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Dear Neil,

**Supplementary response to
Consultation on the draft Integrated Sustainability Appraisal Scoping Report
for the National Development Framework**

Thank you for the opportunity to expand on some of the issues raised in our main response of the 26th May 2017 on the Scoping Report for the Integrated Sustainability Appraisal (ISA) of the National Development Framework (NDF). Our comments on the Strategic Environmental Assessment (SEA) aspects are made in the context of our responsibilities under the Environmental Assessment of Plans and Programmes (Wales) Regulations 2004, and in our statutory role as advisers to Welsh Government on the natural heritage and resources of Wales. Our further comments on the wider ISA are on those areas where we have expertise.

We wish to reiterate that this letter presents additional comments in a few specific areas, and that it should be read alongside our main response letter of 26/5/17 to form the whole Natural Resources Wales response to this consultation.

We present our key comments in this letter, with more detailed comments on individual consultation questions in the attached Annex 1, and a table detailing the contribution of Green Infrastructure to the Well-being Goals in Annex 2.

Our key comments are as follows:

1. We wish to amplify our comments on the benefits of accessible green space and green infrastructure. It is hard to know which question to put this under, as it is so cross-cutting. We suggest you elevate green infrastructure to a cross-cutting principle in the NDF in recognition of its ability to deliver benefits to all of the Well-being Goals, usually in the same place and at the same time. Please refer to Annex 2 for more evidence on how green infrastructure contributes to the Well-being Goals.



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2. We consider that the assessment of impact of the NDF on the attributes of ecosystem resilience is a key role for the ISA. We include further detail on this, and suggestions for how the guide questions can assess ecosystem resilience.
3. We suggest some additional questions to broaden what is assessed under Objective 17 – the sustainable use of natural resources.
4. It is our view that geodiversity is not adequately considered in the current ISA. We therefore suggest changes to ensure geodiversity issues are more fully included in the assessment, including changes to guide questions.

We hope the above is of use. Should you have any queries regarding these comments, please do not hesitate to contact Roger Matthews or Anne MacDonald, via strategic.assessment@cyfoethnaturiolcymru.gov.uk.

Yours sincerely,

A handwritten signature in blue ink that reads "Howard Davies".

Howard Davies
Head of Corporate Planning

Annex 1

- Q1 Do you support the findings of the review of relevant plans, programmes and environmental protection objectives?
Are there any additional plans, programmes or environmental protection objectives you would like to add?
Are there any that you would like to remove from the review? (Section 3)**

Item to add to the review:

Health & Well-being

'Climbing Higher, the Welsh Government's Strategy for Sport and Physical Activity', should be included. This is a 20 year strategy published in 2006 running until 2025, and should inform the NDF. Climbing Higher still contains the target that no one should live more than a six minute walk (300m) from their nearest natural green space.

- Q2 Do you agree with the sustainability issues that we have identified?
Are there additional issues that the ISA should consider? If so what are they? (Section 4)**

Benefits of accessible green space

Table 4-1, item 3 A Healthier Wales – Opportunities for NDF to address
We would like to see the ISA re-worded to recognise the critical importance of accessible natural green space for both health and physical activity, and to state that green spaces within the Welsh Government recommended six minute walk (300m radius) of home are particularly important. TAN 16 (on Sport, Recreation and Open Space) refers to the Natural Resources Wales standards for access to natural green space which propose a hierarchy of provision ranging from large spaces some distance from home, to doorstep green spaces which research¹ shows are likely to be used on a daily basis.

¹Coles, R.W. & Bussey, S.C., 2000; Urban Forest Landscapes in the UK – Progressing the Social Agenda. *Landscape and Urban Planning* 52:181-198,
as quoted in:

Countryside Council for Wales, 2002: *Developing Standards for Accessible Natural Greenspace in Towns and Cities*

Response to Natural Resources Policy priorities

We would like to see greater emphasis on how the NDF can help further the priorities and opportunities to be outlined in the Natural Resources Policy. Our comments around Green Infrastructure in particular illustrate our approach.

