



28th January 2016

Dear Scottish Government Land Use and Biodiversity Team

James Hutton Institute response to Consultation on the draft Land Use Strategy 2016 -2021

Thank you for the opportunity to respond to this consultation. The James Hutton Institute (www.hutton.ac.uk) is pleased to give feedback on the second edition of this important strategy using insights gained from its Scottish Government funded research, as well as insights from other projects and international collaborations. We provide our responses to the relevant consultation questions as well as giving an overall evaluation of the draft strategy below. We look forward to working with you and the many other stakeholders involved to support the implementation of the final strategy, through our input to the Strategic Research Programme (SRP), the Centres of Expertise and our close engagement with public and private sectors and civic society in Scotland.

We broadly support the focus on Policy Context; Informed Decision Making and Applying the Principles. These are part of the 'feedback loop' within the ecosystem service cascade model, which illustrates the importance of human actions in managing, protecting and restoring ecosystems to ensure that they continue to provide services and benefits. It is important to continue to acknowledge the underpinning relationships between ecosystem function, service and benefit; and to acknowledge the uncertainty involved in predicting how much service and benefit can be derived in different places and across time.

Under Q17 we elaborate on some potential omissions in the document and suggestions about how these might be incorporated in the final Strategy. There are two issues that thread through our answers so we offer them at the start: firstly the need to explain that a strategy underpinned by the Ecosystem Approach could be a strategy about everything for everyone, so a process to prioritise and focus was required; and secondly, that whilst this is a Scottish Government strategy, the delivery of the policies and proposals will require partnerships involving public bodies, NGOs, land managers and local communities.

A further general comment is that the plural 'communities' is used throughout the document, recognising the attachments of both communities of place and of interest to different land parcels.

Vision, Objectives and Principles

The Land Use Strategy 2016 – 2021 continues the policy direction established in the first Strategy. We consider that the Vision, three long term Objectives and Principles for Sustainable Land Use are still relevant and fit for purpose therefore we propose that they are retained.



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Q 1a *Do you think that the Vision, Principles for Sustainable Land Use and three long term Objectives are still fit for purpose?*

Generally yes - please see answer to Q1b for details. As these are set out as relevant until 2050 it would be desirable to present the vision of success to be realised by 2021, and explain how the specific priorities for next five years were selected, presented on the associated WWW site rather than in the Strategy.

Q 1b *Please provide your reasons for your answer.*

We support that the vision extends to 2050. However, it would be useful to set out what the Scottish Government aims to be different by 2021 as an outcome of this Strategy, as enabled by the implementation of their policies and proposals; and monitored by the indicators.

We broadly support the three main Objectives.

Objective One.

Research at James Hutton Institute indicates that many land managers believe they are already making as much a contribution to Scotland's prosperity as they can, and that failures are due to global factors such as world markets and commodity prices. Suggestions are:

- (i) The Strategy could recognise external drivers of change more explicitly, outlining current trends in land use which underpin the need for LUS2.
- (ii) A definition of what is meant by prosperity could be included and how it might be better distributed. For example, prosperity could be considered in terms of the wider supply chains including very important economic sectors such as tourism, aquaculture and distilling (missing from the Strategy), rather than only the profit to a holding.
- (iii) Consider how prosperity supports the fabric of Scottish society (inter-relationships between natural, social, cultural capital for example).

Objective Two.

We recommend a reference to the Convention on Biological Diversity. This objective is important in that it recognises the importance of how land is managed and *used* on a daily basis, not just a focus on land cover. Ecosystem services and their resulting benefits are produced in an interaction between natural and social systems and are experienced/appreciated in bundles of services found within a single field, holding or landscape. So, it is important to recognise the diversity of public and private objectives for land and the range of barriers that persist in increasing the delivery of public goods from Scottish land. For comments on partnership working see Q8d and the Environmental Cooperation Action Fund under Q11 below.

Objective Three.

We suggest:



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- (i) Discussion of this objective in section 2.5 be broadened to reflect more of the issues relevant to 'urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use'. Currently, the focus is on community ownership; whilst it is essential that the discussion reflects recent policy developments in this area it is also important to acknowledge that strengthening people's connection to the land goes beyond facilitating new ownership models – many more people will use or enjoy land than own or manage land.
- (ii) More of the other dimensions of this objective are highlighted, including facilitating public participation in placemaking and stewardship with respect to public and private land, and promoting inclusive access and engagement in outdoor recreation.
- (iii) Connecting people to the land must happen through the engagement of individual residents or taxpayers and not only via the route of 'communities' (where the focus is often more narrowly on community organisations). Indeed, there is little in the current draft that recognises the role of consumers and responsible consumption of land based products and services, including responsible access.

We broadly support the Principles of LUS2. However, some specific wording of principles could be refined in light of the experience of LUS 1.

Suggestions for consideration are:

- (i) Principle C – the current wording may suggest that multiple benefits should not be pursued and it might be useful to ensure this impression is avoided.
- (ii) Principle G - "Where land has ceased to fulfil a useful function because it is derelict or vacant, this represents a significant loss of economic potential and amenity for the community concerned. It should be a priority to examine options for restoring all such land to economically, socially or environmentally productive uses". We suggest a rephrasing to read ""Where land has ceased to fulfil its original function because it is derelict or vacant...". This would recognise that vacant or brownfield sites can provide important habitats for some species and a site for informal play, thus it is important to avoid suggesting that 'urban wildscapes' have no function.

We suggest that a sentence on page 8 is rephrased to make more explicit the connection between stocks of natural capital and the ecosystem services provided. For example, "The stocks of ecosystem services we have in Scotland can be thought of as natural assets or natural capital" should be changed to "the stocks from which we gain our ecosystems services in Scotland can be thought of as natural assets or natural capital."

Natural Resource Management



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Our understanding and thinking about natural resource management and ecosystem services has progressed since the publication of the first Land Use Strategy. We consider that the use of an ecosystems approach is a helpful means to better understand our environment and factor it into decisions. This has been successfully demonstrated in the work of the land use pilot projects in Aberdeenshire and the Scottish Borders.

Q 2a *Do you agree that continued use of an ecosystems approach is an effective way to manage Scotland's natural capital?*

We agree that continued use of an ecosystem approach is appropriate. An Ecosystem Approach is a holistic, systems-based and participatory approach to ecosystem management, as defined and used by the Convention Biological Diversity (CBD). Whilst we understand the need to make the approach accessible and engaging to all, we feel it is important to retain explicit links to the underpinning Convention on Biological Diversity and the original 12 Malawi principles of the CBD¹. Research at the James Hutton Institute suggests that the principles related to temporal variability, use of local knowledge and to ensuring that the approach takes account of interactions with other ecosystems, both adjacent and further away, have been often overlooked and deserve more attention. For example, LUS2 could emphasise a need to focus on using such information in decision-making.

