MoorLIFE Project

2010-2015

Matt Buckler
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Moors for the Future Partnership

MoorLIFE Project

2010-2015

Why did we submit the bid?

What are we going to do?

How are we going to tell whether we've done it?

Why did we submit the bid?

- South Pennines Moors SAC and SPA – Natura 2000 sites
- Large areas of bare peat left in the Peak District following HLF project
- No other funding mechanism could cope with the scale of the works

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SAC Priority Habitats

- **Active blanket bog**

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South Pennines SPA

Range of upland bird species


Short-eared owl


Dunlin


Merlin


Golden Plover

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Fire damaged sites – HLF Project

Bleaklow

- Joseph Patch (50hectares);
- Shelf Moor (70 hectares);
- Sykes Moor (27 hectares);
- Lawrence Edge (20 hectares);
- Torside Grain (11 hectares);

Kinder

- Kinder Low (35 hectares brashing);

Arnfield (33 hectares);

Black Hill (46hectares);

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Fire damaged sites – Do techniques work?

May 2006

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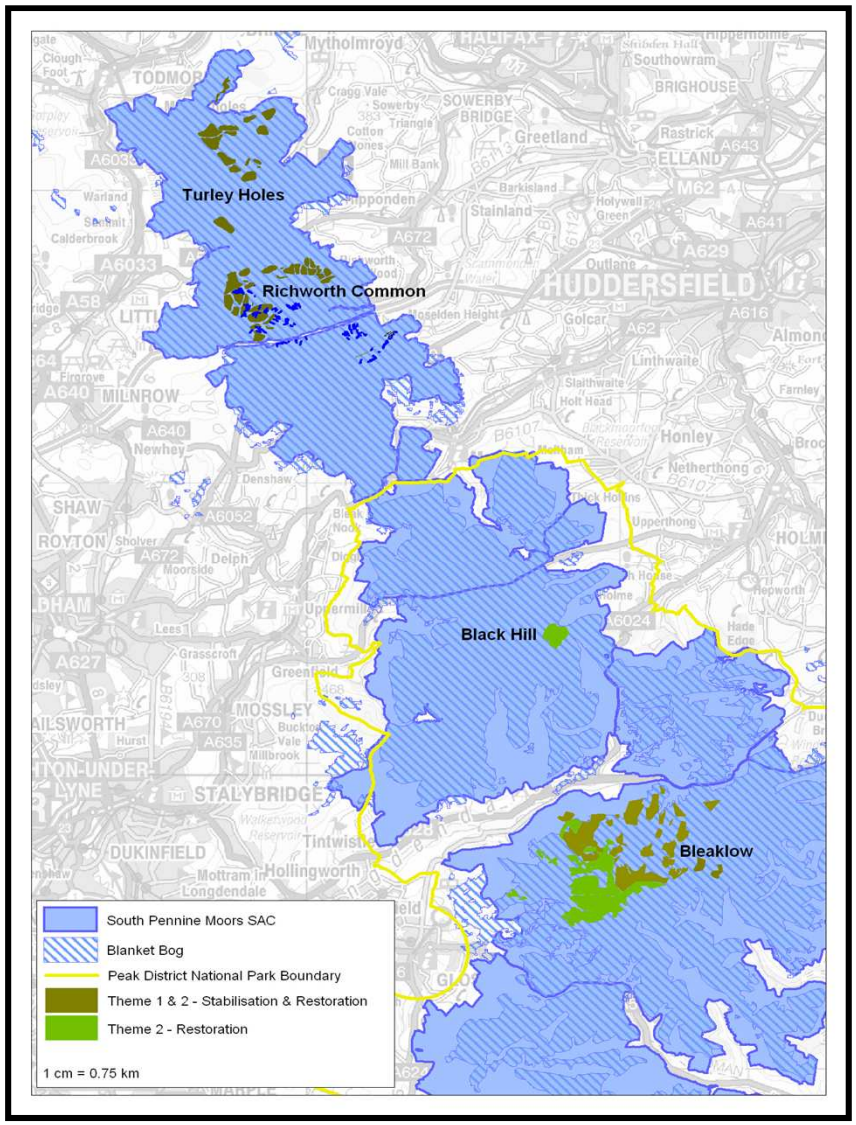
MoorLIFE Project - Scale



