



CONCEPT NOTE

LIFE Nature and Biodiversity

TECHNICAL APPLICATION FORMS



LIFE 2018

FOR ADMINISTRATION USE ONLY

LIFE18 NAT/

LIFE Nature and Biodiversity project application

Language of the proposal:

English (en)

Project title:

Elements of LIFE - Engaging with urban and rural communities to protect active blanket bog in the South Pennines SAC

Project acronym:

ElementalLIFE

The project will be implemented in the following Member State(s) and Region(s) or other countries:

United Kingdom Yorkshire and Humberside
 North West (UK)
 East Midlands

Expected start date: 01/04/2020

Expected end date: 31/03/2025

LIST OF BENEFICIARIES

Name of the **coordinating** beneficiary: Peak District National Park Authority

SECTOR

Nature

Coordinating Beneficiary Profile Information

Legal Name	Peak District National Park Authority		
Short Name	PDNPA	Legal Status	
VAT No	GB127248178	Public body	X
Legal Registration		Private commercial	
Registration Date		Private non- commercial	
Pic Number			
Legal entity is SME	☐		
Employee number			

Legal address of the Coordinating Beneficiary

Street Name and No	Aldern House, Baslow Road		
Post Code	DE45 1AE	PO Box	
Town / City	Bakewell		
Member State	United Kingdom		

Coordinating Beneficiary contact person information

Title	Ms.	Function	Programme Office Manager
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Town / City	Edale		
Member State	United Kingdom		
Telephone No	441629816578	Fax No	

Website of the Coordinating Beneficiary

Website	http://www.peakdistrict.gov.uk
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Brief description of the Coordinating Beneficiary's activities and experience in the area of the

The Peak District National Park Authority (PNDPA) is the lead partner of the Moors for the Future Partnership (MFFP) and employs staff within the MFFP Team. PDNPA is the administrator of the Partnership, is legally and financially responsible for its actions and supports by cash flowing much of the work. Other partners are Natural England, National Trust, United Utilities, Severn Trent Water, Environment Agency, RSPB, Pennine Prospects and Yorkshire Water.

MFFP's principal activity is to deliver moorland restoration together with associated research and education across the South Pennine moorlands. It delivered the MoorLIFE project and is delivering the MoorLIFE 2020 project and the Community Science Project, involving communities in monitoring moorland indicators of climate change which has received a Park Protector Award and was commended in the Natura 2000 awards in 2016.

The PDNPA (est. 1951) has a duty to conserve and enhance the special quality of the landscape and environment and to provide opportunities for enjoyment and understanding. The primary function of the Authority is landscape conservation through management of moorland, farmland and woodland, both on land owned by the Authority and other landowners. It also works with Government departments to bring sites of SSSI designation into favourable or recovering condition.

The PDNPA's new Management Plan (2018 -23) will be the most important document for the National Park

and sets the framework for all actions and activity. It is currently being prepared with all major stakeholders who have agreed special qualities, including the need to protect and conserve upland landscapes, which include Active Blanket Bog.

The PDNPA brings together the many strands of landscape conservation and sustainable land management to address issues on a landscape scale such as moorland restoration, water quality, sustainable farming, promoting climate change adaption, flood alleviation and species recovery.

SUMMARY DESCRIPTION OF THE PROJECT (To be completed in English)**Description Of Species / Habitats / Biodiversity Issues Targeted By The Project:**

The South Pennine Moors is critically important as one of the most southerly and significant areas of Active Blanket Bog (*7130) in Europe, protected by both Natura 2000 (SAC:UK0030280) and UK (Site of Special Scientific Interest (SSSI)) legislation. Its position also makes it one of the most susceptible Active Blanket Bog habitats in Europe to climate change. We need to increase the resilience of the SAC to climate change, by bringing the Active Blanket Bog habitat into good ecological condition, with a high cover of the key indicator species (notably sphagnum mosses) and a high, stable water table which will help to develop a functioning acrotelm. Currently, whilst 92% of the 73,000 hectares of the SSSI that makes up the SAC is classified as in Unfavourable Recovering condition, only 6% is in Favourable condition.

