-benefit analysis in the development of policy options is taking the value of natural capital into account.

Are there further opportunities within current or future EU policy, such as CAP?

As we are part of the European Union, its framework of Directives and policies must guide future Welsh policy. We are unlikely to be able to deliver a widespread Ecosystem Approach without reform of the Common Agricultural Policy and Common Fisheries Policy (CFP).

In particular one of our members noted the need to reconcile the CFP and Habitats Directive to bring fishing permits and licenses within the realm of 'plans and projects' so that their impact on Natura 2000 sites can be appropriately assessed and regulated.

Would there be value in developing formal accounting for natural capital in Wales?

This idea could be implemented in many forms, one of which is a system of biodiversity or ecosystem services offsetting, which can formalise the payments made by developers to compensate for the loss of biodiversity or ecosystem services caused by a development. This idea is being discussed in the aforementioned policy workshop run by the NCI, the output of which, available in early 2011, should be consulted for further input on this option. The NCI also plans to deliver a series of workshops on 'Mainstreaming the Value of Nature', looking at monetary and non-monetary approaches to valuation in 2011, the output of which will be useful when considering the benefits of formally accounting for Welsh natural capital.

More generally, attempting to formally account for natural capital has risks. It largely depends what criteria are used in the valuation process, and how well the criteria lend themselves to all forms of natural capital, including that which provides benefits that are difficult to quantify, such as landscape features with intrinsic appeal or spiritual value. Practically speaking, how this accounting would be done, funded, and by whom, are all important considerations if

¹² NERC Valuation Network: <http://www.nerc.ac.uk/research/programmes/valuation/background.asp>

this approach is adopted in the new framework. Whether or not a formal accounting system is adopted, the valuation of Welsh natural capital is an important task, given that without it nature has a value of zero.

Specific comments for the Regulatory Approaches work stream

How do we maximise benefits from current land and marine designations? Do we need to look again at the purposes of some of them?

The Society's members expressed concern about a review of protected areas, as this presents a risk that existing protections will lapse before any new approach is designed and proven to work. Protected areas may not yet be in perfect condition, but we would be ill advised to overlook the achievements made over the past 60 years and the contribution these areas make to the Welsh landscape. Protected sites and species within them need to retain full protection and continue to be considered in all planning and policy decisions regardless of how these are linked to a new approach. Protected areas need to remain as core areas in any new ecosystem or network approach, allowing the wildlife currently protected within them to disperse more widely.

In terms of maximising benefits, many of the current designations that stemmed from the Birds and Habitats Directives need monitoring and enforcement, which many members have argued is not being done adequately. This needs to be given more attention and resources as a matter of priority. The actual approach taken to monitoring and enforcement also needs to be reformed, to ensure common sense forms the guiding principle. Overregulation of small scale projects can cause public resentment, whereas a neglect of monitoring for large-scale high-impact projects risks losses in biodiversity and an equivalent souring of public opinion. Support for the designations needs to be far-reaching for them to truly be upheld, which can be fostered by a more sensible approach to enforcement.

An example of the neglect of marine designations is the ceasing of monitoring of two Special Areas of Conservation (SACs) in Welsh waters, including Cardigan Bay, which supports significant populations of bottlenose dolphins. This represents a failure to monitor a species protected under Annex II of the Habitats Directive. Meanwhile, the licensing of scallop dredging in the same bay, without an Appropriate Assessment, is another example of a failure to respect existing designations. Generally speaking the high coverage of designation in Welsh coastal waters is to be applauded, however resources must be set aside to ensure these are more than just paper designations.

How far can our evidence base or monitoring proposals sustain a risk-based approach to regulation?

At present the evidence base in Wales is patchy, suggesting it can sustain a risk-based approach to varying degrees. Most risk-based approaches require adherence to the precautionary principle when dealing with uncertainty, on the basis that higher levels of uncertainty require greater restrictions upon human activities that could have a negative environmental impact.

Are there any genuine constraints to using a sustainable ecosystems approach within the current EU framework?