Ecosystem resilience

The resilience of ecosystems is a key concept in the Environment (Wales) Act, and yet it is not fully reflected in the NDF, or well-understood by public bodies and the wider public. The development of the NDF is a clear opportunity for Welsh Government to fulfil its new duty in the Environment Act to maintain and enhance biodiversity, and in doing so ‘promote the resilience of ecosystems’. Hence it is important that the ISA process can consider the attributes of ecosystem resilience and whether biodiversity is being maintained and enhanced. Please refer to Chapter 4 of the State of Natural Resources Report (SoNaRR) for further detail.

In SoNaRR ecosystem resilience is described as: ‘the capacity of ecosystems to deal with disturbances, either by resisting them, recovering from them, or adapting to them, whilst retaining their ability to deliver services and benefits now and in the future’. However, quantifying resilience is very difficult as ecosystems are so complex and dynamic. The pragmatic approach taken by the Environment Act is to concentrate on building resilience by working to enhance the:

- Diversity,
- Extent,
- Condition,
- Connectivity and
- Adaptability of ecosystems

Although resilience is not fully understood, by increasing these attributes, which are understood, and can be measured, we can assume that the overall resilience of the ecosystem is also increasing. Since the adaptability increases as the first four attributes increase, then it is sensible to concentrate efforts on these four. Hence the guide questions must enable assessment of whether the NDF will increase the:

- Diversity between and within ecosystems
- Connections between and within ecosystems
- Scale of ecosystems and
- Condition of ecosystems

See our response to Q4 for suggested changes to guide questions.

Biodiversity Duty

We would like to see the consultation document recognise more strongly the duty of other public bodies (particularly local planning authorities) to maintain and enhance biodiversity, and to promote the resilience of ecosystems. We suggest strengthening the wording in item 2 of Table 4-1 in the opportunities column, from “The NDF can both benefit and enhance biodiversity.....” to “The NDF must both benefit and enhance biodiversity.....”.

Geodiversity

We would like to see greater recognition given to geodiversity. We suggest that geodiversity needs to be explicitly included and has a value in its own right in addition to underpinning biodiversity.

For example, we suggest adding the following paragraph to the 'Geology and Soils' section of Table 4-1, when discussing the 'Opportunities for the NDF to address':

“The NDF can both benefit and enhance geodiversity, and has an opportunity to guide the sustainable use of Wales’ geology through guiding the location and manner through which new development occurs. The planning system should protect not only statutory sites but also enhance opportunities to maximise the benefits of all aspects of geodiversity to the ecosystem services, economy and people of Wales. Examples would include considering and enhancing the geodiversity when designing road schemes, quarry restoration, use of indigenous building stones on new developments, etc.”

There are suggestions under Q4 for changes to guide questions to ensure geodiversity is considered more fully in the assessment.

Q4 Are there any changes you consider should be made to the ISA Objectives or guide questions?

As a general point, we suggest you consider making the guide questions more quantifiable. We suggest new, more quantifiable wording for Objective 2, Q.5 in the table below. Ideally all the objectives of the NDF would be backed by some form of quantifiable standard by which its success could be measured. For example, the acceptable rate of surface water run-off from developments is specified in the Welsh Government’s Non-Statutory SUDS Standards, acceptable levels of particulate air pollution are specified by both the EU and the WHO, and standards for the acceptable level of urban heat-island induced, dangerously hot nights have been defined by research projects. Please contact us if you would like to discuss this further.

We present our specific comments and suggested changes to the wording of guide questions in the following table.