An Ecosystem Approach is not the same thing as an ecosystem service assessment. An assessment focusses on identifying and quantifying ecosystem services, often resulting in a technical and systematic analysis of services, rather than the holistic and participatory ethos of an Ecosystem Approach. However, the two approaches can be usefully combined, by using the ethos of an Ecosystem Approach in decision-making based on evidence derived from an ecosystem service assessment. The approach is highly relevant because it contributes to a global agenda and forum for debates, where Scotland can play a leading role internationally (see the 4 'I's of the Scotland Economic Strategy). It is not always easy or cheap to use a participatory and holistic approach to managing multi-scale socio-ecological systems but over the long term it is much more likely to lead to a more innovative and vibrant land use sector. It would be germane to refer to the formal commitments to the approach made by delivery partners (e.g. SEPA).

Q 2b *Please provide reasons for your answer.*

¹ The CBD provides 12 principles (the 'Malawi Principles') as a guide to implementation. The approach links 'adaptive management' based on understanding ecosystem functions and processes, together with arguments for decentralisation, stakeholder participation and empowerment in decision-making. The aim of an Ecosystem Approach is to protect biodiversity, whilst ensuring sustainable resource use and equitable distribution of the benefits arising.



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We support the commitment to using the ecosystem approach in the Strategy however there are very few examples of genuine, full, implementation of the Ecosystem Approach. For example, we agree that the existing regional land use pilots in Aberdeenshire and Scottish Borders have provided a wealth of information and much to consider on how our environment provides multiple benefits for ecosystems. However, their actual effect on decision-making is yet to be demonstrated, with changing in the process of decision-making beyond the remit of these studies.

To address this, the pilot work could be extended and/or their legacy studied to consider opportunities for improving existing decision-making processes. The regional land use pilots provided opportunities for using an Ecosystems Approach but they did not put this into practice in terms of changing outcomes on the ground. The LUS2 is missing an opportunity to provide more detail about where, how and by whom the approach can or will be used in decision-making.

The CBD objective to consider equitable distribution of the benefits of the ecosystem is often given less attention, yet it fits very well with the LUS2 aim to contribute to a fairer Scotland and the objectives of the Land Reform Bill and Community Empowerment Act.

Policy Alignment

We set out the relationship of the LUS2 to key Scottish Government policies including the National Planning Framework 3 and the National Marine Plan as well as a range of sectoral policies such as forestry, agriculture, peatland, and soils.

Q 3a *Is the relationship as set out in the draft Land Use Strategy 2016 – 2021 clear?*

We support the focus on policy integration. The National Ecosystem Assessment Follow-on Project showed that embedding knowledge of our ecosystems and their services into project, programme and policy appraisals is critical for decision-making and could provide many wider benefits for society. However, both the choice of content and the mechanisms for achieving integration are unclear. We appreciate policy integration is a significant challenge, but one could argue that this is the primary purpose of the Land Use Strategy.

It remains unclear how the current division between the Town & Country Planning regime and those tackling agriculture, forestry, water, biodiversity, soils and peatlands will be bridged. It is surprising that there is no explicit reference to the concept of the water-energy-food nexus, given its prominence in global, European, UK thinking and the potential for the LUS2 to be a leader in such approaches. The table on page 14 could be made clearer if it distinguished between (i) "Policies with clear "decision-maker(s)" and budgets, and (ii) Strategies, etc. which will merely have to be "taken into account" in real-life applications.



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Q 3b Do you have any comments on the relationship between the LUS and Scotland's Economic Strategy 2015, National Planning Framework, National Marine Plan and other relevant policies?

Many "plans, policies and strategies" are presented in the diagram on page 14 but it is unclear why some policies were included and others were not. It is not clear how the layers interact and the mechanisms by which these policies, plans and strategies will be integrated. Whilst many plans have a statutory duty to 'have regard' to one another, often this is not translated into joint activities. For example, from research at James Hutton Institute, particularly in the Aberdeenshire local focus areas, people supported the principle of policy integration but were expecting to see more detail about how it will be implemented in the LUS2. We believe it would be productive to provide more detail about the existing and planned relationships between the LUS and other policies. For example, on page 13 it is stated that the LUS has informed the NPF3, Scottish Planning Policy and the National Marine Plan; it would be helpful to expand on this in an Annex.

Examples of links which could be more explicit and thus strengthen LUS 2 are:

- (i) To position Scotland as leading internationally on themes relating to land use, the Land Use Strategy 2 should make reference to the UN's Sustainable Development Goals (SDGs), with several of them relating directly or indirectly to the aims and content of the Strategy, for example 2, 3, 6, 13, 14 and 15, and particularly 15.9 'integrate ecological values into planning'. We believe the Strategy would carry more weight if it made reference to the SDGs and that the Strategy should keep a watching brief on developments in Europe. The European Commission plans to publish a paper on Land as a Resource during 2016 and, at a general level, much of the Vision, Objectives and Principles of the Strategy has similarities to those in Europe. More details can be found at: http://ec.europa.eu/environment/land_use/index_en.htm
http://ec.europa.eu/environment/land_use/pdf/supportIALandComFinalReport.pdf
- (ii) Reference to the seven "Growth Sectors" (which include Food and Drink, Energy inc. Renewables, and Tourism); or to the Scottish Biodiversity Strategy (only one reference in the Strategy document), or soil carbon management (only one reference in the Strategy document).
- (iii) Some assets (e.g. water) are partially covered by reference to River Basin Management Planning but not flood risk or drinking water protection management.
- (iv) More reference to National Park Partnership plans, given these are advanced forms of joined-up planning and management for some of Scotland's most iconic landscapes.
- (v) Notwithstanding Proposal 1, it would be desirable for there to be more detail on integration with the Land Reform Bill and Community Empowerment Act. There is a risk of a lack of consistency and coherence between the LUS2 and the Land Reform Bill and



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- the developing Land Rights and Responsibilities Statement, which could be confusing, and divisive for land managers. It is also possible that there could be duplication.
- (vi) It is not clear how “Urban and rural communities better connected to the land” (LUS2 Objective 3) will help to ensure communities are resilient and supportive; such connections might engender differences within communities (i.e. SG National Outcome on “strong, resilient and supportive communities”).
 - (vii) The link with the EU Common Agricultural Policy (CAP) is only to the SRDP (the second of “SG National Plans ...” shown). Yet, approximately twice as much resources (i.e. £450 million per year) will be spent on Pillar 1 Direct Payments as through the SRDP. Therefore, a more comprehensive set of links to such an important public investment might be expected.
 - (viii) The relationship between the LUS2 and soils policy needs to be clearer, including the update cycles of both documents.
 - (ix) Greater attention could be paid to the identification of opportunities to help existing policies, plans, activities by non-government and the private and voluntary sectors to deliver more benefits and to avoid trade-offs by innovation in management and planning.

Comment [DRM1]: What are we adding here?

It would be useful to highlight the role of Rural, Agriculture, Food and Environment (RAFE) Delivery Board in terms of helping ensure alignment and holding people to account if policies/strategies are not aligned.

Planning

Planning policy refers to the Land Use Strategy and highlights it as a key document for planning authorities when considering the wider context for development plans. We wish to raise awareness of the relevance of the LUS2 to planners and to enhance their understanding of how the LUS Principles and ecosystems approach to environmental assessment can add value to the planning process.

Q 4a *Do you think that the activities described above could be useful?*

Yes, the commitment to providing more detail and clarity on the relevance of the Land Use Strategy to the planning system is welcome. However, it is questionable as to the extent these activities are going to change current working practices of planning. An area of ongoing work for Scottish Planning Policy is to improve alignment with the Land Use Strategy.

