



MoorLIFE 2020: Technical Summary

October 2015

A Moors for the Future Partnership Project in the South Pennine moors. Delivered by the Peak District National Park Authority, National Trust, RSPB and Pennine Prospects.

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What is the EU LIFE programme?

The EU LIFE programme was launched in 1992 to provide funding to support environmental, nature conservation and climate action projects throughout the EU. Since then LIFE has co-financed some 4,171 projects, contributing approximately €3.4 billion euros to the protection of the environment and climate.

The present EU LIFE programme (2014 – 2020) will allocate €3.2 billion for Environment and Climate Action.

The LIFE Nature programme funds Natura 2000 sites, these are sites that have European protection either because they have been designated as Special Protection Areas (SPAs) in relation to birds or Special Areas of Conservation (SACs) to protect vulnerable habitats such as those of the South Pennine Moors SAC.

What is MoorLIFE 2020?

This world-leading conservation project to help protect internationally important priority habitats in the Peak District and South Pennines has received a massive €11.9 million of support from the European Union toward the overall project value of €15,996,416.

The MoorLIFE 2020 project will protect Active Blanket Bog within the South Pennine Moors SAC, a Natura 2000 site. It is also within the Surface Water Safeguard Zones (WSZ), which are areas of land which supply drinking water to reservoirs. WSZ have been designated under the EU Water Framework Directive (WFD).

MoorLIFE 2020 follows the previous LIFE funded MoorLIFE Project. After five years, this has revegetated nearly 900 hectares of bare peat to protect about 2,500 hectares of Active Blanket Bog (roughly the size of 3,500 football pitches). The most severely damaged blanket bog in this area had been caused by a combination of pollution from previous heavy industry and wild fires.



These before and after pictures illustrates the results of the MoorLIFE Project which MoorLIFE2020 will build on

Work was carried out to stop areas of bare peat from getting any bigger and damaging the adjacent intact blanket bog, improve the landscape, water quality and diversity of upland plants, birds, mammals and insects under immediate threat.

Why is MoorLIFE 2020 necessary?

The South Pennine Moors SAC is critically important as one of the most significant areas of blanket bog in Europe protected by both European (SAC) and UK Site of Special Scientific Interest (SSSI) legislation.

Its position makes it one of the blanket bog habitats most susceptible to climate change in Europe. A previous legacy of atmospheric pollution from coal fired industries has further weakened its resilience and its situation (close proximity to large urban populations) has produced a high incidence of summer wildfires.

The water bodies these catchments serve are failing to meet WFD requirements and the quality of raw drinking water provision to water treatment works is also deteriorating. Reducing the amount of peat that is eroded ensures that less peat makes its way into the water that flows from these important catchment areas.

There is a pressing need for this significant capital project to increase the resilience of these Active Blanket Bogs. Conserving the habitat and improving all the factors above will create synergies between the benefits of the Habitats Directive and the Water Framework Directive - together they will mediate climate change, a suggested priority under the EU LIFE Regulation.

Which area does MoorLIFE 2020 cover?

The map in Appendix 7 shows the area covered by MoorLIFE 2020. It is a vast area stretching from Skipton in the north to Edale in the south.

What will MoorLIFE 2020 do?

The primary purpose of the MoorLIFE 2020 Project is to protect the remaining areas of Active Blanket Bog within the South Pennine Moors SAC. There are a range of activities to be undertaken which can be separated into 5 groups: Preparatory Actions, Concrete Conservation Actions, Monitoring Actions, Dissemination Actions and Project Management Actions. The project started on 1 October 2015 and will run until the end of February 2021.

Preparatory Actions (October 2015 – March 2017)

Project plan and scope

During the first year we will be working with our partners, land managers and other stakeholders to identify exactly where and when activities will take place. A full project plan will be completed to include a hydrological restoration plan to identify where, when and how we will undertake works to improve the hydrological status of the SAC.

Tendering and contracting

We are intending to prepare contracts for the whole of the MoorLIFE 2020 period during the preparatory period, letting contracts for all of the other activities. There will be some framework contracts and some stand-alone contracts. All contracts will comply with Peak District National Park Authority Standing Orders.

Sustainable Active Blanket Bog Management

Building on the work that Natural England's Upland Management Group has developed in the last couple of years, we will work with land managers and other stakeholders to develop ways of sustainably managing blanket bogs which delivers all of the needs of interested parties, from all of their current economic uses to protecting their drinking water provision and allowing access. We will develop from this a communications toolkit to take the learnings out to the wider land managing community. It will also look at ways of developing a better understanding of moorland management practices for the wider public, which will be developed in the Bogtastic activities.

Concrete Conservation Actions (August 2016-December 2020)

Stabilisation of bare peat and halting peat erosion

Expansion of areas of bare and eroding peat is one of the biggest threats to the priority habitat of Active Blanket Bog. Well-established techniques to improve the polluted soil chemistry, through the addition of lime and fertiliser treatments, application of nurse species (such as amenity grasses and heather) and stabilising the surface of the bare peat with heather brash will be used early on in the project.

This will stabilise areas of bare peat and protect the remaining Active Blanket Bog from encroaching erosion. It allows native plants to develop and become established and is the first step on the long road to re-activating degraded blanket bog. Where areas are some distance from sources of moorland plants, we will look to reintroduce other moorland species as plug plants.

Restore hydrological integrity

Improving the hydrological status of areas of blanket bog is critically important for a variety of reasons.

Raising water tables reduces the loss of dissolved carbon, permeable dams trap sediment which can enter watercourses and reservoirs and increasing the amount of surface water allows more sphagnum mosses to develop.

Pictured: Gully blocked by stone to help raise the water table



Increasing surface wetness will reduce the risks to Active Blanket Bog of wildfires and further erosion. To allow these benefits, work will be carried out to block gullies and grips.

The techniques for undertaking this are well known and different techniques will be used in different situations, depending on the outcome required from the dam. In addition, work will be developed to try and block peat pipes, which can lead to gullies forming beneath the body of the peat.

Increase heterogeneity of vegetation

Extensive areas of single age, single species have developed across the SAC, predominantly by historic wildfires. In order to prevent this from happening again, and to protect adjacent areas of Active Blanket Bog, we will be breaking up these areas by cutting and increasing the diversity.

Pictured: Re-introduction of native moorland plants, such as cotton grass

If possible, this will entail mapping of areas to identify the wettest areas and inoculating those areas with sphagnum to create wet fire-breaks.



Managing invasive species, particularly *Rhododendron ponticum*

Across the SAC there are areas which have become dominated by invasive species. Where the bog surface has dried out, due to gully formation and past burning episodes, trees such as willows and birch can invade. These are of benefit in some places and can increase the stability of the bog but can be problematic and increase drying of the bog surface.

