

10. CLIMATE CHANGE MITIGATION 2020-25 (CF)

1. Purpose of the report

This report relates to a proposal for an umbrella authority, for Moors for the Future Partnership (MFFP) on behalf of the Authority to accept funding from a variety of sources for Climate Change mitigation projects up to the value of one million pounds over the next five years.

This will place the Authority in an agile and responsive position regionally and nationally and enable the Authority through the use of the unique skillset and experience within MFFP to meet a number of critical emerging needs associated with the Climate Emergency.

Key Issues

The growing evidence of the harmful impacts caused by anthropogenic climate change draw a clear picture. We need to do more, we need to do it now and, critically, we do not know what the solutions of the future look like yet. For this reason we need to be prepared and ready to action the next big opportunities.

Moors for the Future Partnership's work over the past 17 years has positioned the Partnership to see, understand, and use, new opportunities for the betterment of society and PDNPA objectives. For example, the development of using heather brash with lime, seed and fertiliser to treat bare peat was tested, developed and pushed through by the Partnership and is now established as the go-to technique for restoring bare peat in the Dark Peak and Pennines. It has totally changed the health and trajectory of over 30 square kilometres of the UK's most damaged and critical blanket bog, much of that in the Peak District.

However, in spite of the huge achievement of the past 17 years, the majority of our peat is still losing carbon because it is too dry, and therefore in poor condition. (A vegetative cap is only the first step towards good healthy bog).

We need to change this and return blanket bogs to the huge carbon sinks that they can be. Peat is a "super-soil" covering only three percent of the earth's land surface, but storing over thirty percent of all terrestrial carbon. Yet only 12% of English blanket bog is in good condition and little of that is in the Peak District.

Anticipated Climate Change Project Portfolio Value 2020-25

This Report asks for authority to accept funding up to one million pounds over the next five years.

This will be used to resource capital works and officer time in new areas of innovative research and development to mitigate climate change issues. For example we already have approximately £70k of secured funding, should authority be given to accept it, working in the Calderdale region, (see case study 2, in the *Background Information* below). This work is expected to be the first of a larger body of work, reaching across the Pennines. (There are nearly 250,000 hectares of blanket bog in England requiring a condition assessment). The authority sought in this report would enable this work and others to grow without repeatedly asking National Park Authority Committees to consider the same evidence for the same purpose, while ensuring clear sight and appropriate risk management remain in place.

2. Recommendation

That the Programmes and Resources Committee supports the proposed establishment of small projects to tackle climate change through habitat restoration aspirations (capital

works) and associated research and communications outcomes.

Specifically:

- 1) Authority to engage in new projects up to a maximum value of £1 million between 2020-2025, and delegating authority to approve the acceptance of new contracts with external funders under this authority to the Director of Conservation and Planning, in consultation with the Head of Law and in agreement with the Chief Finance Officer.**
- 2) That the Authority may, subject to compliance with its procurement standing orders, enter into contracts for the delivery of Climate Change Mitigation projects.**

How does this contribute to our policies and legal obligations?

The strategic fit of the Climate Change work is fully integrated within the MFFP 20/21 Operational Plan and the MFFP 2020 – 2025 Business Plan and is relevant to the Peak District National Park Management Plan Vision. It covers many aspects which will support the delivery aims of the National Park Management Plan 2018-23 - specifically:

Special quality 1: Beautiful views created by contrasting landscapes and dramatic geology

Special quality 2: Internationally important and locally distinctive wildlife and habitats

Special quality 3: Undeveloped places of tranquillity and dark night skies within reach of millions

Special quality 4: Landscapes that tell a story of thousands of years of people, farming and industry

Special quality 6: An inspiring space for escape, adventure, discovery and quiet reflection

Special quality 7: Vital benefits for millions of people that flow beyond the landscape boundary

Areas of impact:

- 1: Preparing for a future climate
- 2: Ensuring a future for farming and land management
- 3: Managing landscape conservation on a big scale
- 4: A National Park for everyone
- 5: Encouraging enjoyment with understanding
- 6: Supporting thriving and sustainable communities and economy

In addition Climate Change Mitigation work will support and contribute significantly to the National Park's Corporate Strategy 2019-24 by contributing towards key outcomes including: A Sustainable Landscape that is conserved and enhanced (specifically KPI 3 & 4), A National Park loved and supported by diverse audiences, and Thriving and sustainable communities that are part of this special place.