Area

- Inside PDNPA - 497 Ha
- Outside PDNPA - 358 Ha
- €6.6 million, 2010 to 2015
- Largest EU funding in this round of LIFE+ projects
- Largest ever UK based LIFE project

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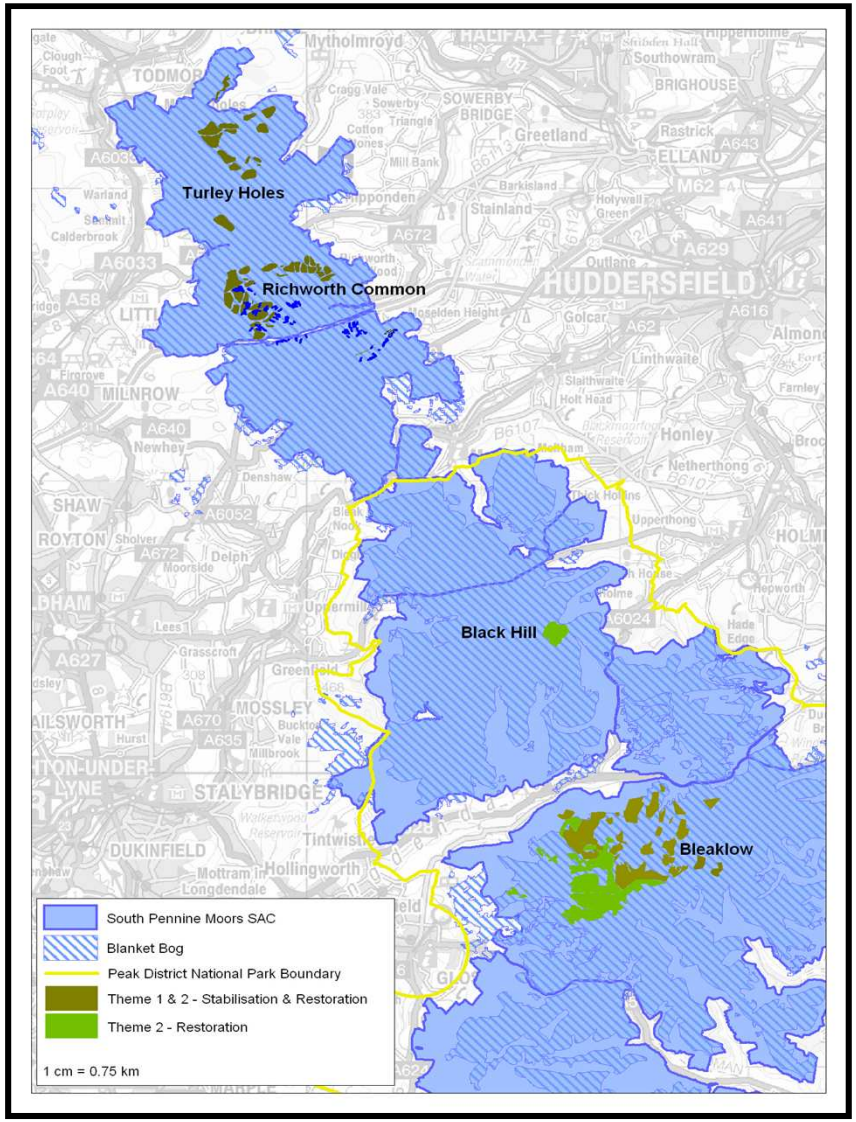
MoorLIFE project - Participants



Co-ordinating beneficiary

- Peak District National Park Authority

Co-financiers

- Environment Agency
- National Trust
- Natural England
- United Utilities
- Yorkshire Water