Rhododendron ponticum was planted historically to provide cover for pheasants and readily spread onto the bog surface. This forms impenetrable thickets which shade out typical moorland species. Where these two different groups of plants are problematic, we will control them. There are extensive stands of *Rhododendron* in the Wessenden valley, which are seeding onto many of the northern Peak District moors. These will be cleared with chainsaws and follow-up herbicide treatment, where there are small seedlings on the bog surface; these will be pulled out by volunteers.

Increase the diversity and quantity of Sphagnum moss

The blanket bogs of the SPM SAC were predominantly formed by compaction of sphagnum mosses over the last 8000 years. During the last 200 years, these mosses have been killed across large areas of the SAC predominantly by sulphur oxides (SO₂ and SO₃).



Pictured: Sphagnum moss a key peat-building moss and vital to the future of this priority habitat

We will add Sphagnum mosses, using micro-propagated or harvested materials, to work areas across the SAC; following bare peat stabilisation, cutting of homogenous vegetation, gully or grip blocking. Increasing the amount of sphagnum moss (pictured below) will help increase the surface wetness of blanket bogs which should reduce the risk and severity of wildfire.

Reduce the impact of land management activities

Having developed a communications toolkit, we will take these messages out to land managers and work with them to identify how they increase the objectives that their land management delivers. We will also talk to them about how the project can benefit them, for example by clearing *Rhododendron*. The project is purchasing a Softrak, predominantly to allow cutting of vegetation and application of *Sphagnum* mosses and we will lend it to land managers for inclusion in delivery of their burning plans in order to allow them to assess the differences between burning and cutting.

Monitoring Actions

Mapping

The preparatory phase will include producing an up-to-date baseline land cover map of the South Pennine Moors using Earth Observation (EO) data (remote sensing data collected from sources such as satellites, planes and Unmanned Aerial Vehicles (UAVs)) and state of the art image classification software.

This tool will enable high resolution identification of land management issues addressed in the project and a baseline against which we can use EO data to monitor the impact of the project at the required landscape scale.

The EO Data will be used to monitor the impact of the project conservation and land management activities on protecting Active Blanket Bog, but also on biodiversity and ecosystem services and how we can use these findings to develop trajectories of recovery, or change in habitat conditions over time, information that is essential to informing future projects and monitoring the 'success' of the project

Biodiversity and ecosystem services

A comprehensive monitoring programme will evidence the impact of MoorLIFE 2020.

At four sites across the SPM SAC the impact on biodiversity and ecosystem services will be monitored focusing on vegetation, water quality, water storage and carbon.



Pictured: Measuring the water table on a bare peat site

Wider landscape-scale changes in vegetation cover through stabilising bare peat and diversifying grass and heather dominated blanket bog will be monitored using images captured from a UAV and state-of-the-art image classification software.

The socio-economic impacts of MoorLIFE 2020 will be monitored; the benefits of the delivery of the project to the local economy and people employed by the project will be monitored through project administration (procurement and audit trails).

Through carefully designed structured interviews and questionnaires we will assess the benefits of the project to site users (visitors/tourists), local businesses and agricultural and land management interests.

Carbon Audit

The greenhouse gas emissions of the project will be assessed by undertaking a carbon audit of the amount of carbon expended in the delivery of the project. This will be carried out during the project with findings used to inform, more carbon-efficient, project actions.

Reducing the threat of wildfire

The impact of MoorLIFE 2020 on reducing the threat of wildfire to Active Blanket Bog through engagement with land owners and managers will be supported by the development of an 'app' for land owner/managers and rangers to collect and share intelligence and information on wildfire events and collect data on wildfire incidents. The impact of all these actions will be evidenced through assessment by experts from the local Fire Operations Groups and will help build our evidence base and support the long-term work of our science team.

Addressing threat of peat pipes

One of the issues that threaten Active Blanket Bog is the extensive network of peat pipes across the South Pennines SAC. In MoorLIFE 2020 we will monitor peat pipe blocking works to evidence the efficacy and impact of peat pipe blocking on blanket bog condition and ecosystem service provision towards informing the development of a best practice on how to address this threat.



Engagement and dissemination

Working with land owners and managers is crucial for the long-term health of the Active Blanket Bog. In the first year we will develop a communications pack, based on a series of stakeholder consultations which will include land management techniques, latest scientific evidence and address concerns and issues raised by the landowning community, in order to deliver all possible outcomes for a site.

Pictured: Sarah Fowler, Chief Executive of Peak District National Park, MoorLIFE Conference 2014

Four demonstration sites, with interpretation, will be set-up in the north and south of the SAC and knowledge exchange events will be planned to engage and develop working solutions for the land managers and the protection of Active Blanket Bog.

A programme of events and conservation communication materials will be developed including a Bogtastic van - to reach out to key stakeholders, including the general public in local communities and urban areas surrounding the SAC, to highlight the value and importance of Active Blanket Bog conservation.

Providing information and engaging people is vital to increasing understanding and to reducing the risk of wildfire and improving response times in dealing with accidental fires.

Campaigns, such as Bogtastic and Fire Aware, will be used to highlight the benefits blanket bogs bring for people and nature as well as the damage that can be done by fire and how it can be avoided.

To inspire future generations we will support 12 partnership youth groups and deliver positive action on the ground such as planting plugs, digging up invasive species or carrying out scientific monitoring.

This will foster an early interest in potential career paths for young people – future specialists and ‘champions’ in Active Blanket Bog conservation.

Pictured: Engagement and education are key in promoting understanding and reducing the risk of wildfires



To increase international exchange of knowledge; members of the junior ranger groups will attend Euro Parc Congress.

In addition, Pennine Prospects will provide fire-aware support in the South Pennines and deliver mapping and data gathering; awareness raising and engagement.

Web and social media development will be used to inspire and connect with people. There will be: information boards at key gateways in the SAC; annual demonstration site interpretation to show progress and learnings; national conference and seminars on innovation and topical issues and a final layman’s report in tablet format to disseminate the results and strategic outcomes of the work across the SAC.



Networking with other UK and international projects will be part of the project. These will include blanket bog projects: Pennine Peat LIFE, UK; Exmoor LIFE project, UK; North Pennine AONB (formerly Peatscapes); Flow to the Future, Caithness and Sutherland, UK; Peatland restoration project, Shetland Amenity Trust and projects in Ireland, RSPB in Scotland, and projects in the Baltic States and Finland.

Project management actions

MoorLIFE 2020 will be managed by a full time project manager, who will be supported by a project administrator. Activities to be delivered by PDNPA will be undertaken by officers embedded within the current MFFP partnership team, who will report to the current MFFP programme managers.

The project will be delivered using the MFFP Project Management toolkit, which includes use of Microsoft Project to develop Gantt charts and a detailed Risk, Issues and Dependencies log.

Who is involved?

The PDNPA will be acting as the Co-ordinating Beneficiary for the MoorLIFE 2020 project. It will be delivered primarily through the MFFP’s team who will appoint staff, directly employed through the project to deliver it. The project will be governed by a project board, which will include representatives of the MFFP, Co-Financiers, Associated Beneficiaries and regulatory agencies.