Q 4b *Do you have any suggestions on other kinds of information and activities that could be useful?*

From the current wording Land Use Strategy could appear as being an optional consideration in the planning process. The Land Use Strategy could be positioned as a core part of the planning system to ensure that the principles and visions of the Strategy are implemented by planning authorities.



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Other observations are:

- (i) In relation to the programme of information and awareness-raising proposed, it is questionable whether awareness raising efforts are sufficient to promote the application of LUS principles in planning decisions. Awareness-raising amongst stakeholders should highlight the benefits and necessity of the LUS not just its existence.
- (ii) Further enhancement of capacity and skills of planners to apply the ecosystem approach may be required to enable delivery of all of the LUS principles.
- (iii) The Ecosystem Approach should form a compulsory part of Strategic Environmental Assessment.
- (iv) A challenge for biodiversity conservation in it being recognised within the planning process, and the absence of reference to biodiversity in the draft LUS2 suggests that this will continue.
- (v) Work on integrating river basins management with planning illustrated that even where planners were aware of the issues a lack of resources and staff meant that any additional integration was seen as an unwelcome burden and not an opportunity. Providing training opportunities for planners could be useful in this respect to help co-construct an approach that made planning more streamlined. The James Hutton Institute plans to work more closely with PAS to help address this type of issue in the forthcoming Scottish Government Strategic Research Programme 2016-21.

Forestry

Forestry is a key land use, covering around 18% of Scotland. It is also a key contributor to climate change and biodiversity targets. The existing Scottish Forestry Strategy was published in 2006 prior to the publication of the first Land Use Strategy. Given the age of the existing Scottish Forestry Strategy, a review could ensure better alignment between forestry policies and the Land Use Strategy Principles.

Q 5 *How could the content of the current Scottish Forestry Strategy be updated to better reflect the Objectives and Principles of the Land Use Strategy and other key priorities?*

All of the LUS Principles are relevant to the forestry sector. Although different types of woodland deliver different suites of multiple benefits (Principle A in the LUS) – for example, compare riparian woodlands with tree line woodlands – a schism remains, in large part between agriculture and woodland (we welcome mention of potential tree planting on farm p25 under 3.3: Agriculture). There is a perception, and in many places a reality, that it is either one or the other. A revised Forestry Strategy needs to find a way around this, and support a more integrated approach with appropriate incentives. For example, stakeholders in the Aberdeenshire Regional Land Use Pilot indicated a desire for more recognition and support for small scale agro-forestry to promote a mosaic of woodlands to form habitat networks and corridors between larger areas. Amenity planting is often provided by non-farming small holders and it would be useful to consider the role of LUS in supporting diverse stakeholders to ensure that it is a strategy for all forestry – not just land in public ownership or commercial plantation.



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Land Reform

In light of evidence provided to the Parliament in connection with the Land Reform (Scotland) Bill, we intend to explore further the potential advantages of an overarching policy statement that deals with ownership, use and management of land.

Q 6a *Do you consider that there could be advantages in having a single policy statement about land which deals with ownership, use and management?*

Though there are significant relationships between land ownership and what it is used for, tackling them within the same policy runs the risk of allying a contentious set of policies on ownership with a set of policies on use that are less contentious. Furthermore, any statement that tries to cover “ownership, use and management” could become too broad to be useful. However, without such a single policy statement, the potential for the LUS2 to work in isolation from land reform will persist and this could potentially damage the common vision and legitimacy of LUS.

Q 6b *Do you have any comments on the relationship between current land related policies and how these would relate to a single policy statement?*

Two examples for consideration in relation to land related policies are:

- (i) **Empowering and protecting local communities** is emphasised by recent policies relating to land use, ownership and management. Whilst we support this, there are many other groups affected by the management of land. Local communities may not always act in accordance with the interests of others, or wider societal needs. We would welcome the opportunity for the Scottish Government to clarify the extent to which local communities are expected to respond to, or interact with, other groups so as to safeguard the interests of Scotland as a whole.
- (ii) The concept of cross-compliance under CAP Pillar One direct payments is not referred to in LUS2 and it would be useful to consider how these responsibilities can support the LUS2.

Informed Decision-making

This group of policies and proposals supports decision making with the development of improved data, increased accessibility and wider empowerment of communities and stakeholders in decision-making.

Ecosystem Services Mapping and Tools

We will continue to develop and support the LUS Data Directory, linking in to any future open data discovery sites and we also propose to explore the practicality of developing methods and



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methodologies to assist in the assessment of land use benefits and opportunities at a more local level.

Q 7a *Do you agree that models and GIS tools could help inform decision making about land use/management change?*

The Institute supports the principle of wider access to data and will continue making our data available through SEweb, Scotland's Soils website and our own website.

Q 7b *Please provide your reasons for your answer.*

A map-based approach to communicating information about ecosystem services is useful in characterising the system but care needs to be taken to account for services and benefits that cannot be mapped. These are often cultural in nature and relate to the values peoples derive from the way the component land-uses deliver landscape character.

The quality of information available from GIS tools and embedded models relies upon the underlying data. Users must be aware of the opportunities and constraints associated with different datasets and the spatial and temporal resolution of the data used. It is important to support the provision of trends and change in environmental and social factors relevant to land use issues through time and not only data of which represent snapshots in time, and that tools enable the capturing of interactions and impacts on ecosystem function. In interpreting outputs from such tools, and that the outputs are interpreted correctly (e.g. with respect to causality of changes in land use).

Research at James Hutton Institute found that map based predictions of land use change can be used to explore the consequences of applying the land use strategy goals in local focus areas. Whilst local stakeholders found these useful for regional level planning, decision making at the sub-catchment scale needs to integrate this approach with local priorities and knowledge. We also found that resources need to be put into providing deliberative spaces for a wide range of stakeholders to access, debate and amend these data/tools for them to be utilised in decision making – they are useful as part of a participatory process but are less useful as stand-alone decision support aids.

It would be useful for this section of the LUS2 to indicate the relationship between the Living Atlas of Scotland, Land Use Data directory and SEweb including Ecosystem Services Data Management Project, particularly as the MRPs are also being commissioned to generate a Natural Asset Register in the Scottish Government Strategic Research Programme (2016-21). Thus, we welcome the availability of open data but proliferation of different sources could be confusing and expensive to maintain.

Q 7c *Do you think that a baseline ecosystems services mapping tool could be useful?*

Yes. It would be constructive to have a single mapping tool available for use across all of Scotland, allowing for consistency in decision making between adjacent areas. It would also be useful to work



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towards integration with the Register of Land and Property in Scotland, However, this commitment should not be at the expense of adaptive management. Gathering baseline should be one step in an adaptive management framework. So, the LUS2 implementation process needs to ensure that resources and energy are kept for later stages in the process – doing things and learning from their implementation.

Q 7d *Do you have any comments on a mapping tool?*

We recognise that many things that matter to communities or stakeholders cannot, or are not, currently modelled or mapped. Furthermore, ecosystem services are not an inherent property of the land, but are generated jointly by the interaction and management of people and ecosystems. Benefits are derived from the co-existence of a bundle of services and therefore mapping and tools need to take account of how these bundles are generated, perceived, used and valued by the public.