The proposed engagement with multiple external bodies and individuals will also

contribute significantly to the outcomes of other partner organisations within MFFP.

Background Information

Why is more investment into Climate Change Mitigation required?

Climate change mitigation is a key challenge facing us all.

Numerous cities have declared “Climate Emergencies”, the “State of Nature” Reports are year on year recording declines in our natural resources. The recent Houses of Parliament Report into Climate Change and Wildfire clearly cites anthropogenic climate change as a cause of the worsening situation.

For decades reports and academic literature have clearly shown the role peat, bogs, land management and broader conservation work have in addressing both the causes and impacts of this changing climate. Whether through providing clean water; storing carbon; protecting communities and infrastructure at risk from flooding or enabling economically sustainable rural communities to provide great recreation and exercise for all our visitors – it is all part of a necessarily holistic approach.

The unique skillset and experience MFFP has developed over the past 17 years now places the Authority firmly at the leading edge of innovative land management in the uplands.

At the start of the Partnership’s operational history the principal area of focus in our work was to revegetate vast areas of bare and eroding peat damaged by atmospheric pollution after industrialisation, and exacerbated by other interacting drivers of degradation. Now in 2020, we know more about these drivers such as climate change and we know we need to do more than we have before, and we need to do it differently, in some cases. So we are compelled to look deeper and further for the next solutions.

Case study 1: Roaches wildfire 2018.

Work from the Community Science Project has demonstrated that the drought of 2018 had a significant, long term impact on the hydrology of many of our iconic landscapes, including the Roaches, Chatsworth and Marsden. Drought events are becoming more common and are one of many increasing risks from climate change. The England and Wales Wildfire Forum Conference in November 2019, for example, repeatedly made this case in its various talks and presentations from the UK and around the world.

Wildfires in recent years have highlighted the risk facing our own iconic landscapes. Hills across the Peak District have been severely damaged and there is no quick healing process.

The wildfire on the Roaches in 2018 was unique because our Community Science Project was already collecting data on the site’s condition. This gives us a very rare before-and-after picture of the wildfire and its impact.

The loss of vegetation and subsequent erosion of bare peat led to an average 5.3cm of peat loss across the burn-scar of 61.7 hectares. In some locations the loss was much higher, nearly 10cm. Given the rate at which peat bogs grow when they are healthy, active carbon sinks, that equates to approximately 500 years of peat accumulation lost in one event, 1000 years in some locations.

That equals an estimated 3,244 tonnes of carbon or 11,430 tonnes of carbon dioxide lost in a single wildfire event.

There were 51 wildfires in the South Pennines Special Area of Conservation in 2018. Reports such as the Houses of Parliament's 2019 Report into Wildfire are clear – the likelihood and impact of these wildfire is increasing.

The only area of the Roaches which resisted the wildfire's damaging effect was restored prior to the 2018 wildfire:

- This followed the advice and technical instruction from MFFP's staff through the Private Lands Project.
- MoorLIFE2020 funded our staff to advise following the 2018 fire and has recently produced a report into the carbon loss from this wildfire.
- Funding from our Water Environment Grant (Building Blocks) is now funding the restoration of the site and our staff have surveyed, tendered and overseen the work.
- Research and development through Moor Carbon and MoorLIFE 2020 have given critical insights into potential restoration for this site.
- We are also helping Staffordshire Wildlife Trust and Natural England formulate a long term plan for the site.

