

mae'n wlad i mi
breathe easier



NATIONAL PARKS WALES
Britain's breathing spaces

Jon Freeman
Assistant Secretary
Royal Commission on Environmental Pollution
5-8 The Sanctuary
London
SW1P 3JS

By email: 25th January 2008

To: jon.freeman@rcep.org.uk

Dear Mr Freeman

**ROYAL COMMISSION ON ENVIRONMENTAL POLLUTION STUDY ON "ADAPTING
THE UK TO CLIMATE CHANGE"**

The three Welsh National Park Authorities - Brecon Beacons, Pembrokeshire Coast, and Snowdonia - are grateful for the opportunity to submit evidence to the Royal Commission on Environmental Pollution's study "Adapting the UK to Climate Change".

The three independent Authorities collaborate under the name of the Welsh Association of National Park Authorities (WANPA). WANPA owes its existence to the political and policy divergence brought about by the 1999 devolution settlement.

The National Parks have two statutory purposes in the 1995 Environment Act:-

- Conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park.
- Promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public.

Cymdeithas Awdurdodau
Parciau Cenedlaethol Cymru

Welsh Association of
National Park Authorities

126 Stryd Bute / 126 Bute Street
Caerdydd / Cardiff, CF10 5LE

Ffôn / Tel 029 2049 9966
Ffacs / Fax 029 2049 9580

Ebost / Email wanpa@anpa.gov.uk



In fulfilling these purposes, the National Park Authority has a duty to:-

- Seek to foster the economic and social well being of the local communities within the National Parks.

We believe that many of the climate change mitigation and adaptation challenges that face the UK as a whole will be thrown into sharp relief in protected landscapes. However, if the UK can achieve resilience, adaptability and tolerance to change in protected landscapes these can probably be achieved anywhere else in the UK. Protected landscapes can therefore be pathfinders for climate change responses and for energy descent following peak oil/gas.

Rather than go into detail, we have a number of general points that we would like to make:

- Climate change itself is not new but this time it comes accelerated and accompanied by many other human pressures on the environment and its inhabitants. Collectively these pressures reduce or remove the options for natural adaptation precisely when they are most needed. Adaptation to climate change must therefore be served by a full range of conservation measures, not just measures which might be automatically associated with climate change adaptation.
- Significant/rapid change in the UK's landscape character is probable, whether from unchecked climate change and/or from measures deployed to offset climate change. However, the latter are more potentially reversible. Relevant authorities will need to find ways of retaining landscape values and utility even as landscape character changes. This will require an understanding of those values (the European Landscape Convention is significant here), an understanding of the scope and deployability of the mitigation and adaptation assets within those landscapes (e.g. by county councils or regional development agencies) and a tolerance to new emergent landscapes.
- What constitutes 'native' wildlife may change as habitat space changes with climate. However if species' responses to climate change (if these are possible) are to be properly understood, a very significant knowledge gap needs to be closed on species migration and dispersal patterns, processes and barriers. In the absence of this intelligence the UK may have the problem of requiring land management and farming to provide more habitat connectivity and 'landscape permeability' without the evidence to justify this requirement. That isn't to say that this should not be the

objective but a 'belt and braces' approach to biodiversity conservation appears to be inevitable, with a surveillance (rather than monitoring) programme implemented to observe how different species are responding before setting objectives for future landscape management.

- Using GDP as the main measure of economic success predicates the world economy on expansion; expansion powered by fossil fuels and increased consumption by people as individuals and as a growing global population. The Stern Review 2006 advised that only a very small fraction of GDP need be invested to deal with manageable consequences of climate change now rather than the runaway costs of runaway consequences in future, a 'stitch in time' approach. This characterised the world's response to climate change as a macro-economic one, with some natural resource measures thrown in. There is already backsliding on Stern's conclusions and responses to climate change need to be widened out from this technocratic approach. There needs to be a strong recognition of the institutional resistance to change; "*The barrier to effective action on climate change is not incomplete science or uncertain analysis, but the inertia of collective decision-making across unaligned or even orthogonal institutions,*" (Hulme 2007).

Citing Rayner and Malone (1998), Hulme also argues for a proper role for people-based values and ethics in developing responses to climate change and for less goal setting and "*a more strategic approach... on measures that promote societal resilience and opportunities for strategic switching, informed by regional and local perspectives.*"

- The immediate problem for the world economy is not of running out of fossil fuels but of not having the ever-increasing quantities it needs. Turmoil following peak oil/gas could be amplified by the impacts of climate change itself and both could have implications for human migration and food security. Quite apart from the atmospheric chemistry involved, oil and gas peaks will not automatically mean that greenhouse gas emissions start to decline (if for example countries burn greater volumes of coal to avoid the descent). Also nations' willingness and ability to reduce emissions may reduce if input costs, led by oil, climb.
- Many of the measures needed to engineer a soft landing from peak oil - the 'energy descent' - will also contribute to those needed to mitigate and adapt to climate change (tabled below), and more could be made of these linkages.