The metadata associated with the mapping tool need to be explicit on the assumptions underlying the input data and associated models, the spatial and temporal resolution of the data, generalisation undertaken, and understanding of what is being not being represented as well as what is.

The use of any one set of tools should not dilute the LUS2 from its vision and objectives.

Regional Land Use Partnerships

Local partnerships can be an effective way of bringing people together to consider land use issues that are relevant to them. We wish to encourage the setting up of regional land use partnerships to help deliver the Land Use Strategy at a local level. Q 8a Do you agree that regional land use partnerships could be a helpful way to support regional delivery of the Land Use Strategy?

A partnership approach is essential to integrate the needs of all interested parties and particularly to ensure that those not directly involved in owning and managing land have a say in the management of their area. There are many well-established benefits of a partnership approach and there was a strong desire to see a cross-sector regional discussion forum established in Aberdeenshire, following the Regional Land Use Pilot.

Q 8b *Who do you think could be best placed to lead these initiatives?*

Local Authorities have an important role to play as they can provide supporting infrastructure and resources, and a democratic mandate. Most local authorities are too large geographically to have the knowledge of local 'networks' to support activities on the ground. The Community Planning Partnerships aligned to each local authority which, since recent reform provide a forum for some topics of relevance to the LUS to be considered. These provide established structures, mechanisms and links which could be expanded, perhaps giving an enhanced function of Community Councils.



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As the Aberdeenshire Regional Land Use Pilot project illustrated, many of the pressing issues facing the area are not within the remit of the local authorities. However, they can act as the coordination lead, whilst ensuring that there is genuine partnership of all sectors with interests in the goods and services coming from land. A practicality of funding such activities would require to be addressed. Depending on their mandate and remit, leadership by other organisations e.g. NGOs or LEADER local advisory groups could also play an important role.

In other words, if the partnership exists to advise and promote greater partnership working and does not directly make or amend policy, then it can draw its legitimacy from participatory democracy and not necessarily from traditional democracy at the ballot box.

Q 8c *Can you suggest any alternative means of supporting the delivery of the Land Use Strategy at regional level?*

It is important to continue attendance at, and support for, established sectoral and geographically based groups; whilst the regional partnership provides a forum to bring them together for dialogue. It would be useful to have LUS champions embedded in other existing regional/local forums to facilitate this cross-fertilisation. We suggest that the Scottish Government recommend that all regional and local groups that use or influence the land and its ecosystem services consider the Sustainable Land Use Principles in their planning and evaluation cycles. This is a relatively easy way to embed the LUS across multiple domains without the overhead of setting up a new forum.

Q 8d *Do you have any other comments on this policy?*

Work to enable land-use partnerships should be contingent on, and informed by, the work to understand how these partnerships can actually contribute to decision-making. Otherwise, a remit for discussion may not by itself be sufficient to motivate and maintain participation from different sectors in society. It is important to consider the mandate of such partnerships, for example are they designed to advise government or provide a space for deliberation and generation for local cooperative action. Whilst the Regional Land Use Pilots indicated support for such bodies, this was coupled with the desire that these bodies could influence future action and deliver more integrated land management. However, it is not always easy or possible for an advisory group to do this without access and influence to decision making at the national (Scottish), UK or European scale. Therefore, we suggest that these groups report to a national level Land Use Forum as many of the issues and challenges for integration cannot be solved at a regional level but require national level guidance leading to national solutions which then can be locally adapted.

When considering implementation, it will be important to consider how these regional partnerships fit with existing regional, catchment or landscape scale groupings. It is useful to reflect on why many previous regional forum e.g. sub-basin advisory groups for the Water Framework Directive; LBAP groups; Regional Priority Advisory Committees etc. seem to be suspended or in flux, and to what extent these proposed regional partnerships might supersede or complement these.



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At the James Hutton Institute, we have researched river basin, national park, protected area and integrated catchment management and can offer further information on what makes a good partnership, which we would be happy to share. Our research showed that 'new' bodies in an already cluttered institutional landscape were only welcomed if they demonstrated they could make a positive difference and achieve things that existing institutions could not. This requires providing these partnerships with resources to take action on the ground, and/or the power to influence how incentives, regulation, advice and plans are implemented.

Regional Land Use Frameworks

The regional land use pilots in Aberdeenshire and the Scottish Borders have demonstrated the potential benefits of the development of regional land use frameworks which could be used to inform land use/management decisions and to inform development plans. Regional frameworks may also be useful for local authorities as they undertake a range of statutory functions or duties such as managing flood risk or biodiversity.

Q 9a *Do you think that regional land use frameworks could be useful to inform regional/local land use decision-making?*

We believe that the regional land use framework could be an important part of informing regional land use decision-making, serving as a guide (not prescription) to what should take place in more local contexts, however see comment in response to Q8b. Research is planned for the Scottish Government Strategic Research Programme (2016-21) on developing the Regional Land Use Pilot toolkit (<http://rlup.hutton.ac.uk/>), which could contribute to achieving the aims of the land use frameworks.

Q 9b *Which aspects of this approach do you think require further development?*

- (i) To ensure such processes represent a good use of public investment, we agree that further work is required to decide how any new regional plans should connect with, complement or supplant existing plans and strategies, particularly existing statutory planning processes and duties.
- (ii) When exploring the connection with existing strategic planning processes, the analysis should consider both urban and rural areas, since the Land Use Strategy is relevant to both.
- (iii) It is important to understand how and when to use quantitative and monetised values in decision making. There have been advances in defining cultural ecosystem services that give rise to a range of material and non-material benefits that are often overlooked in decision-making. Research findings show that values derived from group-based valuation, done through a deliberative, participatory process, tend to be different from



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the conventional aggregation of individual values. These findings enhance our understanding of how values are formed and influenced in a range of complex and contested situations. Therefore, the frameworks should take account of different types of beneficiaries, individuals and groups.

Q 9c *Do you have any comments on this proposal?*

The Vision, Objectives and Principles of the LUS are high level. Early in the period of LUS2, consideration should be given to clarifying the relationship between the LUS (which is national), the proposed regional Land Use Frameworks and implementation on the ground, and what a regional framework would, or could do, and who would be expected to use it. The Policy context on Page 14 of the consultation is very useful but will require more detailed analysis to ensure that the appropriate connections, authority and accountability are established. This would require to be developed in consultation with the full range of actors who deliver biodiversity, flood management, water quality, agriculture, forestry, recreation. So we support the link made between this framework and the regional partnership; and the implied timeline starting with the partnership and allowing them to decide on the need and focus for the framework.

The Strategy could increase the focus on providing information to support discussion about what Scottish land is for, regional priorities, and for illustrating opportunities to manage for multiple benefits and addressing decline (see also responses to Q7b and 7d).

Land Use Mediation and Facilitation

Mediation and facilitation have distinct but complementary roles to play in generating better understanding and more effective decision making in relation to land use. We consider that both mediation and/or facilitation could have a role to play in land use to assist communities and landowners to resolve differences.