This is one example of how MFFP utilises multiple funding streams to maintain focus on the key issues and priorities.

Case study 2:

Blanket bog condition assessment and wildfire severity assessment.

MFFP's staff have a unique range of skills and experience. Our knowledge of the moorlands, restoration, engaging with land managers and owners is unparalleled. We have recently been given the opportunity to use this resource to produce an innovative piece of work for Calderdale's Natural Flood Management Operations Group.

Calderdale Metropolitan Borough Council has offered a grant of £67,000, (funded by the Environment Agency), for MFFP to produce a report on Calderdale Blanket Bog's ecological condition (as per Natural England's "6 States of Blanket bog") and its wildfire severity condition. This is an innovative project, the first of its kind, providing a strategic assessment of risks and opportunities to protect and enhance this most fragile yet critical habitat.

This would be the first, we hope of many, similar projects covered by this authority. These are emerging needs for the National Park Authority, other authorities and agencies as we strive for strategic, holistic management of our landscapes in the face of a rapidly changing climate.

This work would directly deliver "A sustainable landscape that is conserved and enhanced", part of the National Park Authority's "Our Corporate Strategy 2019-24".

Specifically, it would address KPI 2 (Natural beauty conserved and enhanced), which asks us to: *"Develop methodology for strategic sustainable landscape monitoring with partners, which identifies interventions required to prevent/reduce/reverse/ mitigate negative changes and enhance natural beauty; and addresses any issues arising from the climate change vulnerability assessment of special qualities"*.

The proposal is also in line with the objectives set out in the MFFP 2020/21 Operational Plan and fits into the wider vision of delivering both the National Park Management Plan 2018-23; outcomes and Key Performance Indicators of the 2019-24 Corporate Strategy - whilst taking into account the requirements of the Moors for the Future Partnership partner organisations. The projects within the Operational Plan are funded by, and involve, 24 important partners and private

landowners. Developing this ‘umbrella project’ authority will further develop the Authority’s responsiveness to climate change mitigation/adaptation related projects and initiatives. Working in this way will give the Authority significant influence with key partners regionally who themselves have significant influence over the management of the moorland landscape.

Authority powers and the geographical reach of the project: The Functional Specific Power of Competence granted to English National Parks in 2016 (Cities and Local Government Devolution Act 2016) enables NPAs to do “anything it considers appropriate for the purposes of...carrying out any of its functions.....anywhere in the United Kingdom and elsewhere”.

Provided that the project actions are appropriate to the Authority’s statutory purposes (such as to conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park) there are no boundary restrictions. However, this will be determined on a project by project basis as part of the delegated authority.

Project Succession Planning

As previously highlighted MFFP Programme Management continually builds and develops succession within our programme of projects to consistently fight the worst impacts of climate change. This is achieved by matching the multitude of available sources of funding with the restoration needs of the habitats, and the Partnership’s and National Park Authority’s wider outcomes over a huge working area.

In MFFP’s 17 year history an opportunistic approach to all sources of funding has been a vital component of our skill set from external sources. This has unlocked for us the large grants secured by MFFP in MoorLIFE and MoorLIFE 2020 and many smaller ones too.

MFFP has well established relationships with water companies, academic institutions, government agencies and national charities and organisations. We have successfully delivered multi-agency partnership projects which deliver cutting edge research, communications and land management. We are uniquely positioned to deliver more joined up work on our vital landscapes as our society needs to stop the worst effects of climate change. The loss of LIFE funding via the EU indicates that other, probably smaller, but more numerous grants and funding packages will be critical opportunities as we look to the future. While MFFP has achieved significant changes and achievements over its seventeen year history, we also see from this experience that this is merely the end of the beginning – the need to continually evolve and innovate our land management for itself and its wider impact on climate change is clear.

This proposed authority would enable MFFP to use its proven and tested skills and experience to utilise more small but important projects to fight harmful climate change.