| Measure to address climate change ¹ | Energy descent benefit |
|---|---|
| Increase energy conservation Increase energy efficiency Promote community scale renewables Promote marine renewables Promote wood-fuel production | Increases security of energy supplies Overcomes fuel inequality/poverty Increases public awareness Develops civic responsibility Diversifies regional economies |
| Promote regional and local food production and consumption | Increases security of food supplies Develops civic responsibility Diversifies regional economies |
| Reduce car use Strengthen and promote public transport | Reduces dependency of the rural economy on car use and transport |
| Influence organisations' and people's attitudes and behaviour and their ability to make changes | Facilitates all other cells |
| Allow adaptation to changes in habitat space Manage soils and water Manage woodlands | Increases ecological productivity and the understanding and role of ecosystem services |
| Reduce risks of/from fluvial and coastal flooding | Reduces community risk Improves water quality and conservation Safeguards ecosystems services |
| Manage recreation opportunities | Improves public health and wellbeing Develops personal responsibility |

- The drive towards comparative advantage arguably makes trading nations less self-reliant and the probability of systemic failure greater, so as local economic self-reliance gets harder to achieve it may be becoming more important. Increasing resource demand from developing/industrialising countries may have additional and in-combination effects, e.g. we may see a further intensification of agriculture and loss of marginal land in the UK if food and import prices climb in response to higher input prices (especially fuel) and the increased demand from eastern markets for western-style diets. Without new (or re-emergence of old), environmentally sensitive techniques to agriculture and food production, this could militate against the habitat connectivity

¹ Some of these are expanded on below

and permeability required for biodiversity conservation and ecosystem services.

- Governments around the world may then put more emphasis on regional economic self-reliance and on (domestic) security of supply of energy and of food. Protected landscapes may not only not be exempted from helping deliver these, but they might actually be early target areas of search because of their natural assets, rural skills, renewable energy potential, and their rurality but relative proximity to centres of population. While many adaptive measures could, with strategic planning, be accommodated without compromising protected landscapes' special qualities (e.g. hydro, wave tidal, geothermal, solar, photovoltaic, domestic turbines, wood fuel CHP, extensive and organic food production); others (e.g. large wind farms) could not. Whereas extensive land management to conserve soil carbon, restore upland, floodplain and coastal wetlands and suitable and varied woodland expansion and management could allow protected landscapes to make a significant contribution to mitigation and adaptation, with an enhanced role for farmers and other land managers. The geographic spread of protected landscapes in Britain and the strong geo-physical role they play could be exploited positively in this way.
- There is an increasingly apparent and publicly recognised conflict between GDP growth and 'one-planet welfare'. A radical rethink of the way global and UK business is conducted, or at least how its success is measured, is indicated. There is a need to switch to alternatives - or at least additional measures - to GDP as a measure of economic success and welfare. Reducing carbon reliance will be a protracted campaign that will remain with us for as long as there is a fossil-fuelled economy and GDP growth-inspired rates of population and consumption. Current economic goalposts seem to be a major part of the problem; neither population growth nor consumption trends seem projectable long term, yet both are apparently taboo subjects and in the UK, energy supplies, for example liquefied natural gas, a fossil fuel, are projected (based upon what evidence?) to increase for the next 20 years, the main beneficiaries of which being the suppliers. It seems that GDP cannot be underwritten by fossil fuel consumption indefinitely, so in any case there are downside risks to GDP as we approach peak oil/gas.

Some more specific adaptations which we suggest include:

- Continuing to develop an ecosystems approach to reserves and habitat connectivity, in addition to the standard, and often necessarily opportunistic, measures
- Continuing to pursue conservation measures in the wider (undesignated) countryside; linking sites and developing edge habitats and developing core zones, buffer zones and mixed use zones. This includes working directly on the land with farmers and other land managers to help manage the wider countryside for ecological resilience (e.g. encouraging small woodland owners to undertake sustainable woodland management, manage water quality and soil carbon or by encouraging riparian landowners to take the necessary measures to restore the ecological connectivity between river systems and floodplains and valleys. These can also help farm incomes, reduce food miles and contribute to food security.)
- Continuing to recognise management and restoration of soils, woodlands and water resources as critical elements of ecosystem/carbon/flood management
- Planning for a potential increase in regional and local energy and food production and consumption
- Continuing to work towards an adaptive, 'with-nature' approach to fluvial and coastal flooding
- Being aware that there may be unintended outcomes. For instance increasing resource efficiency can lead to greater use of the resource, rather than less.

Thank you again for this opportunity to comment. If you have any queries please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

Greg Pycroft
Welsh Policy Officer

On behalf of:

Brecon Beacons National Park Authority
Pembrokeshire Coast National Park Authority
Snowdonia National Park Authority

References

Hulme, M. (2007) *The limits of the Stern Review for climate change policy-making*.
British Ecological Society Bulletin March 2007

Rayner, S. and Malone, E.L. (ed.) (1998) *Human choice and climate change. Vol.4 –
what have we learned?* Batelle Press, 193 pp.