Q 10a *Do you think that land use mediation or facilitation could be useful in a land use context?*

Yes, we strongly support the need for dialogue and conflict mediation. Research at the James Hutton Institute builds on literature illustrating how skilled and professional facilitation is an important success factor in multi-stakeholder partnerships; and can help deliver the aim of 'better regulation'. However, recognition is required of deep structural aspects of conflict that cannot always be resolved by more dialogue. Sometimes mediation can find a mutual solution but often there are opposing interests, very different objectives and opposite values. It depends to a significant extent on the nature of the conflict and whether facilitating/mediating is in the shadow of statutory sanctions.

Q 10b *Please provide your reasons for your answer.*



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Whilst we support this proposal, we question whether it would be better included in Section 3.3 about applying the Principles rather than in Section 3.2 about informed decision making. It seems that this is a way to support particular instances of problems through taking action on the ground. It could also be usefully connected to the discussion about regional partnerships.

It is specific about mechanisms but lacks detail about the circumstances in which it might be used, who would provide these services and how they would be paid for. Research at the James Hutton Institute on partnerships and implementing the ecosystem approach suggests that facilitation and mediation are recognised as vital but it often proves hard to gain ongoing funding for these activities. As recent evaluations of participation illustrated, it is hard to monetise the benefits of such processes yet in the longer term, such approaches can help win-win solutions become 'normal' and avoid expensive and damaging litigation. It would be useful to learn from, and build on, models of good practice in mediation that exist in housing, social work and trade-union sectors. It is vital that good practice is followed to ensure relationships are improved, not damaged. It is also important that such a proposal has a clear remit and complements similar remits in the Land Reform Bill and Community Empowerment Act.

Agriculture

The Future of Scottish Agriculture sets out our aspirations to be world leading in green farming. A suite of measures is under development which will assist land managers to move towards more climate friendly farming. Practical measures and approaches are being developed for the Third Report on Policies and Proposals (RPP3), to be published in 2016, and there will be an on-going roll out of actions in following years.

Q 11 *Do you have any suggestions on other potential measures to encourage climate friendly farming and crofting?*

We support the focus on climate change mitigation from farming and crofting, particularly as our research suggests that regulating ecosystem services will be under pressure between now and 2050, even with new green farming measures. We welcome the focus on crofting – although only c.770 kha is under crofting tenure, crofters held around 20% of all beef cattle (120,000 head) and 45% of breeding ewes (1.5 million sheep), often on peaty soils. So moves to manage GHGs from livestock and to restore peatlands must involve crofters. It is also important to engage uplands estates, many of which may not classify themselves as 'farmers' for which engagement will be required through other channels.

It is difficult to identify 'other potential measures' as they are currently under development in RPP3, which may not yet be in the public domain. We suggest that close attention is paid to existing approaches to climate friendly farming and learn from their successes or lack of influence. We were surprised by the lack of explicit focus on the role of advice, extension and demonstration farms in the Strategy, particular with reference to this point. We hope that the existing and planned policy-



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relevant advice and research from CXC can support this action and we can support this through our plans for demonstration farms under the SRP 2016-21.

Findings from the Aberdeenshire Regional Land Use Pilot, and previous work on mitigation and adaptation, suggest that it is important that farmers and crofters recognise that they are part of a wider cross-sectoral focus on climate mitigation and are not being 'singled out'. It is also important to address aspects of the supply chain, sustainable consumption by rural communities and to identify on-farm diversification opportunities that are climate friendly.

It would be useful to reference CAP Pillar 1 Greening measures, GAEC and cross-compliance that can help sustainability of intensive agriculture and restore our soils – plus reduce waste, pollution and GHG emissions.

Finally, it is important that this policy considers both mitigation of climate change and adaptation to climate change.

Agri-Environment

The new SRDP has established the principle of targeting to enable measures and support to be focused where they are likely to be most effective. The land use pilot projects have shown there is scope to significantly increase the use of GIS data to assist with a targeted approach. As more detailed and refined mapping of ecosystem services data becomes available, through the development of ecosystem services mapping and tools (Policy 5) this will be used to inform decisions for the current SRDP measures.

Q 12a *Do you agree that more localised map-based ecosystems assessments could be useful to assist in informing funding decisions?*

Yes, we support the targeting of public monies for public benefits. However, please see the response to Q 7b above regarding data quality, resolution, trends and interpretation.

Q 12b *Please provide your reasons for your answer.*

We assume that "localised" means information provided at a finer spatial resolution, using an approach that is consistent across Scotland, rather each area developing their own "ecosystem assessments". The current system is limited by species distribution data at a 10 km resolution, so any improvement in spatial resolution of the data will ensure closer targeting of SRDP resources. We plan to support this spatial targeting in the proposed Scottish Government Strategic Research Programme 2016-21. However, "targeting" can mean geographically (as indicated above) or by objective (see www.gov.scot/Publications/2013/12/7550/291107, esp. paras 189 and 203), or perhaps farm/farmer type. Our research on the uptake of measures suggests that farmer objective and structural circumstances can be as important in determining efficacy of outcome as the bio-



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physical setting of the farm. Therefore, it might be useful to consider targeting more holistically than simply by geography.

We strongly support the wording that links this policy with the policy on regional partnerships; and suggest this could also be linked to policy 1 (implementing the ecosystem approach) and policy 2 (on policy integration).

Agri-Environment

Now that the new SRDP and the Agri-Environment Climate Scheme are operational we have an opportunity to consider what the next scheme could deliver for Scotland and whether there is a case to reshape it. The increased emphasis on targeting, the acceptance of ecosystem health as a means to support the targeting work, and the use of a more spatial approach could enable the next SRDP to be more focused so that limited financial resources can be targeted much more precisely.

Q 13a *Do you agree that an assessment of ecosystems health and a spatial approach could be helpful to further inform targeting for the next SRDP?*

Yes, but see comments under 12a and 12b above.

Q 13b *Please provide your reasons for your answer.*

- (i) We support the ambition to change the way that public money is spent using the considerable information and data currently available (particularly SEweb/land use data directory/Natural Assets Register). We recommend that as much attention needs to be paid to the policy narrative and logic of reshaping these schemes as to the technical implementation to ensure the process is robust, credible and acceptable to key stakeholders.
- (ii) The integration of a wide range of data sources in targeting SRDP should improve its efficiency in providing benefits. However, thought should be given to deciding how to address conflicting priorities (e.g. if overall health is in conflict with a particular service or element of biodiversity), and how to deal with the allocation of resources to either protecting areas of high biodiversity/good health versus areas where health or biodiversity can be restored.
- (iii) Clarity is required as to which multiple benefits are the priorities for LUS2 and how targets can be set and operationalised within SRDP. A critical issue will be the measurement of ecosystem health, and thus an agreed definition. For example, does ecosystem health mean the capacity of an ecosystem to deliver the use-orientated services which are the focus of LUS2, or is it the wider health, e.g. in terms of conservation value or other intrinsic values (bequest, existence etc.)?



