Peatland Tipping Points

Impact summary

The impact goals of this research are to:
* Provide evidence of ecosystem service tipping points in UK blanket peatlands that can help prioritise policy measures to prevent key tipping points being reached. Recommendations will include practical restoration and other management options that could be incentivised via Rural Development Programmes, Peatland Action (in Scotland) and the UK Peatland Code, and spatial targeting of incentives and measures to systems and locations where tipping points are most likely to occur
* Provide evidence that could be used to inform an economic case for investment in peatland restoration, both in terms of avoiding future economic costs and social impacts
* Provide policy-makers, third sector organisations and practitioners with early warning indicators that can be easily and effectively used to identify and avoid imminent tipping points
* Provide evidence to better articulate and quantify the benefits of peatland restoration for delaying and/or avoiding tipping points for multiple ecosystem services as part of the business case for investment in peatland restoration, for UK Peatland Code & Natural Capital Committee

Based on a recent stakeholder analysis conducted for Defra by the PI, stakeholders can be broadly grouped as:
* Policy stakeholders: including Defra, DECC, the Devolved Administrations, agencies such as Natural England and Scottish Natural Heritage, Climate Change Adaptation Sub-Committee, Natural Capital Committee and Forestry Commission. The team has a strong working relationship with Defra's soils team and each of the relevant policy leads in the DAs.
* Land owning and management community: including farmers, sporting estates and other private landowners and their representative bodies. The team works closely with National Farmers Union, the Moorland Association (England), Scotland's Moorland Forum and other groups.
* Third sector: including landowning NGOs such as RSPB, PlantLife and National Trust, and other NGOs that work and campaign on issues linked to peatlands e.g. Woodland Trust and John Muir Trust. The team already has close working relationships with all major environmental NGOs working in peatlands in the UK via the IUCN UK Peatland Programme, and we have good relationships with others such as Country Land and Business Association
* Professional bodies such as British Ecological Society, Royal Institute for Chartered Surveyors and Institute for Environmental Management and Assessment (our team are members of some of these bodies)
* Tourism and recreation interests, ranging from SMEs and their representative organisations (e.g. the Confederation of Small Businesses) and Local Access Groups to a wide range of organisations, associations and clubs, such as the British Mountaineering Council and the Ramblers Association
* Water industry: the team have strong links via previous projects and consultancy work for all the UK water companies that source water from peatland catchments including South West Water, Yorkshire Water, United Utilities, Severn Trent, Nortumbria Water and Scottish Water. Interests focus primarily on tipping points relating to water quality
* Research organisations with interests in peatlands, including Higher Education Institutes, RCUK funded Centres and other Government funded research institutes such as Scotland's Main Research Providers
* Publics with interests in conservation and climate change, and who pursue recreation and tourism in peatlands or engage with peatlands from time-to-time via other stakeholder interests above

Pathway to Impact

The team aims to co-produce a number of important research outcomes that will provide tangible benefits for the third sector, practitioner and policy communities concerned with UK blanket peatlands. For a list of impact goals, see the Impact Plan. This document explains the pathway we will take to achieve each of those goals.

Stakeholder engagement

This project aims to work with the widest feasible range of UK peatland stakeholders, from local (in each study area) to national scales, and linking to international policy processes. The project builds on the most comprehensive and up-to-date stakeholder analysis that has been conducted for UK peatlands (for Defra by the PI in February 2016). In particular, we will work in close collaboration with the new Head of the Secretariat to the Natural Capital Committee (former Head of Soils, heading up the Peatland Code for Defra) and the IUCN UK Peatland Programme (the PI is their Research Manager). The IUCN UK PP will provide a direct interface with their high-level advisory group and wider UK peatland practitioner networks, and enable wide dissemination of research findings to relevant stakeholders via their website. In this way, we will ensure that this research project is effectively linked to other related research and communicated to as wide an audience as possible; we will be at the forefront of a more integrated approach to research that operates in partnership across the research, policy and practitioner community, and which can be replicated in other environments. This will also be a promising way to sustain the outcome of the project and its trans-disciplinary collaborations. The research builds upon several highly successful research projects that have built strong stakeholder networks amongst the policy, third sector and practitioner communities in the UK and beyond. Members of our team have also been responsible for developing IPCC guidelines on accounting for GHG emissions savings from peatland, and members of the team work actively with international policy makers from all three Rio Conventions. If funded, this project will become an 'associated project', as part of an EU LIFE Integrated Project being submitted by XXX to implement a UK Peatland Strategy which is currently under development. If successful, this VNP project will attract match-funding from the EU for this project (our work is not reliant on this, but if both bids are successful it would enable the work to be extended). The bid is also supported by the HEFCE funded N8 Agri-Food Resilience Programme, which will give the team access to seed-corn funding to work with agri-food businesses to conduct scoping studies and leverage more significant funding from funders such as InnovateUK. The International Union for the Conservation of Nature's UK Peatland Programme own the Peatland Code and are working with XXX and a number of major corporations to finance peatland restoration across the UK.

