

mae'n wlad i mi
breathe easier



NATIONAL PARKS WALES
Britain's breathing spaces

soils@wales.gsi.gov.uk
via email

Your Ref:
Our Ref:

To Whom it May Concern

Re: Consultation on the Proposed Welsh Soils Action Plan

The National Park Authorities in Wales – collaborating as the Welsh Association of National Park Authorities (WANPA) - are grateful for this opportunity to respond to the above consultation.

Background

The three Welsh National Park Authorities collaborate as WANPA to respond jointly to policy initiatives impacting Wales' three National Parks.

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.

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.

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



The special qualities of the three National Parks are recognised and admired both by local residents and external users. National Park Authorities are rightly regarded as leaders in landscape management.

Response to the Consultation Exercise

Officers from the three National Parks have contributed to this response. Where possible and where relevant we have responded to each individual question.

Question 1. Have the main functions of soil been correctly identified and described? If not, what other functions should be considered?

Yes, on the whole. WANPA congratulates WAG on this concise Action Plan. An additional and essential function is the role of soils in the nitrogen cycle (gaseous exchange, nitrogen re-cycling), without which amino acid cycles will fail, protein cycles will fail and we'd all expire.

Question 2. Have we identified the main threats to Welsh soils, and the interpretation of those threats? If not, what other threats should be considered?

Yes, on the whole. We recommend that strong emphasis should also be placed on the adverse impacts of historically high and excessive numbers of livestock, especially ewe flocks, on upland soils, which have given rise to compaction and erosion, lack of rainwater infiltration and therefore excessive runoff. This, in combination with the documented and associated decline in upland dwarf shrub vegetation and biodiversity, continues to contribute to water losses, nutrient losses and lowland flooding. By including this threat, you will be better able to integrate the findings of the excellent Pontbren project and the Flood Management Research Consortium.

Peatlands and wetlands potentially harbor harmful substrates, in particular radioactive deposits and their slow annual release with plant growth. This may be included in particular where the vegetation management above is likely to have consequences on animal/human health. This threat should be measured against the role of peatlands in trapping the radioactive substances in the first place, preventing their subsequent release via evaporation into the atmosphere.

Biological contamination of soils (by invasive weeds etc) should also feature in the document at some point, and in particular threats of soil movements. Granted there are some controls in place, but they do not go far enough, and there is no reference to them at all in the consultation.

Question 3. Is the relative emphasis on the individual threats correct from your perspective?

It appears to be; the problem for the Assembly will be in ensuring that departments and in particular individuals within them, as well as agencies and other organisations, work together to achieve the action plan.

Question 4. Have the right actions been identified for each sector?

Yes in terms of topics. However, WANPA strongly urges the Assembly Government to give serious consideration to utilising Wales' National Parks, which cover 20% of the land – 25% when AONBs are included -and therefore 20% of the soils, as

implementation test beds for this Action Plan, i.e., for all 3 of National Parks to play a nationally important role in this, on a very large scale. Using the NPs in this way would be consistent with the Wales Assembly Government's 2007 Policy Statement on NPs.

For example, As the ECOSSE report has demonstrated, Wales' uplands are vital to the management of the country's organic soils and a high proportion of the highest quality upland environments are within the NPs. When organic soils of floodplains and coastal areas are included, this proportion rises further. In terms of flood management, the NPs are sources of a high number of rivers and in the case of the Brecon Beacons National Park, many of these river sources rise on heavily compacted, eroded and denuded upland soils.

Within Snowdonia National Park, Rhaglen Tir Eryri has carried out projects of conifer removal from blanket bog, using them to block the ditches on site, raising water levels, restoring bog, slowing water down and cleaning it. These projects promote carbon storage, water retention and quality improvement, flood risk management, biodiversity, SAC improvement, and provide local work opportunities.

Question 5. What other actions are required within Wales, overall and within sectors? Who needs to deliver them and in what timescale?

Yes, on the whole. We point out that nitrous oxide emissions, which appear to be a lingering and significant contributor to acidification of upland soils and water, will affect Snowdonia and the Brecon Beacons NPs in particular, given that it is upland areas that bear the brunt of this contamination.

For education, emphasis should be given to the effects of climate change on soils, for example gaseous exchange rates (CO₂, CH₃, nitrogen), the nitrogen cycle, and the combined effects of increased storm frequency and intensity, summer droughts, erosion and increased access by people.

For composting and soil sludge, the Action Plan should pay attention to the potential for anaerobic digestors to make a contribution to soil enrichment as well as renewable energy. It should also pay attention to the rapidly emerging need for people, in the face of Peak Oil's impacts on fuel prices and therefore food supplies and costs of pesticides and fertilisers, to start growing their own food (kitchen gardens, allotments, small-holdings) and for farmers to diversify away from just mono-livestock systems into crop production. This will have a significant impact on how and where composts are applied for example, as will the numbers of people who may move into farming for the first time.

Emphasis should be given to making soil management integral to farming, forestry and water resource management and to the role that these industries play in enhancing or undermining ecosystems.

RSPB life bid in the Vyrnwy Estate has been grip blocking on peat soils and they have several ongoing PopNet research studies examining the effect on hydrology. This should be of use for upland units, unimproved soils and vegetation and compared to that at Pontbren..

Useful monitoring stations already exist at the Environmental Change Network (ECN – see <http://www.ecn.ac.uk/>), as well as the recent additions to these (for example Craig Cerrig Cleisiad and Cwm Cadlan National Nature Reserves/SACs). We

suggest that the geographic spread of Wales' NPs and AONBs provide additional useful locations for monitoring stations.

Question 6. Which actions need to be prioritised?

No comment.

Question 7. How and over what timescale should success be measured?

The Wales State of the Environment Report and the National Parks' State of Park Reports may provide a useful timetable to follow.

Question 8. What indicators might be used to measure success of the Plan?

We suggest that you include "rate of uptake" of actions by relevant sectors as a compliance measure. For outcomes, you will need to include biological and ecological measures. For example for upland organic soils, you could have rate of peat accumulation in previously denuded areas. There is already much work underway on the acidification of upland soils and waters, so presumably there will be suitable indicators available there.

Question 9. What monitoring should be done to measure progress in protecting soils?

This relates directly to Q8, i.e., your indicators will reflect your objectives, in which you'll want to observe compliance on the one hand and rate of change on the other. So your monitoring will record how close to your desired rates of uptake and rates of change things are. It might be wise to develop regional rather than Wales-wide objectives. For example: "The rate of peat re-vegetation within bare upland peat areas will be considered to be favourable when [x] hectares have re-vegetated within [y] years."

Question 10. Over what timescale should the Plan operate before it is reviewed?

The plan should itself be lightweight and could evolve into becoming the monitoring plan, with the rest of the plan integrated into other relevant sectors. So the current plan would exist until its contents have been integrated into the last such sector, after which it would change to the monitoring plan.

If you have any further enquiries regarding our response, please feel free to contact me in the first instance.

Yours sincerely,



Greg Pycroft
Welsh Policy Officer
Welsh Association of National Park Authorities