Yorkshire Water, Severn Trent Water and United Utilities are Co-financiers. They will provide matched funding for the project.

Organisations who will be helping to deliver the project as Associated Beneficiaries are the National Trust (High Peak and Marsden Moor Estates), the RSPB (Dovestones Estate) and Pennine Prospects.

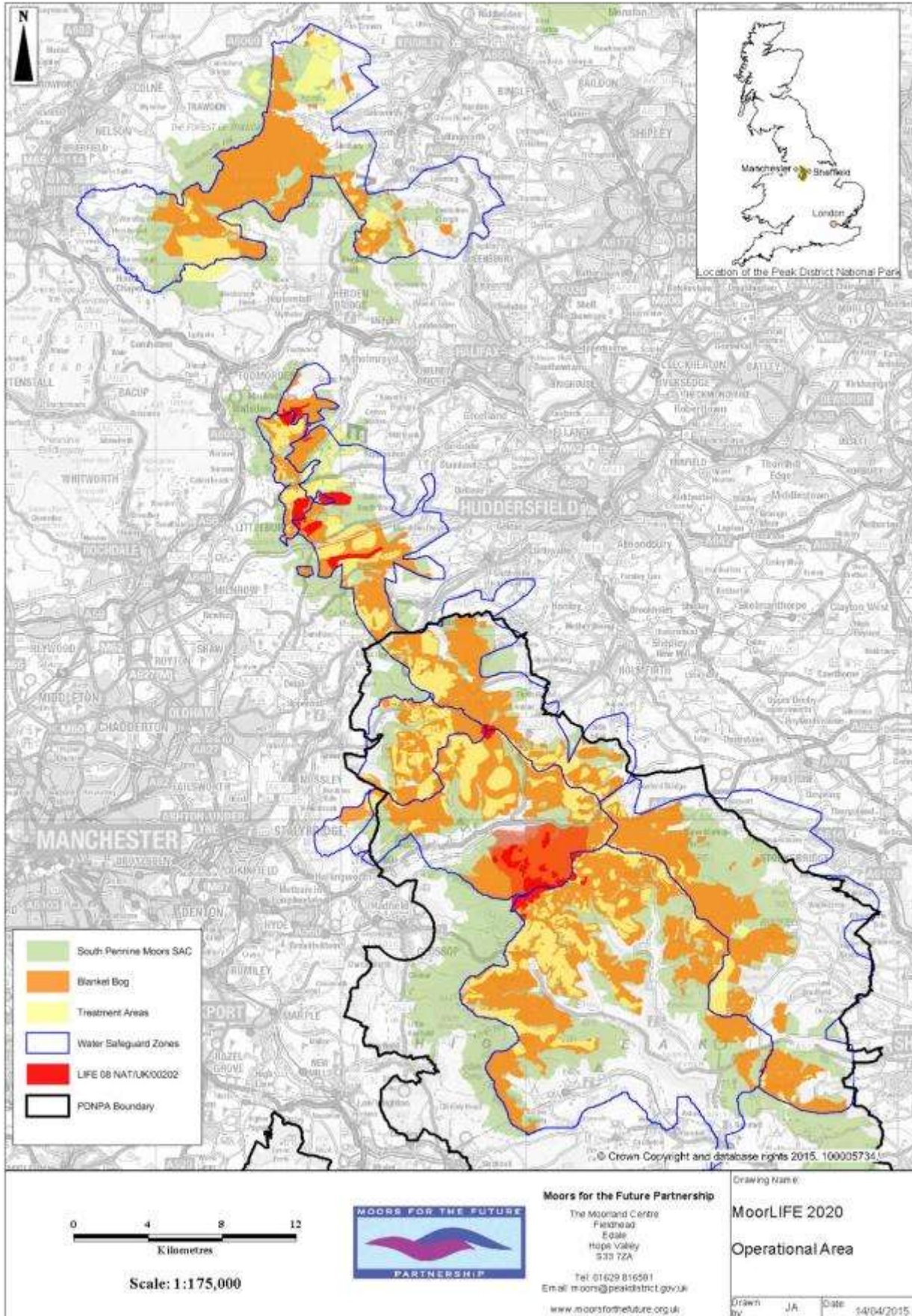
Natural England and the Environment Agency act as regulatory advisors. Both benefit from the project as it will deliver on their strategic objectives for WFD, Water Safeguard zones and SSSI recovery.

Timescales for the Project

The MoorLIFE 2020 bid was submitted on 24 October 2014. Confirmation of the grant award of €11.9 million was received in September 2015. The project started on 1 October 2015 and will run to February 2021.