A previous legacy of atmospheric pollution from coal fired industries has weakened its resilience and its situation (close proximity to large urban populations) has produced a high incidence of summer wildfires. The risk of future wildfires remains high especially in the face of predicted climate change scenarios for the region, if the hydrology of the bog is not improved.

We have a good understanding of historical locations and reasons for wildfire, with the Peak District and South Pennines Fire Operations Groups recording accurately where fires have started. One of the first project actions will be to reassess priority areas at risk of wildfire due to pressure from visitors. Between 1976 and 2007, over 44,000 hectares of moorland, including a significant area of the SAC, was burnt in wildfires. Since 2007, this has declined significantly, and it is estimated that approximately 450 hectares has been seriously damaged by wildfire. This coincides with a period of high visitor management, raising awareness of the impact of wildfire and fighting summer wildfires quickly.

Moors for the Future partners also have a good understanding of the ecological and ecosystem service baseline for the SAC and, through MoorLIFE 2020 we are developing a good understanding of engagement with the habitats concerned. We also know how big a threat wildfire is to the Natura 2000 site and that most of these fires are started by people, either deliberately or accidentally.

Communities adjacent to areas of Active Blanket Bog are often not aware of the benefits they receive from them (Coldwell DF, Proctor S, Walker J & Evans KL (2015) Dark Peak Nature Improvement Area Visitor Surveys – Final Report. University of Sheffield & Moors for the Future Partnership). This project will work with communities across the SAC to protect the Active Blanket Bog near them, with activities including a programme of volunteer conservation work. The concept is developed from the US FireWise programme which works with communities affected by wildfire to reduce wildfire risk.

By the end of the MoorLIFE 2020 project we will know the area across the South Pennines SAC where sphagnum has been applied and will be possible in future. We will also use the 6 states of blanket bog work, which we've developed through the MoorLIFE 2020 project, to assess the progress on the trajectory.

In this project we will continue to move the Active Blanket Bogs of the SAC towards Favourable condition, using a combination of contractors, staff and local community volunteers to undertake concrete conservation actions, such as sphagnum planting, gully blocking and invasive species management.

Project objectives:

The aim of this project is to conserve and protect of the EU priority habitat Active Blanket Bog

(ABB; *7130) within the South Pennine Moors SAC (UK0030280) and the ecosystem services it provides.

Project objectives address the priority threats to ABB identified for this SAC in the 'Improvement Programme for England's Natura 2000 Sites' project ('IPENS'; LIFE11 NAT/UK/000384). Prioritising works within Water Safeguard Zones (2000/60/EC) we will:

1. Protect the integrity of approximately 5000ha of ABB (through implementation of best practice and development of techniques) by:

- a)** Raising water tables by blocking of grips and erosion gullies (IPENS priority #1);
- b)** Reducing wildfire risk (IPENS priority #7) and increasing habitat resilience by diversifying 1500ha of homogenous vegetation;
- c)** Improving the hydrological integrity of the blanket bog and reducing wildfire risk and severity (IPENS priorities #1,7) by delivering and further developing Sphagnum reintroduction methods.

2. Increase the resilience of approximately 5000ha of ABB habitat by:

- a)** Introducing appropriate ABB plant species in 1000ha of species poor ABB (IPENS priority #1,4)
- b)** Controlling invasive species on 3000ha of ABB (IPENS priority #14)

3. Safeguard ABB through promotion of land management appropriate to the protection of ABB (IPENS priorities #2,4,9,12,13,14); responsible enjoyment of ABB (IPENS priorities #5,8); and reducing the threat of wildfire to ABB (IPENS priority #7). We will achieve this through:

- a)** Delivery of an innovative and diverse programme of communication events, materials and campaigns to engage with the public, local communities, and visitors to the SAC about the value and importance of ABB and the role they can play in looking after this habitat;
- b)** Developing a programme of events to engage with communities and carry out community based Concrete Conservation Actions activities alongside those listed in objectives 1 and 2.