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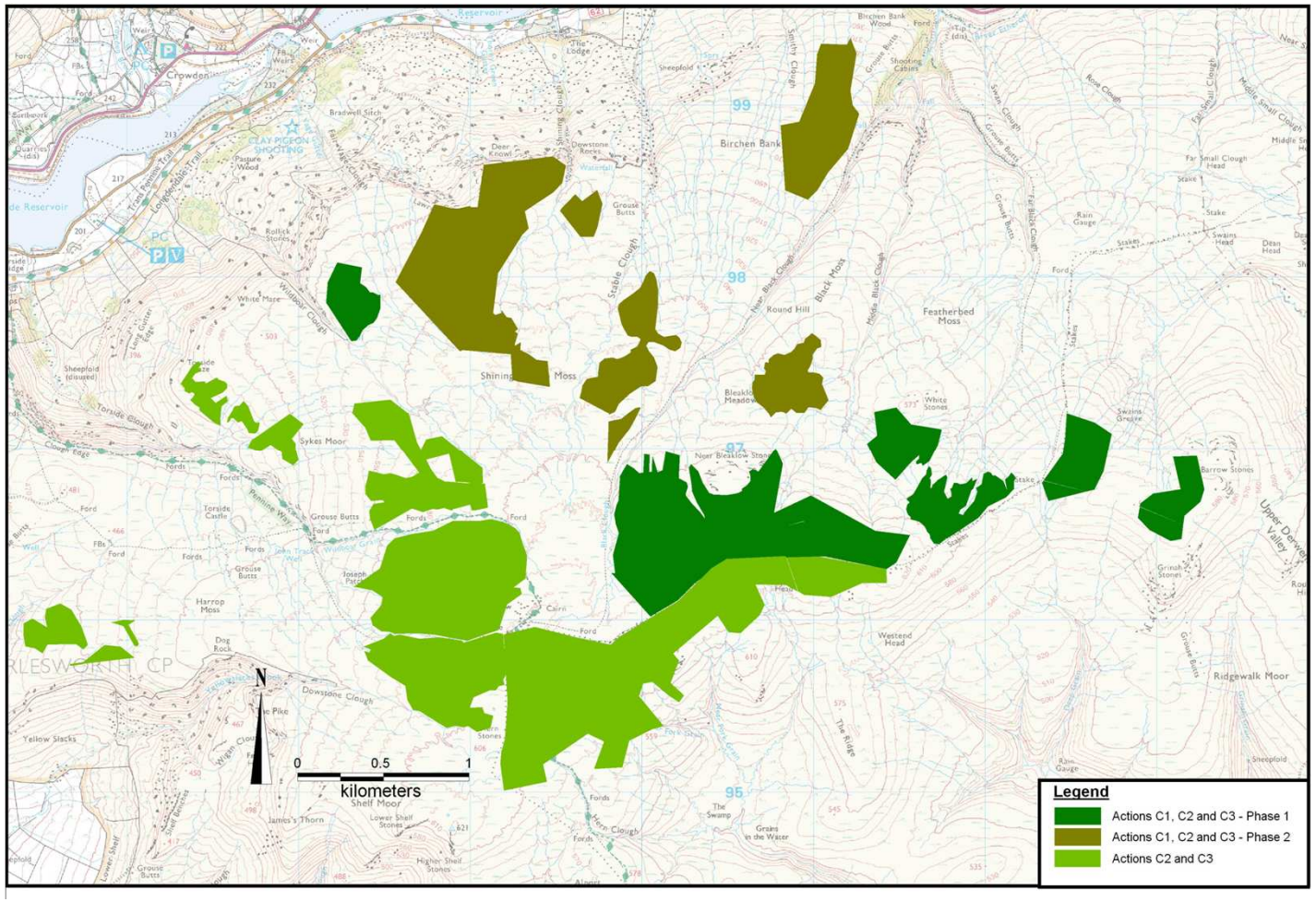
MoorLIFE project – Headlines