For any further information please visit www.moorsforthefuture.org.uk

Appendix 1: MoorLIFE 2020 Operational Area



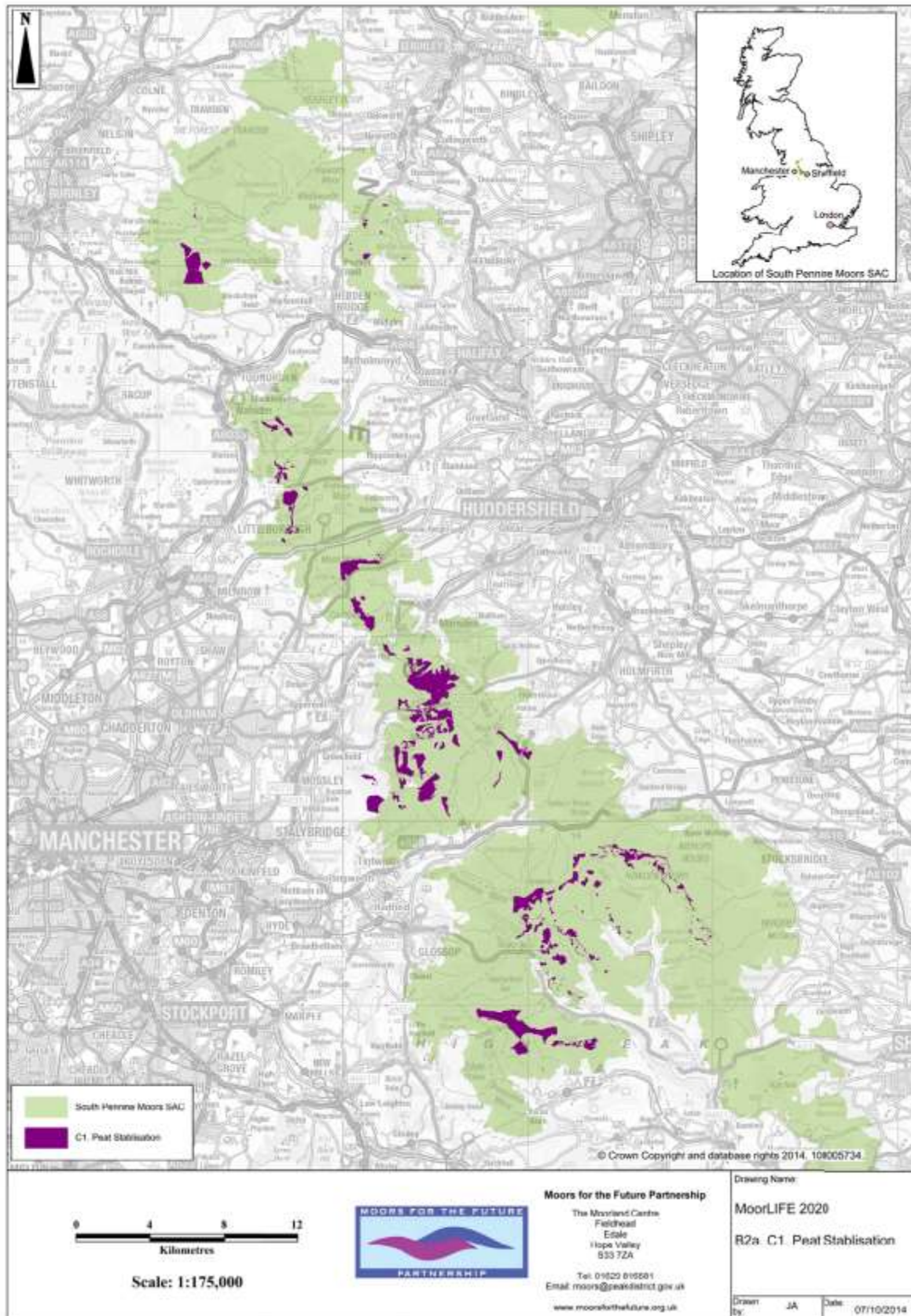
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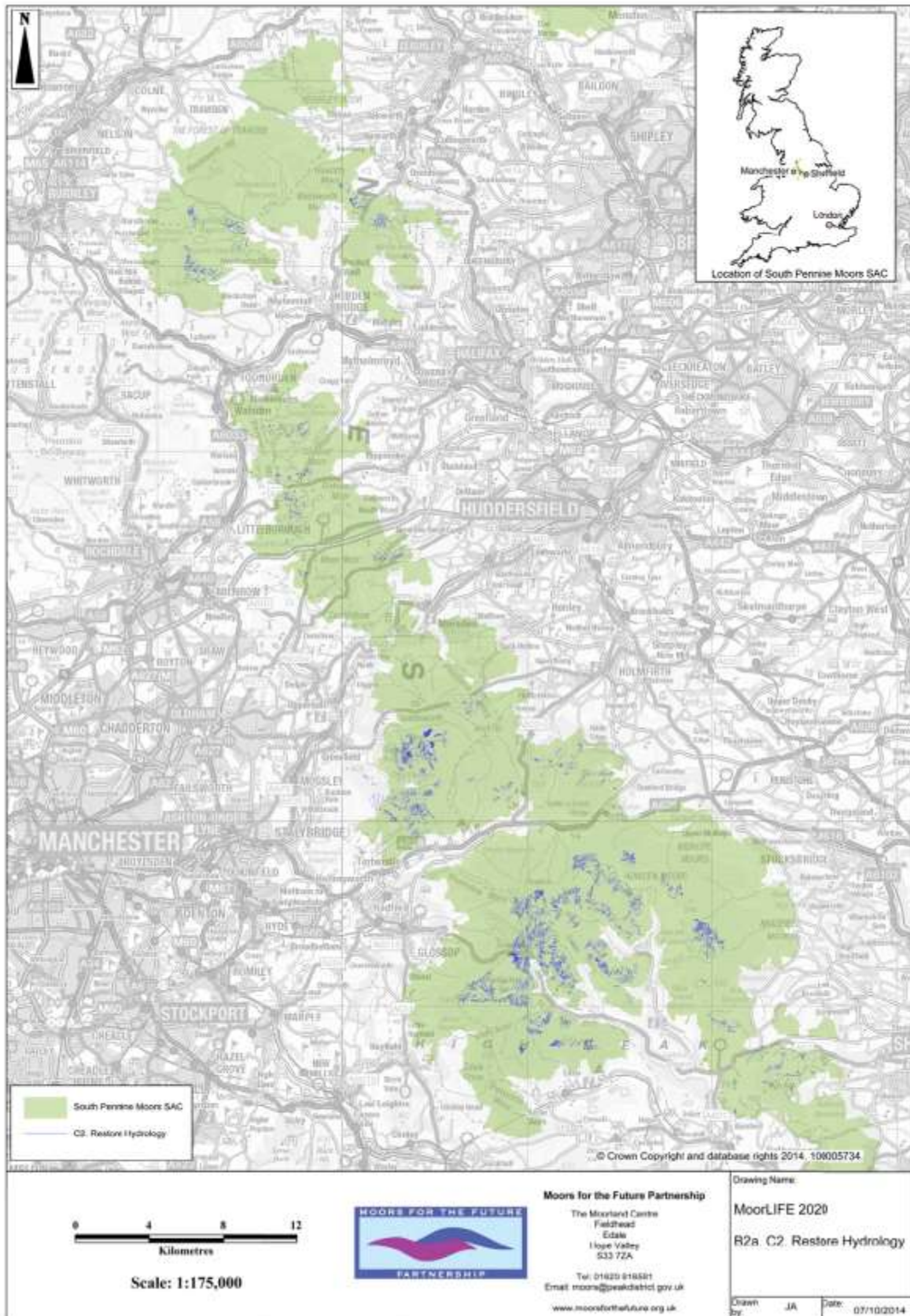
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Drawing Name:
MoorLIFE 2020
Operational Area
 Drawn by: JA Date: 14/04/2015

