

NATIONAL PEATLANDS ACTION PROGRAMME

Annex B Outline of key project actions during year 1 and the scope of actions for years 2-5.

Cross cutting theme #1 - Ensuring effective delivery and coordination

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Integration of plan objectives with Area Statements	<p><i>Action:</i> Dialogue with Area Statement leads to determine their information and format requirements and timescales.</p> <p><i>Outcome:</i> Comprehensive understanding of how best to integrate national peat priorities into Area Statement work plans.</p>	<p><i>Action:</i> Co-design and produce actions and targets with Area Statement teams.</p> <p><i>Outcome:</i> National Peatlands Action Programme fully integrated within Area Statement work plans.</p>
Programme planning and integration with key processes	<p><i>Action:</i> Develop delivery plan for project in years 1 and 2. Integrate projects within NRW work planning.</p> <p><i>Outcome:</i> Project delivery ensured and forward plan for year 2 in place.</p>	<p><i>Action:</i> Refine/develop delivery plan for project in years 2 - 5. Integrate projects within NRW work planning.</p> <p><i>Outcome:</i> Project delivery ensured over full term of 5 year plan.</p>
Supporting recognition of the significance of local/regional peatland resources and the development of local partnerships and strategies, supported by national prioritisation tool.	<p><i>Action.</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Development and roll-out of national GIS resources and guidance on how to use these to support the development of local plans and strategies.</p> <p><i>Outcome:</i> Local partnerships are supported to drive forward plans and strategies and stimulate further funding bids for restoration.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Coordinating the support and effort of partners and stakeholders for delivery of the National Action Programme</p>	<p><i>Action:</i> Reconstitute and revise membership and Terms of Reference of the Welsh Peatland Action Group (WPAG).</p> <p><i>Outcome:</i> Reconstituted Welsh Peatland Action Group which is fit for purpose and supports information exchange, joint recognition of priorities, strong partnership working and identifies and applies for other funding opportunities.</p>	<p><i>Action:</i> NRW NPAP Team to establish, coordinate & chair:</p> <ul style="list-style-type: none"> - Core delivery group - Annual meetings of wider WPAG stakeholder group <p><i>Outcome:</i> Efforts of partners effectively coordinated, leading to synergies of effort and maintained momentum.</p>
<p>Integrate Actions for Peatlands within other key projects and initiatives and stimulate development of new partnerships and delivery groups.</p>	<p><i>Action:</i> Identify other NRW and partner projects and initiatives with the capacity to contribute to the NPAP. Assess opportunities for synergy and additional outcome delivery.</p> <p><i>Outcome:</i> Plan implementation is integrated across partners and programmes.</p>	<p><i>Action:</i> Establish contact with emerging or potential groups and partnerships and support their development through providing advice and support.</p> <p><i>Outcome:</i> Expanded partnership base for delivery.</p>
<p>Extend reach and delivery of programme by stimulating partner activity through funding agreements.</p>	<p><i>Action:</i> Utilise NRW's Strategic Allocated Funding (SAF) mechanism to grant aid delivery amongst key delivery partners with a landscape remit, thus promoting action at an ecosystem scale.</p> <p><i>Outcome:</i> Delivery and capacity building across key partners.</p>	<p><i>Action:</i> Utilise grant and other mechanisms to support wider partnership action.</p> <p><i>Outcome:</i> Partners make a major contribution to the action programme and assume joint responsibility for its delivery; deliverables to be agreed but with a focus on all priority action themes.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Standard and consistency of peatland restoration is improved through identification and development of best practice.</p>	<p><i>Action:</i> Ensure all groundworks follow accepted or developing best practice. Source/define this for project elements in 2020-2021.</p> <p><i>Outcome:</i> Project delivered to high standard.</p>	<p><i>Action:</i> Produce a specification library for the project, sign-posting practitioners to existing best practice and with new methodologies drafted where required.</p> <p><i>Outcome:</i> Project delivered to high standard. Consistency and quality of peatland restoration practice is improved, leading to better restoration outcomes.</p>