Suggested Changes to Objectives and Guide Questions

<i>Extracts from existing text</i>		Suggested changes to guide questions	
Objective	<i>Will the NDF...?</i>	Will the NDF...?	Reasons
<i>2. To contribute to an improvement in physical and mental health and wellbeing...?</i>	<i>Contribute towards improving access to open space including opportunities for play?</i>	Contribute to the achievement of the Welsh Government’s recommended standards for access to natural green spaces and play space?	We suggest you consider making the guide questions more quantifiable. Target 12 in Climbing Higher is that no-one should live more than a 5 minute walk (300m) from their nearest natural greenspace.
<i>4. To promote sustainable economic growth, diversity and business competitiveness.</i>	<i>Encourage economic growth?</i>	Encourage sustainable economic growth?	
<i>16. To encourage the conservation & enhancement of biodiversity & geodiversity</i>	<i>Promote the establishment of more resilient ecological networks on land that safeguard ecosystem services for the benefit of wildlife and people?</i>	Promote the establishment of more resilient ecological networks on land for the benefit of wildlife and people, and enhancement of ecosystem services?	This will capture much, but not all of ‘connections between and within ecosystems’ which is a component of ecosystem resilience. Current wording could imply an emphasis on expanding the network of protected sites. Whilst this is important, there

			<p>is a need to address the permeability of the landscape generally and avoid continued fragmentation by 'death by a thousand cuts'. Management of the agricultural landscape is important here as farmland is such an extensive land use in Wales. See also Obj. 17. Current wording also does not consider connections <u>within</u> ecosystems.</p>
16....	<p><i>Encourage the conservation and enhancement of designated nature conservation sites, habitats and species?</i></p>	<p><i>OR this question and the one below could be combined as</i></p> <p>Encourage the conservation and enhancement of designated and non-designated nature conservation sites, habitats and species?</p>	<p>This, together with the subsequent 'non-designated' question, will cover the 'condition' aspect of ecosystem resilience.</p>
16...	<p><i>Encourage the conservation and enhancement of non-designated habitats and species?</i></p>	<p>Encourage the conservation and enhancement of non-designated nature conservation sites, habitats and species?</p>	<p>This suggested new wording mirrors designated sites wording and now will include non-statutorily designated geological sites such as RIGS (Regionally Important Geological Sites).</p>

16...	<i>Provide an improvement in opportunities for people to access wildlife and open green space?</i>		We suggest this question fits better under other objectives – perhaps 17 (SMNR), 15 (Culture), 2 (Improvements in health and wellbeing) or 4 (Encourage sustainable growth). This is not really about ‘encouraging conservation and enhancement of biodiversity’ except indirectly by connecting it with more people. It is not the biodiversity which will benefit, it is the people.
16...	<i>Encourage the conservation and enhancement of the quality of natural greenspaces?</i>		This will also help to contribute to the Connectivity element of Ecosystem Resilience.
16...	<i>Protect geodiversity?</i>	Protect and encourage the conservation and enhancement of geodiversity?	New wording mirrors other guide questions.
16...		Increase the extent of functioning ecosystems?	A question is needed to address the scale/extent aspect of ecosystem resilience (or incorporate this into wording of existing questions). This could be addressed through habitat restoration and new habitat creation, suitably targeted to complement

			(and benefit from) existing habitats, and to avoid adverse impacts on other ecosystems
<i>17 To encourage the sustainable use of natural resources</i>		To encourage the sustainable management and use of natural resources	The Sustainable Management of Natural Resources is much wider than the existing guide questions. This SMNR objective is cross-cutting and also encompasses many of the other objectives (e.g. 7: Climate change, 16: Biodiversity).
17...	<i>'Encourage a reduction in the proportion of waste sent to landfill?'</i>	Encourage a reduction in the proportion and amount of waste sent to landfill?	Proportion could reduce whilst absolute amount increases.
17...		Increase the resilience of ecosystems?	See also discussion of ecosystem resilience under Q.2 and Obj. 16 above. Given the importance of ecosystem resilience, we suggest a specific question is needed to address it. There will be overlap with the individual elements of ecosystem resilience which are addressed under Obj. 16 above, but the current objective structure already has considerable overlap (e.g. many of the elements of the sustainable