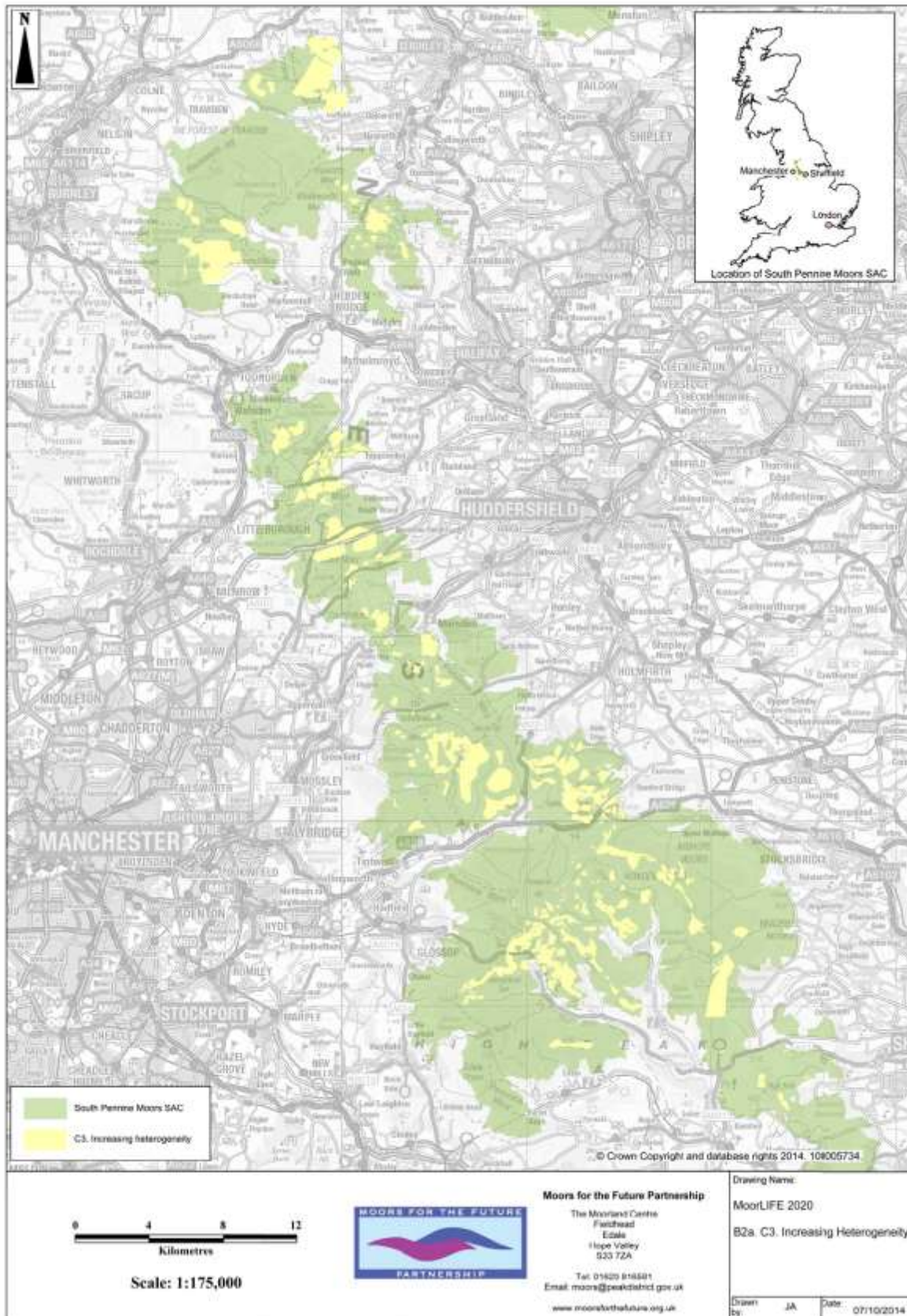
Appendix 2: Action C1 Bare Peat Stabilisation