This project will work with communities in and around the South Pennine Moors SAC to conserve and protect **5000- 10000 ha** of the EU priority habitat Active Blanket Bog within the South Pennine Moors SAC. The project's principal focus is on protecting active blanket bog against the risk of wildfire, but also has benefits for water quality, risk of flooding, climate change mitigation

Actions and means involved:

A. Preparatory actions, elaboration of management plans and/or of action plans

A1 Recruitment of Project Delivery Team

A2 Development of Overall Project Plan

A3 Development and integration of project plans for conservation, monitoring and dissemination actions

Develop a monitoring plan to assess:

the impact of conservation works,
 the impact on perception of the SAC by communities
 all of the socio-economic impacts of the project

through a combination of citizen science, academic and Beneficiary staff.

A4 Preparation of tenders, contracts and landowner agreements

Undertake all necessary work to ensure all consents/permissions are in place to start conservation work

A5 Produce 2020 land cover map of the SPM SAC

A6 Develop stakeholder network

Develop contacts with communities and user groups. Identify key groups that either currently or could benefit from the ecosystem services, such as hiking, climbing, mountain biking, fishing and sailing clubs, parish councils, health care providers.

Develop programme of community events by working with communities to improve uptake by building in their interests. It is likely to include the development and operation of a Fire Watch scheme.

B. Purchase/lease of land and/or compensation payments for use rights

None

C. Concrete conservation actions

C1 Restoring hydrology

C2 Increasing sphagnum

C3 Increasing heterogeneity

C4 Controlling invasive species

C5 Land manager engagement

We will undertake significant practical conservation work with land managers, contractors and Project Beneficiaries to deliver the Objectives of the Project:

Grip and gully blocking (Obj 1a),

Sphagnum planting (Obj 1b, 2a), and

Clearance of invasive non-native species (Obj 2b))

to further progress along the trajectories towards favourable conservation status for the habitat, in line with the Site Improvement Plan for the South Pennine Moors, developed under Natural England's LIFE funded IPENS project.

In order to safeguard Active Blanket Bog (Obj. 3), we will undertake a proportion of the Concrete Conservation Actions as Community Conservation activities - Sphagnum planting, removal of invasive non-native species (such as *Rhododendron ponticum* and Himalayan balsam) and gully blocking by teams of volunteers, which, in addition to delivering Concrete Conservation Actions, will all protect active blanket bog by improving resilience to wildfires and reducing the risk of invasion by alien species. These will include engagement with land managers to build good relationships between the land owners and the public.

D. Monitoring of the impact of the project actions (obligatory)

D1 Monitoring of concrete conservation actions using Earth Observation

D2 Monitoring the biodiversity and ecosystem service impacts of project sites

D3 Monitoring reduction in threats to Active Blanket Bog

D4 Carbon audit of the project

D5 Socio-economic impacts of the Project

We are developing a programme of appropriate scale monitoring, using a combination of UAV and Earth Observation technology and community-led monitoring, building on the Community Science Project, which has received a Park Protector Award and was commended in the Natura 2000 awards in 2016.

E. Public awareness and dissemination of results (obligatory)

E1 Blanket bog champions

Undertaking a series of events to celebrate blanket bog and the upland habitat with communities which are likely to include:

exploration of the landscape using musicians, artists and photographers to inspire a love of blanket bog. Ideas include a city bog art installation, song-writing, art or photography days.

festivals celebrating blanket bogs habitats aimed at the public,

wildlife walks and talks to spot birds and animals in the SPA,

plant identification sessions to help communities understand and gain appreciation of the benefits of active blanket bogs

species identification apps to allow submission of sightings to encourage people to be interested in blanket bog flora and fauna, which we will make them relevant to the entire Natura 2000 network.

youth engagement, to engage with and inspire the next generation.

A significant current threat to the SAC is fires caused by disposable barbecues; we will develop, with communities, a network of lower risk barbecue locations, reducing the chances of ignition from this source.

E2 Establish and maintain a project website

E3 Design and install project information boards

E4 Project launch, seminars and conference

Mid-project workshops to give participants the opportunity to view the restoration, provide feedback and encourage networking.

End of project conference. We will invite Elements of Life Bog Champions to attend to share the celebration. We will give communities a platform at the event and use arts and outdoor activities to celebrate the project.