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- (iv) Based on stakeholder feedback in related research it will be important to have a transparent process that shows a logical approach to setting targets for the ecosystem, particularly one that takes account of interactions across space e.g. upstream/downstream/upland-lowland/urban-rural and through time.
- (v) The process could consider CAP Pillar 1 funding, including Areas of Natural Constraint (ANC) as an important opportunity. There could be an opportunity to use Greening measures and the implementation of ANC to deliver multiple benefits; and through doing so to try to influence the overall CAP review to increase funding streams into Pillar 2.
- (vi) Research is planned in the Scottish Government Strategic Research Programme 2016-21, to work between Themes on Natural Assets, Sustainable Land Management, and Food and Communities to explore the influence of different funding streams on delivering ecosystem services, about which the James Hutton Institute will be happy to share in support of the next SRDP.

Urban Land Use

In order to explore the applicability and effectiveness of an ecosystems approach in an urban context, and its complementarities with the statutory planning system we propose to explore the feasibility of establishing an urban land use pilot project.

Q 14a *Do you agree that an urban pilot project could be useful?*

Yes, this would be consistent with the objectives of the LUS that it relates to all land, not only rural land.

An urban pilot project should take account of its rural hinterland (see findings from existing research on rural-urban linkages in Scottish Government Strategic Research Programme 2011-16 WP8.3). Urban landscapes represent the places in which the majority of the population live, work and spend their leisure time. Scotland's People and Nature Survey (2013-14) found that the three-quarters of Scottish adults would like to see more effort towards improving urban landscapes.

The choice of an urban pilot could focus on a site recognised to be undergoing significant change, such as the closure of manufacturing plants. The choice of such a challenged area (e.g. an administrative area which includes a steel works scheduled for closure) could provide a focus for the pilot, and an integration of efforts across a broad range of interested parties. Success in such an area, with clearly defined boundaries of responsibility for the LUS, would be a significant achievement for the overall aims of the Strategy.

Q 14b *Please provide your reasons for your answer.*



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The spatial context of the urban fringe differs markedly to both rural and urban areas. The two regional land Use pilots for LUS 1 had a focus on rural land use but many of the issues affecting rural Scotland – e.g. carbon storage, flooding, biodiversity, recreation, climate change - are equally applicable, possibly more so, in urban areas. The challenges to developing the partnerships and the context of land use may be very different in urban environments where land ownership is very fragmented, there may be many interested parties, and where land use is heavily influenced by infrastructure and buildings. Of particular value would be to see how such an approach will interact with planning processes, both strategic and development control, and how to engage non-agricultural land owners or managers.

Care will be required in selecting a pilot area such that other urban areas can recognise the benefits to be gained, and the lessons learnt, and how these can be applied to their town/city. It will be important to ensure this takes account of the expansion of land reform powers into urban areas. It is also an opportunity to consider different models of regional partnerships and leadership (e.g. either led by a Local Authority or another place-based partnership).

An urban pilot area should consider the role of private gardens, amenity greenspace and street trees in delivering ecosystem services as well as public open spaces. Such land uses have multiple functions, including acting in mitigation of the emissions generated by recreational and tourism travel as well as aesthetics and contributing to urban biodiversity. Whilst much of the mapping work for cultural ecosystem services focusses on recreational trips around natural or heritage features in rural or remote settings, it is often our immediate settings that support our daily health and well-being thus attention to nature where people live and work is very important for the overall Vision and LUS Objective 3.

It would also be valuable to test how the LUS principles can inform planning and management practices in the context of changing landscapes at the urban fringe, regional green network delivery and green belt policy, amongst other concerns. Therefore, we would also suggest that a peri-urban land use pilot might also be considered.

An alternative approach could be to drop the reference to 'urban' in the title and instead have a proposal to have another regional pilot project based in an urbanised area. The purpose would be to increase the diversity of applications to help in progress with implementation of the LUS Principles, objectives and Vision.

Upland Land Use

The uplands have considerable opportunities to contribute to the climate change agenda in Scotland by delivering multiple benefits from land use. However they are also areas of challenge and at times



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tension. The Land Use Strategy provides an opportunity to consider and agree a new strategic vision for our uplands.

Q 15a *Do you think that a strategic vision could be useful for the uplands?*

Yes, we support this constructive approach to managing these iconic landscapes in a more integrated way for public and private benefits. Please see comments on the need for a definition or alternative reference to 'uplands'.

Q 15b *Do you have any comments on this proposal?*

We support the aim of an integrated approach to the uplands of Scotland, which are areas that have much to offer internationally and locally, but are facing many challenges. A shared, strategic, vision for the uplands would have significant benefits, helping to ensure that issues are more visible to the Scottish population and policy makers, and promoting a better understanding of the value of these areas to Scotland's sustainable economic growth.

As the commentary in the consultation indicates, 'uplands' is an ill-defined term and can lead to misunderstandings between stakeholders. For example, issues being discussed under the term 'uplands' may be occurring at sea level. A definition of uplands could build on land capability classes for agriculture and/or the methodology used to designate Areas of Natural Constraint.

However, the understanding of upland is not solely based on bio-physical characteristics and the complex relationship with the 'lowlands' cannot be ignored. For example, the uplands have strong cultural and social associations, providing cultural benefits to urban populations and in rural industries such as agriculture and the food supply chain.

Upland land use can be contentious, with different interested parties having sometimes very different views about how land should be used. It will be important to ensure that all stakeholders have an equal voice and that, potentially, entrenched viewpoints can be overcome. Here, a cross-reference could be included here to Proposal 3.

The research of James Hutton Institute in the current Scottish Government Strategic Research Programme (2011-16) on ecosystem service indicators suggests that often the uplands provide the majority of regulating and cultural services and it is important to understand their role and function. A recent report for Scottish Natural Heritage (Werritty, A., Pakeman, R.J., Shedden, C., Smith, A., And Wilson, J.D. (2015). A Review of Sustainable Moorland Management. Report to the Scientific Advisory Committee of Scottish Natural Heritage. SNH, Battleby) highlighted that there remains a poor understanding of the effects of upland management on ecosystem services and this needs to be tackled at the same time as developing the vision so that future management is more evidence-based.

There is an absence of any mention of biodiversity conservation or deer management as part of the context for this Proposal. The only reference to the LUS in the Land Reform Bill is in conjunction with



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exploring sporting estate taxation it will be important to ensure that Proposal 6 is seen as an enabling strategy.

Monitoring Delivery of the Strategy - the Land Use Strategy Indicators

The ten Land Use Strategy indicators were chosen to monitor the delivery of the first Strategy's three Objectives. Although they do not provide a comprehensive measure of every aspect of land use, they represent key aspects of the Strategy and provide a balanced picture of important representative elements. We consider that these indicators remain fit for purpose and intend to add to or amend the indicators if appropriate indicators become available over time or if existing data collection ceases.

Q 16a *Do you agree that the Land Use Strategy indicators are still fit for purpose?*

Whilst there is merit in keeping indicators consistent to track trends over time and space, some of the indicators are may be poorly aligned to the purpose. For example, indicators 8 and 10 derive from the Scottish Household Survey responses to questions that are not specifically related to land use (or ownership or management). Number 8 ("Volunteering in nature") refers only to wildlife and environmental protection, not wider use of land through recreation, and number 10 ("Community Inclusion in Land Use Decision-making") refers to a question about any decisions "in my local area", not necessarily those which are land-based.