In marine policy, the recent introduction of the EU Water Framework and Marine Strategy Framework Directives, has placed a new focus on spatial planning and taking a more holistic approach to marine conservation, which seems to fit with the Ecosystem Approach. Any new framework needs to operate with regard to these existing Directives, which need not necessarily constrain it. Once the Welsh Assembly Government has a clearer idea of what the framework will look like, an assessment can be made of how well it will fit into the current EU framework.

In terrestrial and marine policy, one genuine constraint to using a sustainable Ecosystem Approach is the current way in which 'favourable condition' of protected sites is assessed. The current definitions are based on a very narrow view of habitats and require very tight species composition parameters. Without changing legislation or infringing the

Habitats Directive, a more ecologically driven approach to favourable status, based on expert opinion of the overall condition of the ecosystem present should be taken. For example allowing trees to grow on a heathland site could currently be viewed as creating an unfavourable status according to Common Standards Monitoring. With the current predictions for climate change this is a likely scenario that some would argue we should not try to prevent as in this example, scattered trees over heath can increase diversity and would not necessarily render the heath unviable as a functioning ecosystem. The application of Common Standards Monitoring could be adjusted to permit local distinctiveness more frequently and to allow sound expert judgement to be utilised more. Whilst the Ecosystem Approach recognises that some change is inevitable, management practices do not always accept this at present.

How far would the current framework of regulation and management need to adapt to meet these new goals?

The background paper mentions the *Making Space for Nature* review¹³ under taken by Professor Sir John Lawton, which emphasises connectivity of sites at a landscape scale, which the authors see as recommendations to be echoed in the Welsh landscape. However in terms of terrestrial regulation, Article 10 of the Habitats Directive, which focuses on the wider countryside, needs to be considerably strengthened in UK legislation (regulation 39 of the Conservation Regulations 2010) if the objective of ecological connectivity is to be realised. The background paper points out that the alternative focus has been on Article 6 of the Directive, which regards SAC site designation. Some of the Society's members have noted little evidence of any serious attempt to create a coherent ecological network, which would be necessary for the ecosystems approach to be realised. Point 7.8 made in the background paper offers a useful discussion of the options for the way forward. It seems more sensible from a budgetary point of view to retain and reinterpret the existing statutory framework than repeal and replace it.

Whichever option is chosen, reinterpretation of existing regulations seems to be required, as they are arguably not being used properly. For example little or no use has been made of powers for the SSSI management schemes or management notices awarded in 2000 under the Wildlife & Countryside Act, which required recalcitrant land managers to undertake essential conservation land management. Similarly, there has been no application of Conservation Regulation 25 (Special Nature Conservation Orders) in Wales to safeguard Natura 2000 sites from continuing damage over the past 16 years. Proper application of existing law needs to occur whichever specific goals are set in the new framework.

How do we best link the various regulatory and management mechanisms to achieve an integrated approach?

The process of identifying areas valued by society for particular features or functions and advising that fact to managers and decision makers is a simple but fundamental pre-requisite to rational resource management. Monitoring the terrestrial protected area network and communicating the results to landowners is important, and as previously mentioned, the Wildlife Trusts and other charities and NGOs have a role in this. Land owners and farmers cannot protect what they don't know is there, which makes advisory work by the Countryside Council for Wales, the Trusts and others important in stimulating wildlife enhancement.

Are there activities which are currently unmanaged which in future should be because of their critical importance?

The UK government (including the Welsh Assembly Government) places high priority upon the development of offshore renewable energy, which will be necessary in the coming years to meet the EU renewable energy targets, and those set in the UK Energy Act. Our members expressed a desire to see renewables deployed with regard to their environmental impact on marine ecology. Without adequate monitoring and mitigation of offshore developments there is a risk that marine organisms will be negatively affected. These activities need closer scrutiny in the future.

¹³ Making Space for Nature: A review of England's Wildlife Sites and Ecological Network; submitted to Defra, September 2010: <http://www.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

Equally, the marine fisheries sector is in urgent need of regulation to enable the delivery of Article 6 of the Habitats Directive and to enable Wales to deliver its constitutional commitment to sustainable development.