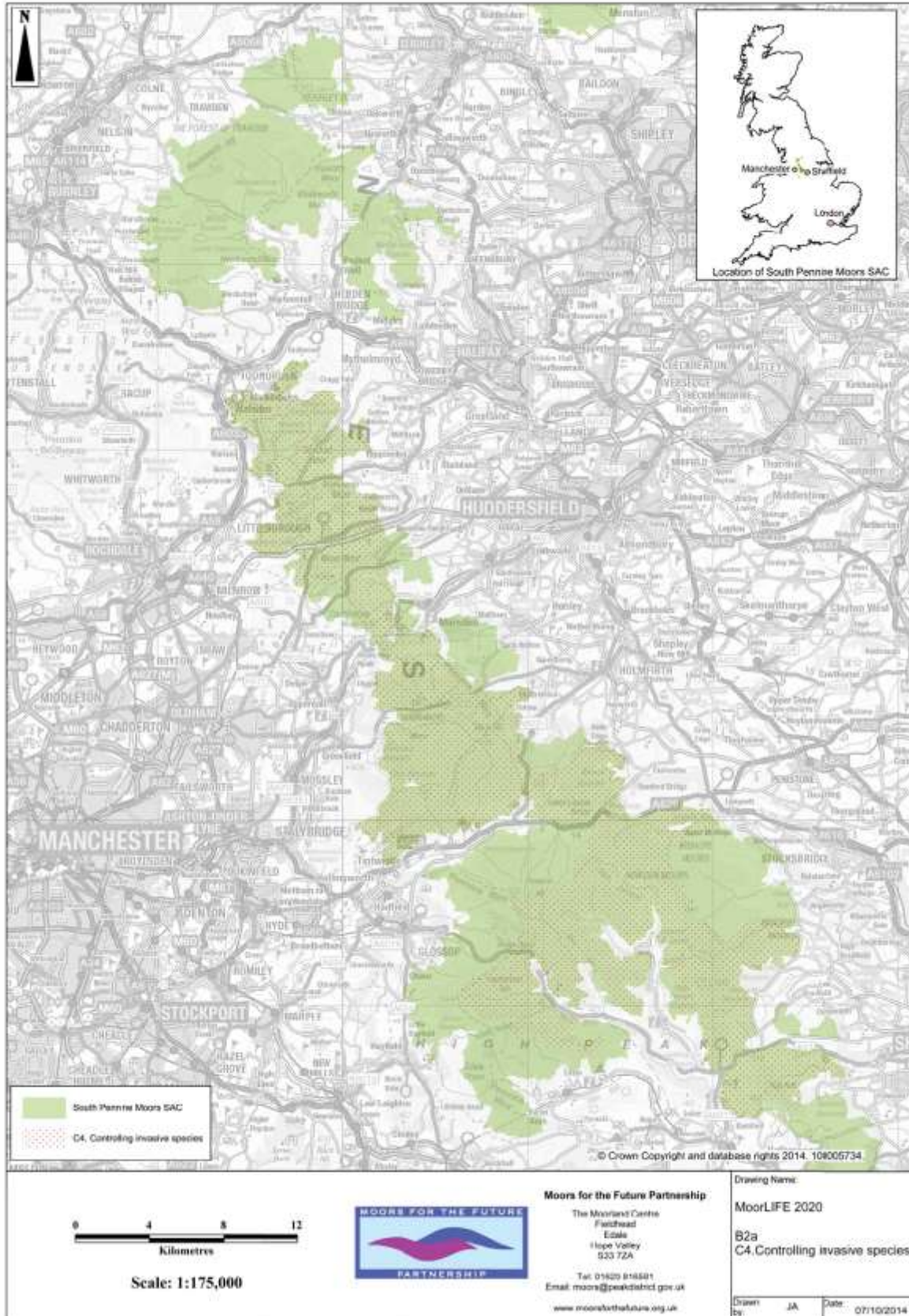
Appendix 3: Action C2 restore Hydrology



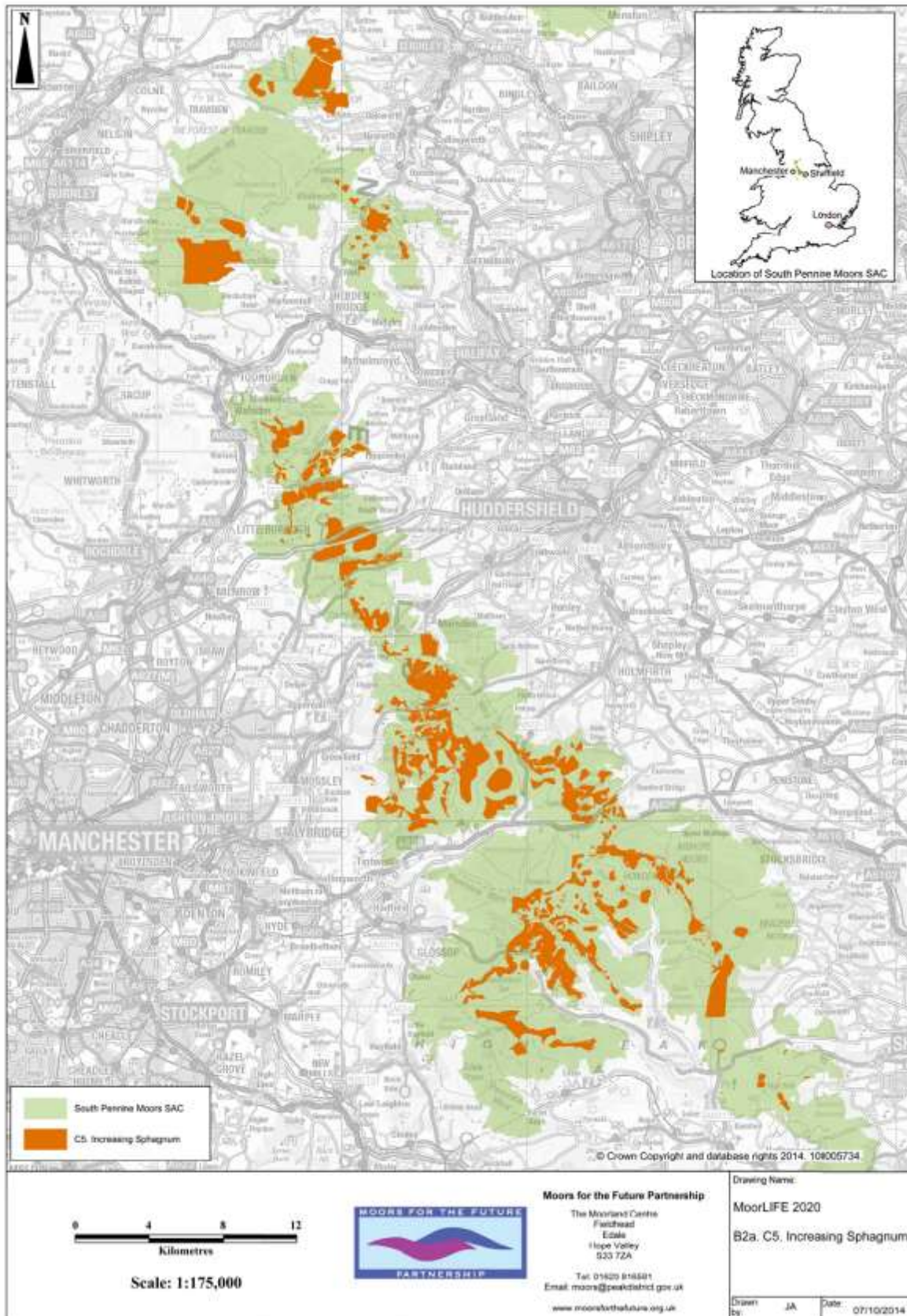
Appendix 4: Action C3 Increasing Heterogeneity



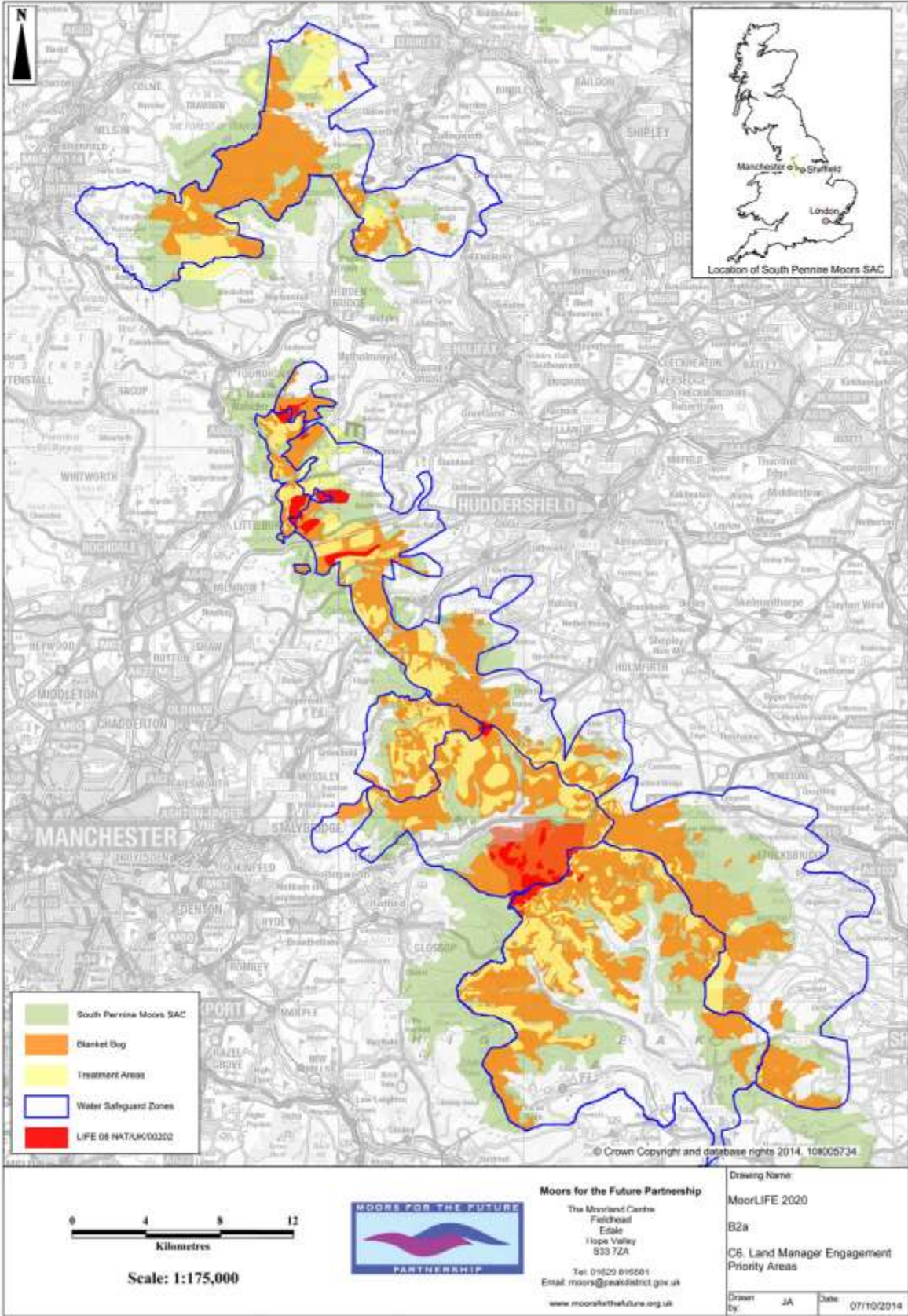
Appendix 5: Action C4 Controlling Invasive Species