Final work areas – Bleaklow

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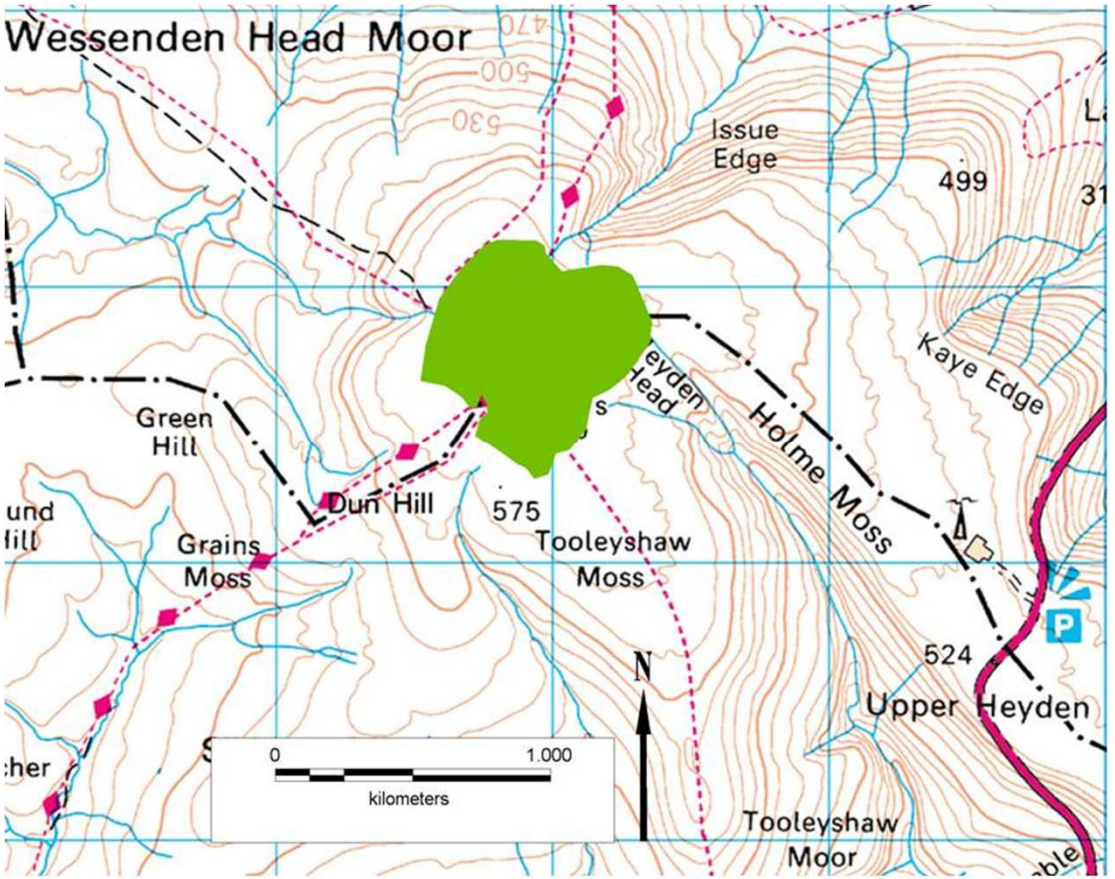
Bleaklow – 2010 – Stabilisation and diversification