<p>Training and building capacity</p>	<p><i>Action:</i> None in year 1 due to Covid-19 limitations.</p>	<p><i>Action:</i> Develop/support practitioner training programmes – the practitioner training may be delivered using the Welsh Peatlands SMS /Yorkshire Peat Partnership developed and Lantra approved scheme.</p> <p>Develop/support/deliver contractor training programmes.</p> <p><i>Outcome:</i> Improved capacity and capability across practitioner sector. Competent contractor base expanded.</p>
<p>Input to co-design of sustainable farming scheme</p>	<p><i>Action:</i> Expert input to co-design process.</p> <p><i>Outcome:</i> Scheme configured to supporting ongoing sustainable management.</p>	<p><i>Action:</i> Ongoing input to scheme design.</p> <p><i>Outcome:</i> Scheme configured to supporting ongoing sustainable management.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Support ongoing development of the Peatland Code and other PES/green market-place mechanisms as a means of supporting the restoration and sustainable management of peatlands in Wales.</p>	<p><i>Action:</i> Contribute to further development of the Peatland Code and other PES and green market-place mechanisms. Scope opportunity for developing further Peatland Code applications in Wales.</p> <p><i>Outcome:</i> Enhanced understanding and use of the Peatland Code and other PES/green market-place mechanisms.</p>	<p><i>Actions and outcomes:</i> Continuation of year 1 programme.</p>
<p>Use of Environment (Wales) Act 2016 powers.</p>	<p><i>Action:</i> Use section 16 agreements to support peatland restoration elements.</p> <p><i>Outcome:</i> Restoration supported and outcomes defined by agreements.</p>	<p><i>Actions and outcomes:</i> Continuation of year 1 programme.</p>
<p>National scale resource for maximising potential of technology and emerging technological advances around informing, evidencing and facilitating delivery of peatland restoration</p>	<p><i>Action:</i> Trial new methods for prioritising peat restoration, site-scale drone survey with subsequent GIS processing of data to prioritise restoration on remote, less accessible sites.</p> <p><i>Outcome:</i> Review of efficacy of drone surveys and GIS data-processing.</p>	<p><i>Action:</i> Develop NPAP Team GIS capacity; engage with JNCC, the other UK administrations and research institutions on novel approaches to peatland monitoring and mapping.</p> <p><i>Outcome:</i> maximise restoration efforts, monitoring and reporting.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Improve NRW capacity for undertaking peatland restoration work.</p>	<p><i>Action:</i> Develop Wales-wide framework available to all NRW staff for undertaking peatland restoration.</p> <p><i>Outcome:</i> Access to large-scale (>£25k) peatland restoration framework for NRW staff for 4 years. Best practice specifications form part of the framework documentation and available for all NRW staff, and both current and future peat restoration projects.</p>	<p><i>Action:</i> none</p>
<p>Develop and co-ordinate efforts to streamline peat restoration delivery constraints</p>	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Identify barriers to restoration and explore ways to minimise these or develop frameworks of best practice to enable efficient delivery.</p> <p><i>Outcome:</i> peatland restoration constraints are minimised as far as possible and/or frameworks for efficient delivery in place allows streamlined efforts within single-financial year constraints, maximising delivery.</p>