Appendix 6: Action C5 Increasing Sphagnum



Appendix 7: Action C6 Land Manager Engagement Priority Areas



Appendix 8: Deliverable Products of the Project

Name of the deliverable	Action number	Deadline
Statutory Consent Framework	A4	2016-12-31
Signed Landowner agreements	A4	2016-12-31
Support materials for the Good Practice Management code	A5	2017-07-31
Approved Code of Good Practice Management for Active Blanket Bog	A5	2017-07-31
3 Project information boards	E2	2017-02-28
Clearance of 1.2 hectares of extensive stands of <i>Rhododendron ponticum</i>	C4	2020-08-31
1800 hectares of Active Blanket Bog cleared of invasive woody species	C4	2020-12-31
Sphagnum applied to 1440 hectares	C5	2020-12-31
Best Practice Guide to Sphagnum application	C5	2020-12-31
Signatories to the Approved Code of Good Practice Management for Active Blanket Bog	C6	2020-12-31
50204 metres of grip blocked with 7100 blocks	C2	2020-08-31
57582 metres of gullies blocked with 8200 blocks	C2	2020-08-31
Report on restoration trajectories.	D2	2020-12-18
Report on the impact of the project's actions on biodiversity and ecosystem service provision at four demonstration sites and the wider project area	D2	2020-12-18
A report on the efficacy and impact of peat pipe blocking and best practice' guidelines	D3	2020-12-18
Production of manuscript of peat pipe blocking report for submission to peer-reviewed scientific journal	D3	2020-12-18
Summary report of metrics - web, social media and app registrations	D4	2020-12-31
Evaluation report of events programme across the SPM SAC	D4	2020-12-31
A single database of wildfire incidents across the SPM SAC	D4	2020-12-31
Reporting on FOG group expert opinion on the impact of project on reducing wildfire risk	D4	2020-12-31

Report on changes in wildfire data reporting over duration of the project	D4	2020-12-31
Fire aware land manager app	E7	2017-12-22
Supporting promotional literature produced annually (2016 - 2019)	E7	2019-12-20
After LIFE Plan produced	F3	2021-02-28
Development of the five restoration trajectories	A6	2016-08-19
High resolution land cover map of the South Pennine Moors (SPM) SAC	A7	2016-05-31
An eCognition 'rule set' that can applied to other areas	A7	2016-07-29
Ground-truthed spatial database of vegetation types for use in interpretation of Earth Observation (EO) data	A7	2015-10-30
Final report on the socio-economic impacts of the project	D6	2020-12-18
837 hectares treated with lime, seed and fertiliser	C1	2019-09-30
75,000 plug plants planted	C1	2019-09-30
43 hectares of bare peat treated with heather brush to prevent erosion	C1	2018-03-31
Evidence-based best practice guidance on increasing vegetation heterogeneity	C3	2020-12-18
Heterogeneous vegetation cut on 965 hectares of blanket bog	C3	2020-12-31
Final Carbon Audit report	D5	2020-12-18
Downloadable guide to carbon auditing land management practices; including templates to guide the collation of GHG data for restoration actions.	D5	2017-12-22
Printed and tablet version of layman's report	E5	2020-12-31
A project delivery (compliance) map presenting what and where concrete conservation actions have been delivered - updated monthly.	D1	2020-12-18
Land cover maps of this area before and after restoration treatment and derived land cover change maps.	D1	2020-12-18
A dataset of 85 km ² of EO data captured from a UAV, including RGB, VNIR and thermal imagery covering the project area.	D1	2020-08-18
An eCognition 'Rule set' used in the production of the land cover maps	D1	2020-12-18

One national conference with support materials	E4	2017-12-22
Two seminars - looking at the value of Active Blanket Bog and threats	E4	2018-12-21
1 project launch media event attended by key stakeholders at a specified venue.	E4	2016-05-31
Project website	E1	2020-12-31

Appendix 9: Milestones of the Project

Name of the milestone (max. 200 characters)		Number of the associated action		Deadline
Demonstration site information boards revised and updated		E3		2019-09-30
Demonstration site information boards revised and updated		E3		2017-09-29
Demonstration site information boards revised and updated		E3		2018-09-28
Brief developed		E3		2016-03-31
Tender written and contractor appointed		E3		2016-07-29
Demonstration site information boards produced and installed		E3		2016-11-30
Tenders and Contracts for all actions in place		A4		2016-12-31
95% of landowners approached for landowner agreements		A4		2016-03-31
85% of landowner consents granted		A4		2016-07-31
All consents for Ordinary Watercourse and Land Drainage applications received		A4		2016-09-30
Preparation of 95% of tenders and contracts		A4		2016-06-30
All activities requiring Natural England consent identified		A4		2016-07-31
All applications for Ordinary Watercourse and Land Drainage consent completed		A4		2016-07-31
Creation of initial land management support materials		A5		2017-08-31

Final Report		F1		2021-02-28
Design brief for project information panels produced		E2		2016-06-30
Project information boards produced and installed		E2		2017-02-28
Initial rhododendron clearance at Butterly		C4		2017-04-30
50 Rhododendron clearance events organised and undertaken		C4		2018-07-31
75 Rhododendron clearance events organised and undertaken		C4		2019-07-31
100 Rhododendron clearance events organised and undertaken		C4		2020-12-31
25 Rhododendron clearance events organised and undertaken		C4		2017-07-31
Overall Project Delivery Plan in place		A2		2016-03-31
First material applied in November 2016, when the first areas are cut under Action C3		C5		2016-11-30
Areas for cutting and collection of Sphagnum material identified and approved by Natural England		C5		2016-09-30
Contractors' programme for the supply of Sphagnum to be completed by end of May 2016		C5		2016-09-30
Independent audit completed		F2		2021-02-28
Independent Auditor appointed		F2		2020-09-30