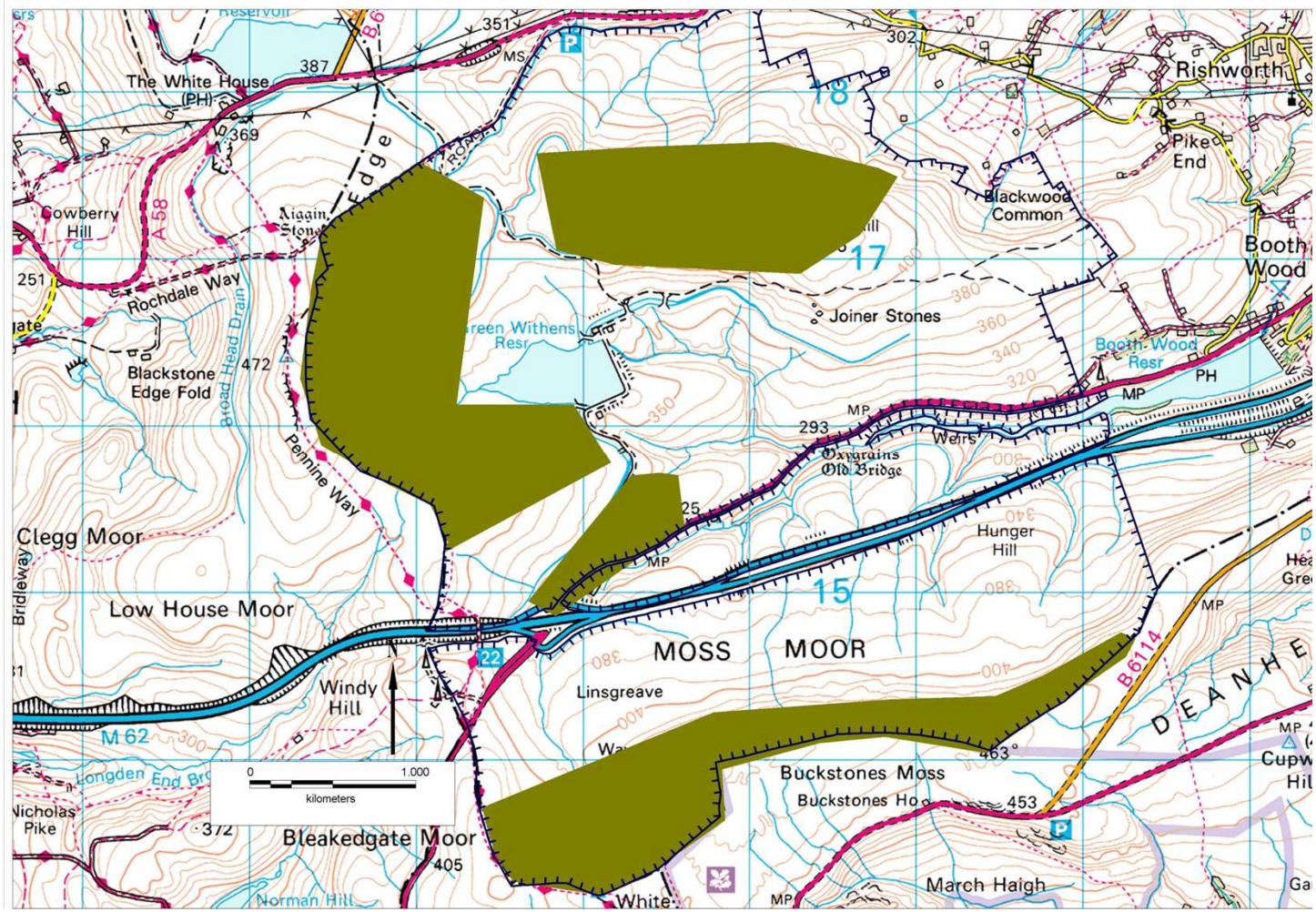
MoorLIFE project – Headlines



Final work areas – Black Hill

Black Hill – 2010 – Diversification work

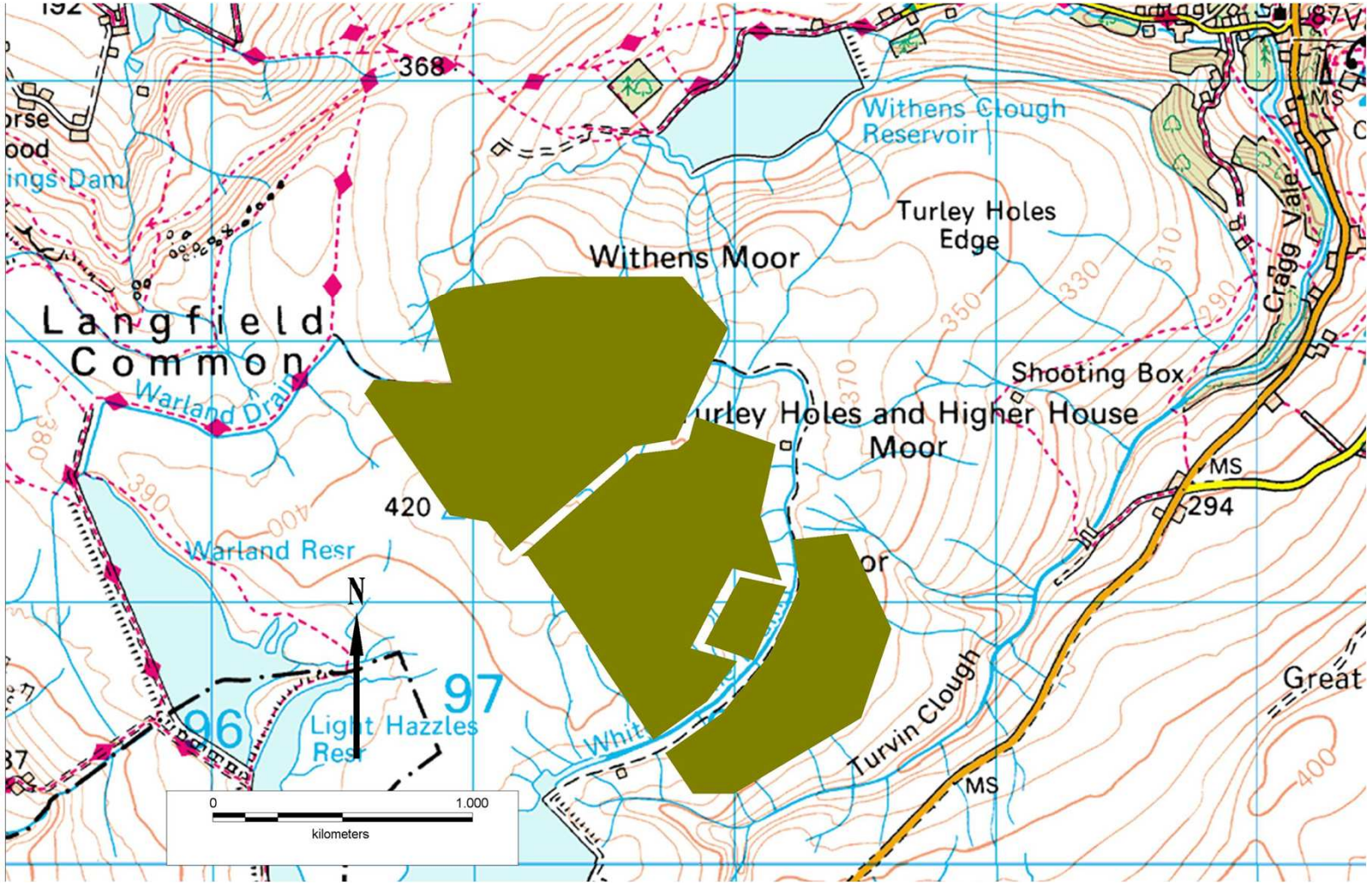
MoorLIFE project – Headlines



Final work areas – Rishworth Common – 2011-2015

Rishworth Common – 2010 - Stabilisation and diversification

MoorLIFE project – Headlines



Final work areas – Turley Holes - 2010-2014

Turley Holes – 2010 - Stabilisation and diversification

What are we doing?

- Restoration works
  - Stabilising bare and eroding peat (Action C1)
  - Diversifying stabilised ground (Action C2)
  - Blocking eroded gullies (Action C3)