Do we need fresh Welsh legislation to address any of these issues?

As referred to previously, the problem is the piecemeal way in which existing legislation is *applied*, rather than the way it has been formed. Although a new framework would usefully streamline the existing regulatory tools, the last few decades have seen great achievements in environmental legislation, which unfortunately is underused in Wales. New regulation is arguably a low priority; the proper application of the current legislation based on an ecological and common sense approach needs to be the urgent priority.

Some of our members however have called for the Scottish example to be followed in the marine area, calling for the development of a Welsh Marine Bill (which would need to be integrated with the legislation dealing with other UK seas), and supported by creating an equivalent of Marine Scotland, which could bring together and empower the major relevant scientific bodies within the country. This could be taken forward as a possible piece of new legislation.

Specific comments for the Delivery Mechanisms work stream

Members generally felt it difficult to comment on the delivery of the new environmental framework until its aims are fully developed. Generally speaking though, it is likely that it would have to be a multidisciplinary approach, involving all Welsh Assembly Government Departments and guided by the Natural Environment and Rural Communities (NERC) Act duties.

How do we ensure all the various stakeholders and sectors can shape the implementation of the framework positively?

Drafting consultation documents carefully to ensure a coherent document is available for stakeholders to comment upon is a very important first step as incomprehension can lead to disengagement.. In this instance, many members found the document and background paper difficult to understand due to the convoluted and incoherent language used.

Participation also depends upon incentive, which may be financial or some other motivation related to an anticipated personal benefit, and thus incentives need to be assessed carefully. Stakeholders need to be made to feel that in being asked their views, the consultation process will go beyond the receipt of a written response; there needs to be adequate feedback and dialogue. Particular effort to ensure harder-to-reach stakeholders are involved should be made; be it by making active contact through written channels or by organising accessible public meetings.

How do we build a common view of the true significance of `green and blue infrastructure` of Wales and a language to describe it that communicates well with the wider public?

The background paper recognises the strong connection many Welsh people feel to nature, which is already reflected in the language. This suggests the Welsh population is starting from a higher level of engagement than in other parts of the UK. To truly communicate the significance of the 'green and blue infrastructure' requires partnership working between Government and non-governmental nature protection organisations, who may be better placed to engage with public by utilising their membership bases and encouraging members to disseminate their message into wider communities.

It is worth noting here the danger that jargon-laden phrases such as 'green and blue infrastructure' present in terms of hindering engagement. These phrases could disenfranchise and disengage and most lay people, in the way that

'biodiversity' is said to have done in the past. Simpler references to nature and wildlife may be more effective for use with the general public.

Through the NCI, BES has worked with Sciencewise¹⁴ on public engagement issues, specifically on a public dialogue pilot project¹⁵ led by the Countryside Council for Wales, which aims to gauge public perceptions of the value of ecosystem services in Wales, and establish the preferred land use management options which may need to be utilised in the face of climate change. Projects such as this will help ensure information flows both ways, allowing an exchange of information between the public, NGO community and Government agencies.

How might we improve current stakeholder and delivery arrangements to meet the new challenges? How can we do this in the most efficient, effective way given the financial constraints?

With the present economic climate and large cuts in public spending, it is even more important than ever that scarce resources are utilised effectively. One way to achieve this is to forge stronger partnerships with NGOs and academic establishments to enlist their help with environmental research and monitoring, policy advice and education. This could be developed much more than exists at present. The Scottish Government's example could be considered as a model, which introduced a grant scheme to support environmental projects from NGOs and universities, which pays them dividends, since they are better practiced at delivering more with smaller budgets.

Which are the key sectors and policy areas that would need to reflect the new approach?

The background paper recognises the need to better communicate the value of nature across Government (and within 'direct driver' sectors) to ensure biodiversity is not just an afterthought or an add-on. This is important as it is arguably the consideration of 'the environment' as its own department or stand-alone issue which has caused failures in the past. The concept of 'joined-up government' is not a reality at present, yet it is needed for the success of any future framework. Departments are unlikely to integrate the value of nature, or wider sustainability, without a financial incentive to do so. In this regard, the Government may need to place concrete requirements on all departments. By reforming guidance used in policy appraisal across Departments, to take into account the valuation of natural capital in cost-benefit analysis,, the WAG can make sure that the values of nature are taken into account.