The output from this authority will provide answers to the “next big questions” we are only beginning to formulate. A better understanding of the condition of our blanket bog is one answer – so we can start to understand what is missing and what needs repairing most urgently.

This is entirely complimentary to our strategic goals of strengthening our position through greater resilience and filling the critical gaps in our knowledge. Knowing where to act, and having a new arsenal of techniques to work with, can only enhance our future standing on this issue.

Programme Management

There are typically around 20 projects being delivered at any one time, delivering MFFP’s three objectives of Communications and Engagement, Research and Monitoring and Conservation and Land Management. The 2020/21 financial year will be the final delivery year of a number of these

projects and it is imperative that MFFP remains an agile, versatile competitor in the conservation funding market, as we develop future (post-Brexit) projects to continue the work of the partnership.

Each new project under this new authority will be assessed against our ongoing programme commitments, and as at February 2020 there is sufficient capacity within the programme to integrate the additional officer resource, (such as monitoring, surveying and communications) within our existing resource levels. Project Management will be resourced from MFFP's existing Prince 2 qualified Project Managers all of which have experience of delivering capital works projects on degraded peatlands. Project Managers will resource the project from MFFP's existing Conservation, Research and Communications Officer resources. The core MFFP Programme Team will provide overall project leadership and support for the delivery of the project.

Conservation and Land Management

The climate change mitigation project proposals to be delivered in the next five years will be developed through an iterative process working with partners and will be specifically tailored to meet, and where possible exceed, their specific strategic, functional or KPI requirements.

Climate change mitigation is rapidly growing as a key driver for many of our partners from water companies to the National Trust, DEFRA and the Moorland Association.

Research and Monitoring

Research and development are key aspects of the fight against climate change's worst impacts. We do not know enough about our most vital landscapes, (*see the Parliamentary Office of Science and Technology's report into Wildfire and Climate Change as one example of the evident lack of evidence*). Through engaging with multiple partners and external bodies we will have the best opportunity to continue to develop our expertise and wider goals.

MFFP has demonstrated experience of:

1. Extensive programme and project management; (including financial and strategic risk management)
2. Cutting edge blanket bog and carbon research and monitoring with leading academic institutes;
3. Engagement with a wide variety of stakeholders in complex, multi-organisation and multi-disciplinary projects;
4. Leading innovation for fire retardant blanket bog;
5. A well-developed network of contacts in local government, DEFRA, academia, utility companies, charities and private land managers;
6. A significant, regular social media presence among target audiences;
7. Proven experience of finding and maximising funding opportunities;
8. Delivery of extensive capital works across a landscape of protected sites.

In a swiftly changing world, where new technologies and strategies are more and more in need, our skills and experience at MFFP are exactly suited to meet this challenge.

This authority will enable us to do so, while giving full sight to senior National Park Authority managers of the strategic fit, function and risks.

This also provides MFFP and partners with the opportunity to focus on the wider ecosystem benefits delivered by peatland restoration, such as natural flood management, water storage and quality, biodiversity, recreation and the local economy and thereafter share and disseminate this

information at a national level. This will contribute to maintaining MFFP's and the Authority's position as a leaders within the peatland restoration community in the UK.

Communications and Engagement

For as long as funding allows, we will continue a programme of face to face engagement for urban and rural communities, land managers and partner organisations to inform and educate people about the important benefits of mitigating climate change, primarily focused on the uplands and our core work on blanket bog. MFFP will agreed a programme of communications and engagement which will be integrated within the Programme's wider communications activities, which will add value to this area of our work over the next 5 years.

Proposals

As the Climate Change Mitigation proposed authority will constitute a new project for MFFP (not being linked to other MFFP grant funding applications). The proposal is brought to committee for consideration and approval as a defined set of works to be incorporated into the MFFP forward Programme of Projects. As per the approach to new projects set out in the 2020/21 Operational Plan, this project proposal is made as an individual report to Committee to gain authority as a new initiative to meet Standing Orders.