- Increasing awareness of importance of moorlands (Actions D1-D4)
- Monitoring works and techniques (Actions E2-E6)

Action C1 – Stabilisation

- Heather brash
- Geo-textiles
- Moved by helicopter, applied by hand

Action C1 – Stabilisation

- Application of lime
- Application of nurse crop and fertiliser
- By helicopter

Action C2 – Diversification

- **Hydro-seeding with *Calluna***
- **Potential for application of other species**

E.g. *Erica cinerea*

Erica tetralix

Vaccinium myrtillus

Sphagnum spp.

Action C2 – Diversification

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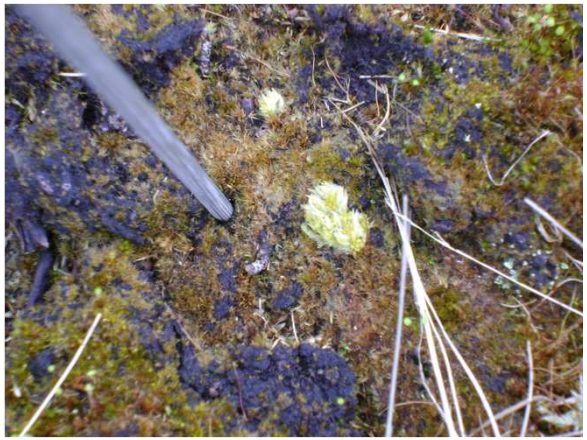
Action C2 – Diversification