Cross cutting theme #2 – Evidence, assessment, monitoring and reporting

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Support/undertake production of key spatial data resources to support plan implementation and reporting.</p>	<p><i>Action:</i> Support development of new national peat map, condition survey, and peat properties survey being delivered through the Welsh Government's Soils Policy Evidence Programme.</p> <p><i>Outcome:</i> Revised national peat map reflecting the distribution of deep peat and an improved basis for prioritising effort.</p>	<p><i>Action:</i> Ongoing collection of spatial data from restoration delivery and integration with the national peat map.</p> <p><i>Outcome:</i> Updated living national peat map providing the best available evidence to practitioners and policy makers.</p>
<p>Monitoring NPAP progress and outcomes</p>	<p><i>Action:</i> Work towards a standard monitoring scheme to be used on project sites.</p> <p><i>Outcome:</i> Baseline monitoring conducted on project sites where possible.</p>	<p><i>Action:</i> Implement monitoring framework across peatlands sites included in 4 year programme.</p> <p><i>Outcome:</i> Demonstrate the benefits resulting from the NPAP effort; support national reporting requirements; support SoNaRR review and address evidence gaps; and, support development of proposals for a successor NPAP for Welsh Ministers to consider.</p>
<p>National activity recording system in place to support reporting under SoNaRR, GHG inventory, statutory site condition, Area Statement revision, and other reporting obligations.</p>	<p><i>Action:</i> develop national GIS based recording system and capture ditch-blocking activity to-date plus all activity resulting from year 1 programme and LIFE and SMS programmes.</p> <p><i>Outcome:</i> Pilot activity recording system in place.</p>	<p><i>Action:</i> Finalise national activity recording system and capture historic and project activity.</p> <p><i>Outcome:</i> A fully GIS based system for analysing and reporting activity.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Ensure Welsh and contribute to UK coordination with evidence and monitoring programmes	<p><i>Action:</i> Continue/expand engagement with Welsh and UK level peatland monitoring and evidence initiatives and programmes.</p> <p><i>Outcome:</i> Co-ordinated approach to evidence and monitoring at Welsh and UK scales; ensures monitoring efforts contribute where possible to statutory national reporting .</p>	<p><i>Action:</i> Continuation of year 1.</p>
Contribute to projects addressing evidence gaps	<p><i>Action:</i> Contribute to key evidence projects commissioned through Welsh Governments Soil Policy Evidence Programme.</p> <p><i>Outcome:</i> Development of a range of resources to guide and support programme implementation.</p>	<p><i>Action:</i> Contribute to or commission projects addressing key evidence gaps through funding and/or in-kind support.</p> <p><i>Outcome:</i> Programme delivery is based on a better evidence base.</p>

Cross cutting theme #3 – Development of a national public engagement programme

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Development of core aims, messages and audiences and project resources.	<p><i>Action:</i> No action proposed in year 1</p> <p><i>Outcome:</i> N/A</p>	<p><i>Action:</i> Year 2. Scope aims, messages and audiences and review what interpretation and education material is already available and can be adapted.</p> <p><i>Outcome:</i> Project brief developed for the programme.</p>
Infographic development	<p><i>Action:</i> No action proposed in year 1</p> <p><i>Outcome:</i> N/A</p>	<p><i>Action:</i> Develop a GIS-based query tool which enables local groups to develop bespoke infographics based on national data on carbon stocks, GHG emissions etc.</p> <p><i>Outcome:</i> Tool developed to enable production of infographics at a scale appropriate to the needs of specific groups, sectors and individuals, thus enabling people to reference the importance of peatlands at a meaningful and relevant scale. People in Wales value peatlands for their intrinsic value and the benefits they provide to society.</p>
Develop engagement programme relevant to key groups and sectors across Wales.	<p><i>Action:</i> No action proposed in year 1</p> <p><i>Outcome:</i> N/A</p>	<p><i>Action:</i> Develop engagement programme moulded to key sectors in Wales.</p> <p><i>Outcome:</i> Public and sectoral understanding of the value of peatlands and the importance of managing them sustainably.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Develop private sector engagement programme to build support for an investment in Peatland Code and other PES mechanisms.	<p><i>Action:</i> No action proposed in year 1</p> <p><i>Outcome:</i> N/A</p>	<p><i>Action:</i> Scope mechanisms and opportunities for optimal engagement with private sector. Deliver engagement programme with private sector, including an event to coincide with the IUCN annual meeting in Wales in 2022 (postponed from 2020 due to Covid-19 emergency).</p> <p><i>Outcome:</i> Private sector investment for peatland restoration in Wales encouraged and supported.</p>
IUCN UK Peatlands Programme 2022 conference	<p><i>Action:</i> Project represented at 2020 virtual conference.</p> <p><i>Outcome:</i> Improved awareness of and engagement with NPAP.</p>	<p><i>Action:</i> Co-host conference in 2022 together with New LIFE for Welsh Raised Bogs Project.</p> <p><i>Outcome:</i> National/international awareness of National Action Programme achieved. Synergies developed with other programmes.</p>
Develop programme website	<p><i>Action:</i> Scope options for developing a project website.</p> <p><i>Outcome:</i> Options for website development identified.</p>	<p><i>Action:</i> Develop project website, complementing the SMNR data portal.</p> <p><i>Outcome:</i> Project objectives, actions and outcomes and other resources publicly available and providing a one-site resource in Wales.</p>