E5 Produce a layman's report

E6 Networking with other projects

F. Project management and monitoring of project progress (obligatory)

F1 Project Management

F2 Audit

F3 After-LIFE Plan

F4 Indicators

Is at least 25% of the eligible project costs dedicated to concrete conservation

Yes ☒ No ☐• Has this proposal been submitted before? Yes ☐ No ☒**Expected results (outputs and quantified achievements):**

Install 10,000 blocks along 70,000m of grips and gullies;

Apply sphagnum to 3000ha of blanket bog;

Remove 5 ha of established Rhododendron plants;

Clear 3000ha of invasive woody seedlings;

Produce an up to date (2020) map of land / vegetation cover as a baseline for the project;

High resolution mapping of capital works sites, using remote sensing technology to enable work planning, and spatially extensive and high resolution monitoring of biodiversity targets;

Evidence carbon budget in project delivery and carbon benefits of the capital works programme;

Production of three journal articles for submission to peer-reviewed publications;

Production of up to 12 leaflets and publications for community engagement;

Community events programme (Concrete Conservation Actions, Monitoring of the Project Actions, Public Awareness and Dissemination) developed and implemented;

Undertake 60 Build-A-Bog events across the SAC;

2 mid project workshops held for up to 100 people to disseminate learnings from local communities;

End of project conference for up to 300 people;

Establish Junior Bog Champions, giving young people the chance to attend a Europarc Congress to share experiences of Active Blanket Bog conservation;

Reach residents, local communities, through 80 events (mix of urban shopping malls to village hall events in rural communities);

Project website established and maintained;

Project information boards installed.

Sustainability of the Project Results:

This landscape is offered the highest level of landscape and habitat protection in the UK. Organisations such as Natural England and Defra are responsible for the statutory regulation of this protection and ensuring that damaging management practices are prevented. Natural England, through its statutory consenting process on SSSIs (implemented by its core staff resource), will ensure that land management activities, e.g. grazing and managed burning, are not damaging to the restoration works carried out under the project. The land that is being worked on is SSSI, SAC, SPA and a large proportion is also within the Peak District National Park.

Most of the land on which concrete conservation actions are being undertaken are also covered by Drinking Water Safeguard Zones under the Water Framework Directive. The three water companies, who are the Co-Financers for this proposal, have a significant interest in ensuring the protection of the Active Blanket Bog, which is the source of drinking water for a significant chunk of England's population.

A principal aim of the project is to safeguard this and previous restoration efforts. The key factors in protecting the Active Blanket Bog into the future are to prevent both desiccation of the peat body and reduce the risk of fire. This proposal aims to do this by:

1. Increasing water levels through grip, gully and peat pipe blocking;
2. Preventing loss of the peat body through erosion of bare peat;
3. Increasing the amount of Sphagnum mosses, which will ensure the surface of the peat remains wetter throughout the year;
4. Raising awareness amongst the wider public of the significance of Active Blanket Bog for ecosystem services and biodiversity by involving communities in concrete conservation actions. A key feature of this will be to raise awareness of the importance of reporting fires quickly and reducing the risk of accidental ignition

The proposal addresses the following project topic(s):

- Improvement of the conservation status of habitat types or species of Community Interest under the EU Birds and Habitats directives, targeting Natura 2000 sites proposed or designated for these habitat types or species.
- Projects aimed at improving the conservation status of habitat types or species of Community Interest, provided, their status is not 'favourable/secure and not declining' or 'unknown' according to the most recent overall assessments that Member States have provided at the relevant geographic level according to Article 17 of the Habitats Directive or to the most recent assessments according to Article 12 Birds Directive and EU-level bird assessments.

Reasons why the proposal falls under the selected project topic(s):

The proposal falls under the selected topics by focussing on positive conservation actions, identified by the national competent authority (Defra, through Natural England) on the South Pennines Moors SAC (UK0030280), addressing priority habitat Active Blanket Bog (*7130). All of the activities required, including raising public awareness (Action 7D), are in the Site Improvement Plan for the SAC (<http://publications.naturalengland.org.uk/file/6518808585961472>) .