Q 16b *Do you have any comments on the future monitoring of the revised Land Use Strategy?*

- (i) The draft Strategy does not explain how the LUS2 will be governed or implemented. We support having an Action Plan, and that it is updated annually.
- (ii) There could be useful lessons to share with the Welsh Government and the Glastir Monitoring and Evaluation Programme (GMEP) in terms of which indicators they are using and how these are helping them implement their approach to sustainable land management.
- (iii) The indicators are predominantly focussed on final outcomes and do not include any monitoring of procedural aspects, yet these are important to the Ecosystem Approach. For example, there is no monitoring of whether the full range of stakeholders have been included or whether management has been decentralised.
- (iv) An Ecosystems Approach changes what data are required for decision making. As well as ecological data, it requires data on peoples' perceptions of the environment and the socio-economic factors influencing land and water management or the impacts of management interventions. Attention should be paid to intermediate and not just final impacts, e.g. conceptual changes, social capital development, growth in new partnerships, understanding and use of adaptive management concepts etc. It would be appropriate to monitor the actions that generated these trends; in order to understand which policies and proposals were successful.
- (v) Indicators –



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- a. It is not clear who will use the indicators and for what purpose. For example, will they be reported to the RAFF Delivery Board?
- b. It would be desirable for there to be more information about how learning will be generated from trends derived from the indicators, and how they will support the evaluation of progress towards the LUS vision and objectives, and whether there is any relationship identified between the indicators and the Principles.
- c. The presentation of the indicators reflects a non-systemic view of the world, inconsistent with an ecosystem approach.
- d. We support the move to the NCAI. This could be aid in explaining relationships between these indicators and the Scottish ecosystem health indicators. It should be noted that the NCAI is an index that takes account of multiple data sources and overlaps with “Water ecological status” and “Terrestrial breeding birds”. [Note that terrestrial breeding birds is a broad category. It would be more useful to disaggregate this to farmland, woodland etc.]. Both the bird indicator and ecological status of water are driven by other policies and changes are not a direct result of the LUS (beyond the policy 2 on policy integration).
- e. Where there is a focus on single species/habitat or asset, it would be useful to clearly communicate that they are a keystone species or asset that signals something about a wider system.
- f. Other indicators would be appropriate to include. For example –
 - i. ‘Area of restored peatland’ given that it is part of Scottish Government’s climate change mitigation strategy.
 - ii. An indicator reflecting well-being from nature. The National Performance Framework uses the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). The inclusion of such an indicator could make it simpler to link the environment into wider cross-sectoral objectives around wellbeing promotion. Population data on WEMWBS is already collected in the Scottish Health Survey, and the shorter version SWEMWBS is used in the Scottish Household Survey.
 - iii. Our research on measuring geographical (urban-accessible rural-remote rural) disparities in wellbeing found a simple single-item measure of life satisfaction to be useful. That data came from the Scottish subsample of the British Household Panel Survey, however there is a similar life satisfaction measure included in the Scottish Health Survey which would offer a greater sample size so potentially more opportunity to report by different



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geographies. The development of such analysis is proposed for the Scottish Government Strategic Research Programme (2016-21).

General Questions

Q 17 Are there any other activities that you think we should be undertaking to achieve better understanding and application of the Principles or delivery of the Strategy?

Q 18 Are there any other points you wish to make about any aspect of this draft Strategy?

Missing actions/ideas:

Selection and focus

- (i) **Context for Strategy.** We appreciate that a Land Use Strategy based on an ecosystems approach could easily become a strategy about everything for everyone, so there was a need for boundaries to be identified around the topics within its remit. However, in the final strategy it would be helpful to include a short paragraph or infographic that recognises how land use influences, and is influenced by, other topics e.g. transport, housing, skills, investment, migration. This contextual paragraph then leads to an explanation of the focus for LUS2 2016-21, and its links to strategies that address other, related, issues that affect land use.
- (ii) **Choice of priorities.** The choice of priorities of the LUS2 is not clear and currently begs questions of why some issues are not included. The WWW page supporting the Strategy could include an explanation of the background to the choice of priorities of the LUS2 and thus why some issues are not included (also, see below).
- (iii) **Relative priorities.** It is unclear whether all the policies and proposals in the document are equal priorities or where the most effort should be expended.
- (iv) It would be desirable for the LUS2 to indicate how it will include consideration of emerging issues over the period 2016 to 2021.

Comment [DM2]: I suggest that a Strategy should address the topic and the process of how it was derived should be elsewhere (e.g. supporting www page), hence the edit proposed.

Missing

There is a lack of reference to air quality, drinking water quality and quantity and flood risk. It is important that in the focus on land the important, relevant, interactions with water and air quality are not omitted.

- (i) **Water.** In the draft Strategy there were only 7 references to water with little attention of how land management affects water. We suggest that reference be made to the Water Resources Act, Water Environment and Water Services Act and Scotland as a Hydro-Nation.
- (ii) **Soil.** There are 217 instances of the word 'soil' in the Environmental Report but only one in the consultation document (see Question 3b). A number of these instances refer to



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the positive role that soils play (e.g. *'particularly in how our soils, water, biodiversity and cultural heritage play in facilitating how land is used (i.e. supporting, regulating, provisioning and cultural services')*, Page 41). These positive roles should also feature in the final LUS2.

We suggest inserting reference to 'fertile soils' into the phrase "vital ecosystem services upon which we all depend such as clean air and water, flood protection or a rich and varied biodiversity" (Page 7).

(iii) **Biodiversity.** Explicit mention of biodiversity conservation is missing. We were surprised by the lack of reference to the Scottish Biodiversity Strategy (only mentioned on Page 24 and is missing from the LUS policy context table).

(iv) **Objectives**

a. **LUS Objective 1.** More emphasis should be placed on land based businesses that are major contributors to Scotland's regional and national prosperity (e.g. tourism, recreation, freshwater aquaculture, distilling – which all have very strong links to land use). The interactions of land based businesses with farming, forestry and upland management is crucial but this does not come through clearly in the current draft.

b. **LUS Objective 3.** Proposals to promote use of and access to the outdoors are absent. It is a topic in which there is significant common cause with health and transport policy areas (e.g. National Walking Strategy, Physical Activity Implementation Plan). It should be valuable to identify opportunities to support integrated efforts in this respect (e.g. through the Green Exercise Partnership) would be valuable.

Human aspects

We argue that the LUS2 should recognise more strongly the 'human' dimension to delivery of ecosystem services and benefits. Delivery of sustainable land use is generally dependent on choices and behaviours by those who own, manage and use land. The choices about what land is used for and how to manage it; and the impacts of these choices, are strongly influenced by socio-economic factors. This is not explicitly recognised in the current draft strategy.

The importance of transport, housing, labour force, second home ownership, aging populations, broadband access etc. in allowing land-based businesses to flourish were strongly identified in the Aberdeenshire Regional Land Use Pilot, and in the National Ecosystem Assessment Follow-On project. Land-based businesses need these facilitating factors, but they also need their supply chains to flourish and their local consumers to be able to access their products – so maintaining viable communities becomes crucial to delivering all three objectives of the LUS.



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Research findings show that many of the benefits derived from land do not arise from single, specific structures, but from the interaction of a mosaic of different places, habitats, people, views and opportunities of which landscapes consisted. This implies that context matters when analysing spatial distribution of ecosystem services.