Priority Action Theme 1 – Addressing peat erosion

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Assessment of the scale of peat erosion in Wales and development of resources to prioritise areas for restoration.	<p><i>Action:</i> No action proposed in year 1.</p> <p><i>Outcome:</i> N/A</p>	<p><i>Action:</i> Develop a 4 year plan for addressing priority areas of peat erosion in Wales based on assessments and restoration experience gained in year 1 and from other projects.</p> <p><i>Outcome:</i> Plan for restoring peat erosion, focussing on priority sites and issues.</p>
Priority areas of peat erosion restored across Wales.	<p><i>Action:</i> Restore initial suite of peatland sites affected by gullyng and peat erosion.</p> <p><i>Outcome:</i> Improved condition and resilience of peatlands affected by active erosion and gullyng.</p>	<p><i>Action:</i> Implement national peatland erosion restoration programme, focussing on remaining priority sites.</p> <p><i>Outcome:</i> Improved condition and resilience of peatlands in Wales affected by active erosion and gullyng.</p>

Priority Action Theme 2 – Addressing peatland drainage

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Build on previous assessments to develop an improved evidence base relating to peatland drainage in Wales.	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> (i) Review extent of ongoing active drainage, and (ii) undertake review of effectiveness of grip blocking installation methods to-date and identify priorities for remedial action.</p> <p><i>Outcome:</i> Advanced understanding of the extent of remaining active drainage and best-practice restoration methods for remediating peatland drainage.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Natural hydrological regimes restored on priority drained peatland sites to improve ecosystem resilience and maximise the potential of our peatlands to deliver key ecosystem services.	<p><i>Action:</i> Undertake year 1 programme of restoration of drained sites.</p> <p><i>Outcome:</i> Hydrological regimes restored on target sites in year one.</p>	<p><i>Action:</i> Undertake years 2-5 programme of hydrological restoration on priority sites.</p> <p><i>Outcome:</i> Hydrological regimes consistent with optimal peatland function restored across priority peatland sites.</p>

Priority Action Theme 3 – Achieving the sustainable management of blanket peatlands

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Tackle <i>Molinia</i> and ericoid dominance through large-scale measures.	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Develop and implement programme of management to tackle <i>Molinia</i> and more generally graminoid dominance and ericoid dominance.</p> <p><i>Outcome:</i> Suite of sites restored and the approaches and techniques established for tackling this large-scale issue.</p>
Building resilience against increasingly likely future threats to Welsh peat resource.	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Liaise with Welsh projects addressing fire risks in Wales e.g. Vital Nature funded project ‘Opportunities for fire risk reduction at Mynydd Du Commons’ (including Mynydd Du SSSI); progress action where possible on fire-risk mitigation on Welsh peatlands.</p> <p><i>Outcome:</i> Increased knowledge and understanding of practicalities in managing fire risk.</p>

Priority Action Theme 4 – Achieving the sustainable management of lowland peatlands

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Undertake capital works programme to address fundamental barriers to achieving sustainable management.	<p><i>Action:</i> Undertake restoration to tackle key issues of management neglect and currently unfavourable hydrological / hydrochemical regimes.</p> <p><i>Outcome:</i> Key aspects of poor condition addressed and mechanisms for ongoing management in place.</p>	<p><i>Action:</i> Undertake a suite of restoration projects on sites across Wales to tackle key issues of management neglect and currently unfavourable hydrological / hydrochemical regimes. Focus effort on sites supporting threatened habitats and species, including lowland raised bog, alkaline fen, and transition mire. Take advantage of synergies with existing projects.</p> <p><i>Outcome:</i> Key aspects of poor condition addressed and mechanisms for ongoing management in place.</p>
Work to secure sustainable grazing regimes on sites suffering from management neglect.	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Work to secure re-introduction or modification of grazing where required on project sites.</p> <p><i>Outcome:</i> Sites placed on recovery trajectory and under long-term sustainable management.</p>
Undertake a consultation with a cross-section of lowland peatland owner/occupiers to better understand the economic and practical barriers to achieving sustainable management in the specific context of lowland peatlands.	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Organise regional workshops to understand the economic and practical barriers to achieving the sustainable management of lowland peatland resources.</p> <p><i>Outcome:</i> Better understanding of how to tailor interventions and support mechanisms to achieve the sustainable management of lowland peatlands within the context of the future Sustainable Land Management scheme and other schemes.</p>