			management and use of natural resources are dealt with more specifically elsewhere as well).
17...		Contribute to the sustainable management of farmland, forests and the wider countryside?	<p>We suggest there is a need for new questions relating to encouraging sustainable production in agriculture and forestry. This will contribute to the connectivity aspects of ecosystem resilience by increasing the 'permeability' of the wider landscape.</p> <p>The Rural Proofing impact assessment 'concludes the NDF potentially has an impact on rural communities. Therefore, objectives encompassing aspects of rural life such as access to services; broadband coverage; and the economy have been incorporated into the ISA framework.' Given the importance of agriculture and forestry in rural communities, we suggest that these should be included in the assessment guide questions too.</p>



Annex 2

How Green Infrastructure (GI) can deliver the Well-being Goals

Well-being Goal	Green Infrastructure (GI) Response
A prosperous Wales	<p>GI saves money and increases productivity³.</p> <p>GI boosts business profits⁴.</p> <p>Sustainable Drainage Systems (SUDS) are always cheaper to install in new developments than regular drains (see the report at the foot of reference⁸).</p> <p>Because GI requires regular, unskilled maintenance it is an excellent source of “starter” jobs and can provide an employment base for the local economy. See Parc Peulwys¹⁴ for an example.</p>
A Resilient Wales	<p>Urban GI can make a significant contribution to the conservation of threatened pollinators^{5,6}.</p> <p>Replacing grey infrastructure with green infrastructure as in the Greener Grangetown³¹ project creates space for nature at the same time as providing essential services for life.</p> <p>Use the techniques in the NHS Wales Heatwave Action Plan¹⁹, The Welsh Government SUDS Standards⁸, and use local green space for allotment growing – it can provide food and space for biodiversity²¹.</p> <p>SUDS offer an extremely cost-effective solution to reduce the frequency and severity of local flooding from storm water. See the Augustenborg estate in Malmo²⁰.</p>
A Healthier Wales	<p>GI brings multiple health benefits, from stress reduction²⁷, ameliorating the effects of environmental noise, intercepting particulate air pollution, providing environments which encourage healthy exercise, and reducing direct hazards such as flooding and urban heat islands. For a summary of benefits and actions see reference³⁴.</p>

<p>A More Equal Wales</p>	<p>The most disadvantaged areas of Wales are host to some of the most degraded environments¹⁴.</p> <p>Engaging local people fully in GI provision and maintenance will restore pride in the local environment, reducing litter, dog fouling and vandalism, whilst improving health and mental well-being. See Parc Peulwys¹⁴, the Green Flag Awards³² and Augustenborg²⁰.</p> <p>A major symptom of disadvantage is the increased prevalence of ill-health, and the installation of GI can have a massively beneficial effect on human health¹¹.</p>
<p>A Wales of Cohesive Communities</p>	<p>When done as part of a three-pronged programme of economic, social and economic development, the installation of GI will reverse deprivation and create a coherent community, where once there was crime and antisocial behaviour^{14, 20, 17,18}</p>
<p>A Wales of Vibrant Culture and Welsh Language</p>	<p>GI is host to and the raw material of some of the most innovative artworks in Wales³⁵. Art is an integral part of GI in Parc Peulwys¹⁴ and has played a pivotal role in engaging the local community in the full spectrum of improvements on this formerly highly disadvantaged estate.</p> <p>Cymdeithas Edward Llwyd exists to promote engagement with the natural environment through the Welsh language, celebrating the links between Wales' rich linguistic and natural heritage³⁶.</p> <p>Wales' only Biosphere Reserve (part of the UNESCO Man and the Biosphere Programme) was founded on the principles of improving economic, social and environmental well-being, and aspires to be "an exemplary area", setting the benchmark for "green", bilingual living³⁷.</p>
<p>A Globally Responsible Wales</p>	<p>GI conserves threatened biodiversity^{5, 6, 21}.</p> <p>What Wales has learned about the role of GI in sustainable development is communicated to the World Network of Biosphere Reserves³⁷.</p>



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