It is often not helpful to distinguish a priori between cultural and other ecosystem services, as most ecosystem services include a cultural element (see next point). The scientific literature usually refers to the “provision” of ecosystem services. However, a study of woodland ecosystem services showed that ecosystem services are not just ‘provided’, they are created through the interaction between people and the ecosystem. These interactions should be given more attention in the LUS2.

Focus on how to achieve change

- (i) We welcome the focus on putting the LUS Principles into action. However, whilst incentives are no doubt important, one should not forget the role of regulation, advice, information and peer learning. The UK NEAFO developed the use of the ‘4 Is’ framework (Institutions, Incentives, Information, Identity) to build complementary response options and suggested that the use of ‘Identity’ measures was currently underutilised. The interplay of such different institutional dimensions need to be harnessed. We highlight the potential role of farm advisors in mediation and facilitation processes; along with the support for the use of demonstration farms.
- (ii) We support and encourage the reference to the Environmental Cooperation Action Fund. However, at £10million, it represents a very small proportion of the £1.3billion funding for CAP Pillar 2.
- (iii) We suggest that the LUS2 gives more weight to the provision of advice and support for peer-to-peer learning to try to improve these ratios in SRDP 2021-2027. Research is proposed for the Scottish Government Strategic Research Programme (2016-21) on evaluating cooperation action around demonstration farms.
- (iv) The LUS2 could recognise more explicitly, and build on the concept of stewardship – rewarding traditional practices where they work, supporting innovation where needed, whilst not sanctioning bad practice. The feedback from numerous projects working with land managers records that they are keen the majority are not required to ‘jump through hoops’ as a consequence of poor management choices by a minority.

Balance between conservation and use

The services listed emphasise exploitation. Nature conservation is itself a service, but there are commitments to conserve nature (species and habitats) and not just the services they deliver. This is recognised in the draft Strategy but, combined with the limited reference to biodiversity conservation, it would be desirable to explicitly note that the LUS2 and the ecosystem approach is about achieving a balance across potentially competing requirements on natural and cultural resources.



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Spatial scales

The LUS2 should avoid seeking the ‘magic bullet’ of a single geographic scale on which actions should focus. Land Use issues often require interventions at a range of scales simultaneously, e.g. national level policy to give strategic direction and to fund programmes, regional level to coordinate implementation, and local level to tailor measures, spread information and encourage uptake.

An Ecosystem Approach requires any action on a piece of land to be put in wider context of its habitat, landscape or catchment. Therefore, any mapping should consider not only the presence/absence of a service but also the impacts of this on the wider ecosystems. A focus on these nested scales is both more likely to increase the achievement of wider multiple benefits, and to improve the cost-benefit rating of a measure when considering what it can deliver on a catchment/landscape scale not just the immediate field/holding.

Drivers of change and exploring future possibilities

We support the positive language of increasing prosperity and making the most of opportunities, however it would be appropriate to highlight that there is also a need for action. The first 5 years of the LUS indicators could be used to identify where there have been improvements or where some factors have degenerated.

It would also be desirable to make more explicit that existing pressures on land might intensify due to external driving forces including climate change and market volatility. The overall strategy needs to articulate the drivers of change to 2050 more effectively (e.g. as discussed in Borders LUS Pilot framework and utilised in the Aberdeenshire pilot local focus area activities).

We understand that the proposals and policies in LUS2 focus on the time period 2016 to 2021, however it would benefit from more context about how these immediate actions fit into the longer term processes of change. Both of the regional land use pilots and the NEAFO illustrated that using scenarios of possible futures were helpful for exploring which policy measures or other interventions are likely to be most effective and resilient in the long-term. It would be useful to consider using these techniques when developing some proposals and policies, e.g. Policy 1, Policy 4, Policy 7, Policy 8, Proposal 2, Proposal 4 and Proposal 6.

Opportunities for joined-up governance and partnership – going beyond government

A striking aspect of the draft LUS 2 is that it reads as a strategy by Scottish Government for Scottish Government and its agencies. From our action research on developing other plans e.g. Cairngorms National Park Plan, we understand the difficulties and sensitivities of trying to specify actions for non-government actors, particularly within a short time frame. However, central to an Ecosystem Approach is partnership working and it is important for the LUS2 to make clear that delivery of the



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Vision, Objectives, principles, Policies and Proposals relies on the cooperation of a broad range of stakeholders across the public, private and 3rd sectors.

The publication of the draft LUS 2 is an opportunity to reaffirm a commitment across its constituency of stakeholders to a shared vision and set of objectives. In this regard it could make use of the community of practice which has evolved in delivering the first LUS. One way to illustrate the engagement and importance of multiple partners would be to reference existing projects and programmes run by other stakeholders that support the draft policies and proposals (e.g. the Main Research Providers, CAMERAs partners, NFUS and SLE, RSPB etc.).

The LUS2 will require an action plan and a national stakeholder forum to oversee delivery. The action plans should be for all relevant actors (including non-traditional sectors e.g. health, manufacturing, building). The strategy could include words to the effect that there is a commitment to ongoing dialogue about implementation to change the emphasis from one of updating stakeholders with information or occasionally consultations and to increase the level of their inclusion for co-delivering the strategy.

The initial sections of the draft LUS 2 address issues of integration so it would be useful to remind the reader that the later policies and proposals would be nested within these earlier policies and proposals. In the final section on putting the principles into action the separate focus on agriculture, forestry, urban and uplands does not suggest that land use planning and management will become more joined up.

The final Strategy could make more of the fact we need to farm/forest/practice field sports more wisely, and not either or (land sparing), but instead land sharing. The LUS2 is a good, possibly unique, opportunity to illustrate joined up delivery across agencies, geographies and sectors. For example, a stakeholder recently suggested Scotland should develop a “National Nature Corridor” linking Cairngorms National Park, Loch Lomond and Trossachs National Park and Central Scotland Green Network.

Equalities

To help inform our Equality Impact Assessment of the revised Land Use Strategy it would be helpful if you could answer the following question:

Q 19 *Do you have any comments on the policies and proposals in this draft Strategy in terms of how they may impact on any equalities group, i.e. with regard to age, gender, race, religion, disability or sexuality?*



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References to communities of interest and place should recognise that within such communities there may be material and social inequalities that prevent full participation in land-based decision making due to age, gender, race, religion, disability and sexuality. Therefore, attention should be paid to good practice with regards to community engagement in the proposed projects, and with wider stakeholder engagement in the LUS 2016-21 process, e.g. ensuring venues and media are fully accessible; meetings are held at family-friendly times and locations; language is gender neutral etc. Traditional dynamics within communities of place can silence certain voices and privilege others so care must be taken not to assume that the feedback from a community body truly represents the wishes of the majority, and recognise that there will be more than one 'community' perspective in any locality.

However, we have no concerns on how the policies and proposals in the LUS2 may impact adversely on equalities of groups if good practice is followed.

This paper was based on responses by: Kirsty Blackstock (lead), Kathryn Colley, Kerry Waylen, Rob Brooker, Justin Irvine, Willie Towers, Helaina Black, Tim Daniel, Robin Pakeman, Ken Thomson and Annie McKee.