Priority Action Theme 5 – Afforested peatlands

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Identify priority afforested peatland sites for restoration on Welsh Government Woodland Estate.</p>	<p><i>Action:</i> Undertake assessment of areas of deep peat within the WGWE with a focus on low yield class areas. Undertake field survey and assessment using a modified version of the peat toolkit methodology.</p> <p><i>Outcome:</i> Development of an afforested peat programme for years 2-5 and beyond for integration within Forest Resource Plans, NRW Business Plans and Service Plans. Develop a monitoring system to track and record progress.</p>	<p><i>Action:</i> Ongoing field assessment as required of further candidate restoration sites. Determine whether the outcomes of the survey warrant revision of the 2012 Peat Toolkit assessment protocol.</p> <p><i>Outcome:</i> Long-term work programme defined/refined for afforested peat restoration, feeding into Land Stewardship Service Plans.</p>
<p>Undertake restoration of afforested peatland sites</p>	<p><i>Action:</i> Utilise any early opportunities in 20/21 for funding rewetting restoration on previously felled sites or open ground sites or sites with poor conifer growth within the WGWE.</p> <p><i>Outcome:</i> Achieve restoration of peatland within WGWE.</p>	<p><i>Action:</i> Expand programme to priority sites identified under first action area.</p> <p><i>Outcome:</i> Achieving restoration on afforested peatlands identified through the assessment action.</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Technical workshops and training	<p><i>Action:</i> None proposed in year 1.</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Promote replication and transfer of new restoration techniques developed in Scotland. Establish a Welsh afforested peat user group supported by the Pen y Cymoedd team who will be leading the most extensive afforested peat restoration project in Wales.</p> <p><i>Outcome:</i> Enhanced capacity and capability for implementing new and effective techniques, thus increasing the range of starting conditions from which peatland restoration achieves successful outcomes in this context.</p>

Priority Action Theme 6 - Ultra-modified peatlands

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
<p>Develop a better understanding of the definition and location of this component of the peat resource.</p>	<p><i>Action:</i> No action in year 1</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Determine what is in scope for this component of the programme – this includes intensive grassland and croplands as well as nutrient-rich extensive grasslands. Map the main concentrations of this component in relation to flood-risk, wider issues of peatland resilience and current land-use.</p> <p><i>Outcome:</i> Programme measures are targeted appropriately.</p>
<p>Establish collaboration with land manager sector.</p>	<p><i>Action:</i> No action in year 1</p> <p><i>Outcome:</i> N/A.</p>	<p><i>Action:</i> Develop confidential listing of land-holdings and establish contact through farming unions to identify interested individuals. Establish collaborative dialogue with land managers of our most modified peatlands and develop understanding of the type of structures and incentives needed to adopt land management practices that result in reduced GHG emissions and, where possible, net C sequestration</p> <p><i>Outcome:</i> Shared understanding of (i) the issues and risks associated with 'business as usual' approach, particularly in locations vulnerable to flooding and (ii) the incentives required to adopt wet agriculture and paludiculture approaches and (iii) improved profile of paludiculture and wet agriculture across the Welsh farming community as options for diversification. .</p>

Work area	Actions/outcomes in year 1	Actions/outcomes in years 2-5
Land management	<p><i>Action: No action in year 1</i></p> <p><i>Outcome: N/A.</i></p>	<p><i>Opportunistic action:</i> Explore opportunities to implement land management options in this context which reduce GHG emissions or ideally switch land to net C sinks.</p> <p><i>Potential Outcome:</i> Ultra-modified peatland under management which greatly reduces GHG emissions.</p>