

6. SPHAGNUM LAB

1. Purpose

Approval is requested by Moors for the Future Partnership (**MFFP**) to accept funding and enter into agreements to establish a Sphagnum demonstration and research field laboratory at Featherbed North (**the Project**). Dense planting of Sphagnum moss will allow detailed research into a range of areas of interest, valuable engagement opportunities and multiple benefits to ecosystem services.

2. Context

2.1. It was anticipated that the original project would be authorised by the Moor Resilience authority (“Climate Change Mitigation Project” P&R 17/20) however, additional funds have been made available by Rebel Restoration which extends the project to 2026, past the duration of the Moor Resilience authority (2025). MFFP therefore seeks approval from the Programme & Resources committee for the Project and to enter into associated agreements.

2.2. Standing Orders: Acceptance of funds over £200,000 requires committee approval (Part 7.C-2). Expenditure over £150,000 which form a project requires the authority of the relevant committee (Part 3.C-3).

2.3 Previous Due Diligence (DD) under DD Panel 2/22 had a funding ceiling of £50K – this is was superseded by DD Panel 02/24 allowing funding up to £500K (subject to review in January 2027).

3. Proposals

3.1. The proposed budget for the Project is £768,900 over 7 years (2024-2030): the Project will be funded for the first two years by Rebel Restoration (£207,500), and by the Peak District National Park Foundation (**PDNPF**) (£40,000). It is anticipated that both these parties will continue to fund further years of monitoring, analysis and reporting once they see the outcomes of years one and two. Additional funds will be sought as needed from other sources, including grants and donations. However, should no other funds be forthcoming, the Project commitments to Rebel Restoration and PDNPF will end in 2026. There will be no further expenditure and, as the Project is fully funded up until this time, no debt commitments to fulfil. The legacy will be sphagnum lawns that will continue to contribute to the ecosystem and be of ongoing value for demonstration visits.

3.2. Site description - Featherbed North is on National Trust land, on Ashop Moor. It is accessible from the A57 via the Pennine Way – a 10-minute walk in total. It is the site of an extensive research project (collaboration between National Trust and Nottingham Trent University) which finished on 31/12/2021, assessing impacts of gully-blocking techniques (timber dams) on hydrology (streamflow, water table). The monitoring infrastructure remains in place. The existing setup presents an excellent opportunity to add dense Sphagnum cover, to assess the impacts this would have in addition to the gully blocks.

3.3. The proposed sphagnum lab will facilitate detailed research into key areas, including benefits to Natural Flood Management, whilst simultaneously providing a visually impacting engagement tool for MFFP and the National Trust to use when engaging with members of the public, students, journalists, politicians and policy-makers and creating benefits to multiple ecosystem services – for example sequestering carbon,

improving biodiversity, reducing flood severity. Nottingham Trent University will continue and extend their research, using their UAV capabilities to collect aerial imagery at the Featherbed North site and at the Authority's first dense sphagnum site on Kinder Scout, to remotely measure sphagnum cover and to generate footage for communications purposes, at a cost of £35,698.86 to the Project.

3.4. Objectives

- To evidence the effects of extensive Sphagnum cover on streamflow (stormflow and drought resilience), carbon fluxes, water table, soil moisture, vegetation community composition
- To develop an easily accessible site, which may be used to demonstrate the value of peatland restoration to a range of stakeholders
- To develop a best practice guide for planting Sphagnum as a restoration technique (based on a trial assessing relative growth rates of plugs affected by planting spacings/geometries, species mixes, microtopographic conditions)

3.5. Project Management

- The capital works (sphagnum planting) will be delivered using the Peak District National Park Authority and Moors for the Future Partnership processes and procedures for delivering blanket bog restoration capital works.
- A project report on project progress to funders will be completed at least yearly.
- MFFP will liaise with the landowner, the National Trust High Peak Estate, as required (at least yearly).

3.6. Timescales

April 2024 to March 2025:

- Finalise statutory and stakeholder consents
- Procure and install moisture sensors
- Commence baseline monitoring
- Remote sensing baseline survey (NTU)
- Plant Sphagnum demonstration lawns
- Written update to funders and stakeholders

April 2025 to March 2026

- Continue baseline monitoring (to Autumn 2025)
- Secure sphagnum planting contractor through PDNPA tender process and through liaison with CaLM team works programming.
- Plant Sphagnum in vegetation quadrats and experimental catchments (Autumn 2025)
- Start post-treatment monitoring
- Written update to funders and stakeholders

April 2026 to March 2027

- Incorporate monitoring by University of Manchester into the Project at adjacent monitoring site Upper Gate Clough, where they are studying the effects of dense Sphagnum planting on greenhouse gas emissions (currently funded as its own

project, but will be funded by this Project from April 2026, if we can secure the necessary funds)