Agricultural policy is arguably a key sector which needs to implement a new approach. The background paper mentions the Glastir agri-environment scheme, which some members have questioned the effectiveness of. The prescriptions are seen by some as too general and not underpinned by sound science. The emphasis on minimising project officer inputs, and a dependence on the applicant to appraise the value and objectives of a particular area of land, may prove to be misplaced. Furthermore, the compliance with prescriptions is not policed sufficiently. The Government needs to think about how this scheme can be improved and shaped to reflect the new Ecosystem Approach.

Specific comments for the Environmental Delivery Bodies review

What are the organisational implications of pursuing an integrated approach based on ecosystems?

The main implication alluded to in the background paper is the merging of the Countryside Council for Wales (CCW), Forestry Commission Wales (FCW) and Environment Agency Wales (EAW), which is proposed on grounds of streamlining their functions and avoiding duplication. Our members recognise the merits of this in terms of

¹⁴ Sciencewise is the UK's national centre for public dialogue in policy making involving science and technology issues. See the website for more information: <http://www.sciencewise-erc.org.uk/>

¹⁵ See the project website for further details: <http://www.sciencewise-erc.org.uk/cms/landscapes-and-ecosystem-futures-wales-background/>

efficiencies; however warn of the dangers presented by any major institutional change, which can disrupt day-to-day delivery. Mechanisms would need to be in place to ensure there is no vacuum during the changes.

Furthermore, the three bodies have very different aims, and in combining them there is a risk that some objectives are undermined, for example those of conservation and biodiversity protection, which could be sidelined by the new aims of a larger organisation, which is likely to place a greater emphasis on recreation and economic development. In particular the conservation objectives that have made the CCW so effective over the last few decades need to be retained, if indeed the overriding implication of the new approach is a merger of these bodies.

How would delivery best be organised at the localised level to ensure coherent delivery?

The Ecosystem Approach enshrines the principle of local delivery, however this needs to be done whilst maintaining an awareness of national and international policies. Getting the balance right between adequate attention to local contexts and ensuring that delivery is coherent on a wider spatial scale is challenging, but can be achieved. Involving local groups *and* national NGOs with regional structures is important, not only for success but for public support; the public values local officials who understand local issues and have the capacity to communicate them to national policy-makers.

What can be learnt from the approaches of the different bodies to improve delivery, regulation and enforcement?

Some of the Society's members have had experience with CCW, which has received praise and some minor criticism. Whilst the CCW works effectively and has achieved a great deal, it would perhaps benefit from developing initiatives in a more holistic manner. In some cases it has been reported that local efforts are proceeding without necessarily paying adequate attention to the wider context. Overall though, the CCW is seen to have shown great initiative over environmental policies, research and monitoring within Wales, although its more recent work is not seen to be of the same calibre. For all three bodies, an external review will be needed to ensure the most effective aspects of all are carried forward to a new body.

What are the detailed costs and benefits of change?

Generally, some of the Society's members have expressed concern that Wales has not seen as many gains from the devolution process as Scotland, because it has neither full powers nor adequate resources to put strong environmental policies into effect within Wales, nor does Westminster give it adequate support financially. Making changes to the way environmental protection is delivered is important for future targets to be met. However the creation of a new body needs to be done carefully.

In reality it will be difficult to deliver the same for less money. Given the aspirations of the WAG are to improve the quality and quantity of existing conservation work, the implications of financial cuts are worrying. A merge of the delivery bodies, though perhaps more efficient in the longer term, will require some up-front costs, which need to be carefully accounted for before changes are implemented. In the absence of such investment much can be gained from encouraging closer working practices between the key agencies - it may be more cost effective to simply ensure that staff are housed and work together, or at the very least encouraged to increase the amount of informal contact they have. This can be much more valuable in conveying information, trust and confidence than any institutional arrangement.