It is undertaking works moving the Sites of Special Scientific Interest (SSSI) units towards favourable condition, as identified by the national competent authority (Defra, through Natural England). None of the units are in favourable condition or unknown, being classified as in Unfavourable Recovering condition, the work is critical for maintaining the trajectory towards Favourable condition.

Project Partnership

MFFP's principal activity is to deliver moorland restoration together with associated research and education across the South Pennine moorlands. It was set up in 2003 and has been delivering projects, such as the one proposed, since then.

The Peak District National Park Authority (PDNPA) is the lead partner of the Moors for the Future Partnership (MFFP) and employs staff within the MFFP Team and will be the Co-Ordinating Beneficiary for Elements of LIFE. The PDNPA is the administrator of the Partnership, and is legally and financially responsible for its actions and supports it by managing the cash flow for much of the work. PDNPA has previously hosted two LIFE projects (MoorLIFE and MoorLIFE 2020). PDNPA (est. 1951) has a duty to conserve and enhance the special quality of the landscape and environment and to provide opportunities for enjoyment and understanding, although it does not have a statutory requirement to undertake any of the actions proposed.

Other MFFP partners are Natural England, Environment Agency (who will act as advisors to Elements of LIFE), United Utilities, Severn Trent Water and Yorkshire Water who will be Co-Financers, (this funding is not yet secured but one utility company, Severn Trent Water, have already expressed a wish to be involved in a further LIFE project), Pennine Prospects, National Trust and RSPB (who will be Associated Beneficiaries). All have experience of undertaking LIFE projects, at least through MoorLIFE 2020. Both RSPB and National Trust have significantly more experience nationally. It is intended that representatives from these organisations will form the Project Board for Elements of LIFE.

Because of the nature of the work, working with local communities, other organisations may yet be asked to be Associated Beneficiaries who are not currently members of the Partnership. We anticipate that the Associated Beneficiaries will deliver some of the conservation and engagement activities.

Expected Constraints and Risks Related to the Project Implementation and Mitigation Strategy

Constraint 1 - The work is undertaken on a Natura 2000 site and must not have a negative impact on the interest features of the site.

Overcoming constraint

1. Activities C1-C4 are key features of Defra's Strategy for the Restoration of Blanket Bog in England.

Constraint 2- Lack of Skilled Labour

Our ability to undertake much of the work is dependent on the availability of contractors.

Overcoming constraint

By completing our contracting in year 1, as preparatory action A4. This will identify any situations where further contractors are needed.

Constraint 3 - Loss of Key Personnel

In a project of this type and length, the project team is vital to ensure that works progress as currently predicted.

Overcoming constraint

Detailed project delivery plans will be produced (Actions A2 and A3). Responsibility for delivery of each stream within the project will rest with more than one person.

Constraint 4 - Burning of restored areas

There is the potential for all of the restoration work, particularly any timber dams, to be burnt if wildfires occur between April and October.

Overcoming constraint

Land Manager Engagement and Bogtastic campaigns (Actions C5 and E1).

Constraint 5 - Impacts of plant diseases

When moving plant material from one site to another, it is possible to transfer plant pathogens (e.g. *Phytophthora* spp.) and other pests and diseases (e.g. heather beetle, ticks).

Overcoming constraint

We survey all collection sites for known pests and diseases and have developed a range of protocols to deal with them.

Constraint 6 - The Actions may be undermined in the long-term by climate change.

It is likely that climate change will have an adverse impact on the blanket bog in the project area.

Overcoming constraint

The restorative work we plan to carry out will increase the resilience of the blanket bog to withstand any changes.

Work on increasing awareness and responding quickly to fires that do occur (E1) will be more important than at present if summers become warmer and drier, as this change is likely to lead to an increased risk of fire in the uplands.

Constraint 7 - External constraints affecting work programme

Compression of timescales for the delivery of the works, including:

adverse weather conditions on the moors;

bird breeding season (April 15 to July 31);

grouse shooting season (August to October).

Overcoming constraint

We know from our 15 years' experience how much contingency is needed. This will also be addressed during the project planning phase (Actions A2 and A3).