- Continue post-treatment monitoring
- Written update to funders and stakeholders

April 2027 to March 2030

- Continue post-treatment monitoring at the Sphagnum Lab quadrats and catchments, and at the Upper Gate Clough carbon monitoring site
- Remote sensing post-treatment survey
- Written update to funders and stakeholders

4. Recommendations:-

- 4.1. That Committee supports bids for and approves acceptance of funds for the Project up to a maximum of £800,000 for the period to 2030, including acceptance of £207,500 from Rebel Restoration and £40,000 from the Peak District National Park Foundation. Approval of the terms of funding is delegated to the Head of Assets and Enterprise in consultation with the Finance Manager/Chief Finance Officer (or such other person appointed under S151 of the Local Government Act 1972).
- 4.2. That authority be delegated to the Authority Solicitor to enter into and determine the terms and conditions of the funding agreements for the Project in the best interests of the Authority.
- 4.3. That acceptance of funds shall be subject to the approval of the Due Diligence Panel, where applicable.
- 4.4. That the Authority may, subject to compliance with its procurement standing orders, enter into contracts for the delivery of the Project outcomes.
- 4.5. That this Project be monitored by the Audit, Budget and Project Risk Monitoring Group.

5. Corporate Implications

a. Legal

Pursuant to section 65(5) of the Environment Act 1995, the Authority has power to do anything which is calculated to facilitate, or is conducive or incidental to the accomplishment of its statutory purposes. The Project falls within the Authority's statutory purposes. This power is subject to any express statutory or public law constraints, including compliance with the Public Contracts Regulations 2015 which would apply. In this event, a transparent, compliant procurement exercise must be undertaken in order to ensure any contract award is robust against legal challenge.

b. Financial

Cash flow forecast:

Note: Expenditure figures from 2026/27 onwards are projected costs, contingent on the Project being funded after 2025/26 (as is hoped and anticipated). The Project is fully funded up to and including 2025/26. If no further funding is forthcoming, then the Project will end in 2025/26 with no further cost commitments.

Expenditure by FY	2023/2024	2024/2025	2025/26	2026/27	2027/28	2028/29	2029/30	TOTAL
Pay (inc. Corp o/h)	12,000	51,000	44,500	55,000	60,000	65,000	70,000	357,500
Non-pay	0	5,000	135,000	50,900	51,200	112,200	57,100	411,400
TOTAL expenditure	12,000	56,000	179,500	105,900	111,200	177,200	127,100	768,900
Income								
Rebel Restoration	0	148,000 ("Grant 1")	59,500 ("Grant 2")*					207,500
PD Foundation Donor	40,000	0	0					40,000
TOTAL Income	40,000	148,000	59,500					247,500

c. National Park Management Plan and Authority Plan

- The Project will include the planting of 284,000 *Sphagnum* plugs, with significant benefits in terms of carbon sequestration, nature recovery and improvements to biodiversity. This aligns with Aim One of the Peak District National Park Management Plan
- The Project will deliver important research quantifying the benefits of peatland restoration (focusing on *Sphagnum*), which will support further efforts to raise funds to deliver future restoration works across the National Park.

d. Risk Management

All risks associated with the Project will be managed internally by MFFP.

- i. Risk: insufficient capacity to manage/deliver the project.
 1. The Project will be delivered by MFFP using existing staff capacity, already assigned to this project.
- ii. Risk: failure to plant *Sphagnum* due to lack of availability of materials/contractors.
 1. The capital works element of this Project will be incorporated into MFFP's wider capital works programme. This will be managed by our Conservation and Land Management team, who have assessed the requirements of the project and have no concerns about conflicts with other capital works resourcing.
- iii. Risk: insufficient funding to continue the Project
 1. If insufficient funds are raised to continue the Project, the Project will stop (or pause). All reporting/contractual requirements up to that point will be fulfilled by the MFFP staff working on the Project.

e. Net Zero

The Project will include the planting of 284,000 *Sphagnum* plugs, which will bring a benefit of carbon sequestration both during and beyond the lifespan of the Project. Carbon emissions associated with the Project will be minimal, as no helicopter or onsite vehicle operations will be included.

6. Background papers (not previously published)

None

7. Appendices

No appendices

Report Author, Job Title and Publication date, 28 November 2024

Tom Spencer, Senior Research & Monitoring Officer

Tony Price, Business Development Manager

Matt Scott-Campbell, MFFP Partnership Manager

Deborah Shaw, Senior Lawyer

Hannah Turner, Head of Asset and Enterprise