The process for confirming contracts for Climate Change Mitigation if Authority is granted will be as follows:

- **Resource Management Meeting in April 2020:**
The Climate Change Mitigation proposals are presented for comments and approval to progress to Committee.
- **Programmes and Resources Committee in May 2020:**
Climate Change Mitigation Proposals put to Committee for approval.
- **Confirmation of initial Contracts by July2020:**
Upon Authority approval, recommendations for delegated approval to accept new contracts with funders will be made by MFFP and upon acceptance finalised for project start by June 2020.

Are there any corporate implications members should be concerned about?

Financial:

The resources available to develop and agree the agreements for working to mitigate against climate change are those of the existing MFFP staff team with welcome advice from senior officers. No additional resources will be required.

Prior to gaining delegated authority the project cost models will be baselined and spending and income forecast. This information will be provided to National Park Authority officers with delegated authority to accept new projects in tandem with MFFP recommendations.

The Climate Change Mitigation Authority can be expected to provide project funding income to support core MFFP activities over the 2020-25 period. This is in line with the intention set out in the 2020/21 Operational Plan for projects to generate additional funds to support core MFFP programme activities.

The Partnership has a history of sound financial management, income control (including draw down of funding and claims) is of great importance and overseen by the Programme Office Manager. Regular updates are held with the Chief Finance Officer with monitoring of cash flow to ensure the 'books' are balanced.

Risk Management:

The Climate Change mitigation proposals are an integral part of the 2020/21 Operational Plan and MFFP 2020-25 Business Plan, as such the Project Management risks once in delivery will be adequately managed as part of MFFP's programme risk management activities.

Risks, Issues and Dependencies of the programme of projects are monitored weekly and reviewed quarterly alongside the Programme Progress Log.

Our health & safety log is reviewed weekly.

Project Managers update their project logs weekly and report via the weekly programme status update meetings with in-depth updates held monthly.

We produce a Programme Progress Log four times a year which identifies approvals and financial values of projects - with issues identified through a Red/Amber/Green assessment - and includes brief summaries of progress highlights. Income and Expenditure of projects and programme team are also monitored by the Partnership's Strategic Management Group at its quarterly meetings.

Sustainability:

From a business sustainability perspective, this proposal fits within the context of the Moors for the Future Partnership interim Business Plan 2020-2021 (under development at the time of writing). Undertaking additional projects for our partners, building on work which is already being done, is a key part of our business model and has allowed immense improvements to the landscape and conservation of the Dark Peak and beyond. Creating synergies between projects is a key component of the sustainability of the Moors for the Future programme.

Protection of the peatlands of our core work area is a key part of protecting land based carbon, which internationally has the potential to have a huge impact on climate change. In addition, the ecosystem service benefits of our blanket peat work is well known, reducing the risk of flooding, improving water quality and improving the landscape, so highly valued for recreation.

The rejuvenation and conservation of peatlands is a vital role in reducing erosion, enhancing the quality of the landscape and transforming a source of carbon into a carbon sink. Our work, to date, has avoided the loss of circa 62,000 tonnes avoided loss per annum of CO².

In addition, the moorland fires and drought conditions have shown how the upland landscape needs to be in the best ecological condition to withstand the shocks and stresses of a changing climate in order to deliver positive benefits for the downhill, downstream and downwind communities in places such as Manchester.

By rejuvenating the areas of damaged blanket bogs, we aim to:

- halt the erosion of peat from the moors
- reduce the loss of carbon
- increase the amount of carbon absorption
- turn the damaged carbon sources back into carbon sinks

Equality

There are no equality issues arising from this report.

5. Background papers (not previously published)

None

6. Appendices

None

Report Author, Job Title and Publication Date

Chris Fry, Conservation Quality Manager: Conservation & Land Management, Moors for the Future Partnership.

06/05/2020