Activities

Building on evidence from RELU that advisory panels are effective in ensuring knowledge exchange and impact (Phillipson et al. 2010), the project will be advised by a stakeholder panel meeting twice and be consulted regularly. This group will draw on the IUCN Peatland Programme's advisory group, which includes high level representatives from a range of businesses, NGOs and Government agencies and departments. Indicative membership of this group (to be confirmed) includes representatives from: Defra, Scottish Government, Welsh Assembly Government, Natural England (NE), Scottish Natural Heritage (SNH), IUCN UK Peatland Programme (IUCN UK PP), NFU, the Heather Trust & Scotland's Moorland Forum. The role of this group will be to: i) ensure project goals are consistent with the needs of beneficiaries, suggesting, where feasible, additional work to help realise social and economic impacts in a dynamic policy and economic environment; ii) review and provide feedback on project progress towards stated goals; iii) develop indicators with the project team to ensure that research outcomes can be monitored in policy and practice. In addition to this, the project will work with beneficiaries to realise impacts from the research, using the following approaches:

Project governance and local stakeholder involvement:
- Stakeholder advisory panel meetings (two meetings per study area; total of four meetings):

- Year 1 meeting: two day session including field visit with local and national stakeholders to learn about local knowledge and priorities, identify potential collaborations and adapt proposed research design where possible to incorporate their priorities; followed by a facilitated component and deliberation on cultural ecosystem services changes from tipping points
- Year 3 final project meeting with stakeholders to present and help interpret preliminary findings, including early warnings that can be used in policy and practice to avoid (or delay) tipping points. This will be combined with a multi criteria evaluation session to evaluate robust management options with varying likelihood of preventing tipping points, and ecological, economic, social and cultural implications.

Wider stakeholder engagement and communication:
- Government briefings/seminars with DEFRA's Rural Communities Policy Unit, Ecosystem Services & Strategic Issues team, and Strategy & Evidence Group; Scottish Government's Rural & Environment Analytical Services team and CAMERAS group, the Wales Environment Hub, uplands teams in NE, Countryside Council for Wales and SNH
- Policy briefs and information leaflets developed in collaboration with project partners
- A project Twitter account will be opened and managed by XXX (who has >40,000 followers across his Twitter accounts), as part of a wider project social media strategy
- Project web page to facilitate feedback and engagement with users, providing: general project information, academic publications, links to briefings (hosted on www.scribd.com for wide access and tracking), team details, links to social media
- Annual project newsletter
- Regular press releases, distributed via the funder and the consortium's press offices, targeting national (e.g. TV, broadsheets) & specialist (e.g. Farmer's Weekly, BBC Wildlife) press
- Presentations at academic and stakeholder conferences

Conclusion

This pathway to impact will be developed into a fully-fledged knowledge exchange and impact plan, matching impact goals to key messages from the research that are likely to be relevant to different stakeholder groups, and providing a more detailed list of activities that will be undertaken to achieve these goals with each group (see Reed, 2016). This will include a more detailed assessment of potential risks and assumptions (and ways of overcoming these), and timings and team responsibilities for each knowledge exchange activity. Indicators will be identified that can determine the success of knowledge exchange activities and monitor progress towards impact goals. These indicators and narrative evidence of impact will be collated during the project using the KOLOLA impact tracking system (https://www.kolola.net).

Resources

To support this Pathway to Impact, resources have been requested to fund time for XXX, the Director of the IUCN UK Peatland Programme to advise on stakeholder engagement & knowledge exchange, co-design/facilitate workshops and write briefing notes. A project web page will be developed as part of the Valuing Nature Programme website, to increase visibility (in search rankings) and longevity, and linked to from the IUCN UK Peatland Programme website and each of the project partner's websites, to provide access to project updates and findings. We have budgeted for project briefing notes and KOLOLA licences for tracking impact, and staff time is allocated to managing knowledge exchange and impact via Prof XXX with support from the PDRA.

References

Phillipson J, Liddon A, Proctor A, Lowe P (2010) Telling stories: accounting for knowledge exchange. RELU Briefing Paper no. 10. Available at:
http://www.relu.ac.uk/news/briefings/Brif10.pdf
Reed MS (2016) *The Research Impact Handbook,* Fast Track Impact.