Final Indicator Tables submitted with the Final Report		F4		2021-02-28
Indicator tables submitted with the First Progress Report		F4		2016-12-31
Action A5 completed on time		C6		2017-07-31
Programme of events developed		C6		2016-08-31
Follow-up land management support materials (based on new findings from the four demonstration initiatives)		C6		2019-08-31
7100 grip blocks installed		C2		2020-08-31
Hydrological restoration plan, through Action A3		C2		2016-08-01
8200 gully blocks installed		C2		2020-08-31
Compilation of final datasets and metadata (to INSPIRE standards) from demonstration sites		D2		2020-10-30
Set up of demonstration sites		D2		2017-03-31
Collection of 'before' intervention monitoring (baseline) data at demonstration sites		D2		2018-08-31
Annual update of restoration trajectories 2017		D2		2017-12-15
Annual update of restoration trajectory 2018		D2		2018-12-14
Assessment and reporting on the progress of concrete conservation sites against restoration trajectories including 2019 annual update		D2		2019-12-31

Set up of monitoring to evidence the efficiency and impact of vegetation diversification Action (C3)		D2		2017-03-31
Collection of 'after' (post) diversification intervention data		D2		2020-09-30
Evidence on the success and impact of vegetation diversification to inform best-practice recommendations		D2		2020-12-18
Set up of monitoring to evidence the efficiency and impact of methods to reintroduce sphagnum (Action (C5))		D2		2017-03-31
Compilation (including producing metadata) and analysis of sphagnum monitoring		D2		2020-10-30
Evidence on the success and impact of sphagnum establishment activities to inform best-practice recommendations		D2		2020-12-18
Collection of 'after' (post) intervention monitoring data at demonstration sites		D2		2020-09-30
Analysis of data collected at the demonstration sites		D2		2020-12-11
Final report on monitoring biodiversity and ecosystem services at demonstration sites		D2		2020-12-18
Final update of restoration trajectories 2020		D2		2020-10-30
Collection of 'before' diversification intervention (baseline) data		D2		2018-08-31

Compilation (including producing metadata) and analysis of vegetation diversification monitoring		D2		2020-10-30
Collection of 'before' sphagnum treatment (baseline) data		D2		2018-08-31
Collection of 'after' (post) sphagnum treatment data		D2		2020-09-30
Collection of 'before' (pre) intervention (peat pipe blocking)' data		D3		2018-08-31
Set up of peat pipe blocking demonstration site		D3		2017-03-31
Collection of 'after' (post) intervention (peat pipe blocking) data		D3		2020-08-30
Baseline survey of Fire Operations Group on current wildfire risk and evidence base within the SPM SAC		D4		2016-12-31
Report on Fire Operation Groups assessment of the impact of the project on reducing wildfire risk		D4		2020-12-31
Report on wildfire data reporting, including assessment of changes in wildfire evidence over life of the project		D4		2020-12-31
Summary report of metrics - web, social media and app registrations		D4		2020-12-31
Follow up survey of Fire Operations Group on wildfire risk and evidence base within the SPM SAC		D4		2020-11-30
Update wildfire database 2017		D4		2017-12-31

Update wildfire database 2018		D4		2018-12-31
Update wildfire database 2019		D4		2019-12-31
Final update of wildfire database 2020		D4		2020-12-31
Compilation of a single, up-to-date database of wildfire incidents across the SPM SAC		D4		2016-12-31
Evaluation report of events programme across the SPM SAC		D4		2020-12-31
Programme of events and visits		E7		2016-12-23
Youth materials and engagement set-up		E7		2018-09-28
Establish MoorLIFE 2020 Youth Group		E7		2019-03-29
Evaluation and review of programme of events and visits		E7		2019-12-18
Evaluation and review of programme of events and visits		E7		2018-12-18
Evaluation and review of programme of events and visits		E7		2017-12-18
Evaluation and review of programme of events and visits		E7		2020-12-18
Set up of bogtastic van and supporting materials		E7		2017-02-28
After LIFE Plan submitted with the Final Report		F3		2021-02-28
Collation of data to develop five restoration trajectories		A6		2016-03-31
Object based image classification and production of land cover map		A7		2016-05-31

Earth Observation (aerial photographs) data acquisition		A7		2015-12-31
Ground-truthing EO imagery (aerial photographs)		A7		2015-12-31
MoorLIFE 2020 Project Manager in post		A1		2015-11-01
MoorLIFE 2020 Project delivery team in place		A1		2016-03-31
Baseline (pre-delivery of project actions) report on the socio-economic impacts of the project		D6		2017-12-15
Mid-term report on socio-economic impacts of the project		D6		2019-09-27
Visit and host other UK and EU projects to refine plans and build knowledge base		E6		2020-12-31
Attend UK and EU peatland conferences and forums and transfer knowledge		E6		2020-12-31
Conduct desk research into other UK and EU peatland projects		E6		2016-12-31
Propagation of plug plants started		C1		2016-04-30
All heather brash works completed		C1		2018-04-30
All bare peat stabilisation works completed		C1		2019-12-31
Heather brash cutting starts		C1		2016-10-31
All seeding completed		C1		2017-10-31
All vascular plug plants planted		C1		2018-10-31
250 hectares of blanket bog vegetation cut		C3		2017-08-31

500 hectares of blanket bog vegetation cut		C3		2018-08-31
750 hectares of blanket bog vegetation cut		C3		2019-08-31
970 hectares of blanket bog vegetation cut		C3		2020-08-31
Softraks purchased		C3		2016-06-30
Carbon Audit Update 2019		D5		2019-08-31
Carbon Audit update 2018		D5		2018-08-31
Final Carbon Audit report		D5		2020-12-18
Carbon Audit methodology, processes and protocols established		D5		2016-05-31
Carbon Audit update 2016		D5		2016-08-31
Interim report; including Carbon Audit update for 2017		D5		2017-08-31
Produce Layman's report		E5		2020-12-31
All Appropriate Assessments completed		A3		2016-07-29
Project Plan for land management actions in place		A3		2016-07-29
Project Plan for dissemination actions in place		A3		2016-07-29
Project Plan for monitoring actions in place		A3		2016-07-29
Integrated Operational Project Plan Produced		A3		2016-07-29
UAV (EO) data acquisition 2020		D1		2020-09-30
UAV (EO) data acquisition 2016		D1		2016-09-30

UAV (EO) data analysis 2020		D1		2020-11-30
UAV (EO) data acquisition 2018		D1		2018-09-30
UAV (EO) data acquisition 2019		D1		2019-09-30
UAV (EO) data analysis 2017		D1		2018-05-31
Purchase UAV and undertake pilot training course		D1		2016-05-30
UAV (EO) data acquisition 2017		D1		2017-09-30
UAV (EO) data analysis 2016		D1		2017-05-31
UAV (EO) data analysis 2018		D1		2019-05-31
UAV (EO) data analysis 2019		D1		2020-05-31
Seminar one		E4		2018-12-21
Project launch event		E4		2016-03-31
Seminar two		E4		2019-12-20
National Conference		E4		2017-12-22
Website up and running		E1		2016-10-31