Best Practice/Demonstration Character/Pilot Aspects: of the Project

Fundamentally the project is a Best Practice project; it will use Best Practice land management techniques, developed through various other LIFE funded projects (e.g. Pennine PeatLIFE, MoorLIFE and MoorLIFE 2020). This work will be delivered by the Beneficiaries and through External Assistance (approximately 75% of the works required).

However, there is also a Demonstration/ Pilot aspect to the project: We are not aware of another project which has focussed on delivering concrete conservation actions with local communities, as a way of developing understanding of a priority habitat and engendering a sense of ownership and protection for it. Using the communications and engagement techniques developed through this project could provide valuable lessons across all Member States on how to raise awareness of the socio-economic impacts of the LIFE programme. This will be delivered by the Beneficiaries, with all materials purchased through existing contracts (e.g. gully blocking materials and sphagnum moss propagules).

EU Added Value of the Project and its Actions

The key feature of this project is highlighting the socio-economic benefits of the Natura 2000 site, specifically the active blanket bog, to local communities in order to encourage them to protect it. The ecosystem services of peat are well understood, this project will help communities to develop shared ownership of these ecosystem services with land owners and managers, in order to further protect them (a key risk to the South Pennine Moors SAC is human-caused wildfires).

Community activities will also reduce the risk of wildfire, by establishing sphagnum moss, blocking gullies and an active acrotelm and developing community focussed monitoring of sites, looking at both the Natura 2000 features and ecosystem services provided. We will run a programme of events to raise awareness of the environmental problems within the SAC and working with the communities to deliver appropriate activities. It will inform and educate citizens to adopt a more environmentally friendly approach to reduce the threat of wildfires. This high level of engagement will also foster a sense of co-operative ownership with community peatland “guardians”.

In addition, we will work with outreach and health and well-being workers, using volunteer activities to improve outcomes for areas of health inequality, which generally are not frequent users of the SAC.

In addition to the Project Topics identified, this project also addresses some of the other Priority Areas within the Multi-Annual Work Programme, specifically:

Priority area Environment and Resource Efficiency

Thematic priorities for Water, including the marine environment: Implementation of flood and/or drought risk management actions by applying at least one of the following:

— nature-based solutions consisting in natural water retention measures that increase infiltration and storage of water and remove pollutants through natural or ‘natural-like’ processes including re-naturalisation of river, lake, estuary and coastal morphology and/or re-creation of associated habitats including flood and marsh plains,

integrated risk assessment and management approaches taking into account social vulnerability and aiming at improved resilience while ensuring social acceptance.

Priority area Environmental Governance and Information:

Raising awareness on environmental problems, EU environmental policies, tools and/or legislation among the relevant target audiences, aiming to change their perceptions and fostering the adoption of environmentally friendly behaviours and practices and/or direct citizen's engagement.

Connecting with citizens:

— Natura 2000 and the benefits of the implementation of the European nature legislation, in line with the action plan on nature, people and the economy (5),

— invasive alien species,

— benefits of nature including green infrastructure and related ecosystem services.

Making it happen:

— benefits of the implementation of water legislation.

Budget breakdown cost categories	Total cost in €	Eligible Cost in €	% of total eligible costs
1. Personnel	2,300,000	2,300,000	38.33%
2. Travel and subsistence	150,000	150,000	2.50%
3. External assistance	960,000	960,000	16.00%
4. Durable goods			
Infrastructure	0	0	0.00%
Equipment	300,000	300,000	5.00%
Prototype	0	0	0.00%
5. Land	0	0	0.00%
6. Consumables	1,800,000	1,800,000	30.00%
7. Other costs	70,000	70,000	1.16%
8. Overheads	420,000	420,000	7.00%
Total	6,000,000	6,000,000	100.00%

Contribution breakdown	In €	% of total	% of total eligible costs
EU contribution requested	4,500,000	75.00%	75.00%
Coordinating Beneficiary's contribution	25,000	0.41%	
Associated Beneficiaries' contribution	0	0.00%	
Co-financers contribution	1,475,000	24.58%	
Total	6,000,000	100.00%	