Application of *Sphagnum*



Developments from *Sphagnum* propagation project

Application needs further “development”

Action C3 – Grip and gully Blocking

Various techniques

- Heather bales or coir logs
- Stone
- Timber planks
- Machine built peat dams

Actions C1-C3 - Logistics

614 hectares

2800 tonnes heather brash

Up to 47 hectares geo-jute

1800 tonnes of lime and fertiliser

31 tonnes grass seed

150,000 plug plants

Various lift sites

Starting this winter

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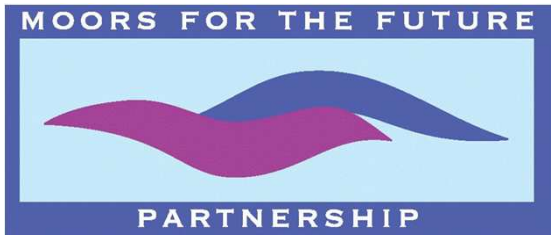
How do we know if it's working?

Monitoring MoorLIFE



Monitoring Programme

1. Vegetation establishment and succession

2. Changes to the water table and carbon budget of restored blanket bog

3. Carbon audit

Vegetation

We will set up four hundred 2x2 m quadrats across all four sites.

Annual surveys will monitor:

1. Nurse crop establishment
2. Plug plant and sphagnum establishment
3. Further succession
4. Fuel loadings

Carbon

Surface erosion of peat

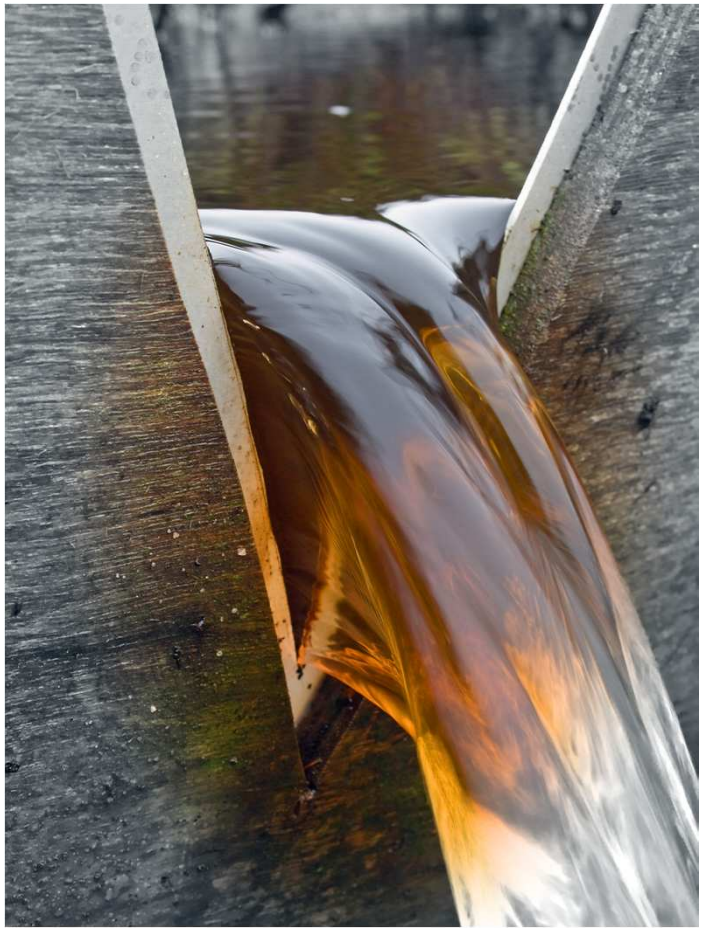
Peat pins are widely used to monitor changes in the level of the peat surface.

We will install ~400 peat pins against which we will measure peat height throughout the project to estimate peat erosion.

Water Quality / Carbon

Carbon in water causes discolouration that can represent a water quality issue

The carbon content of soil water will be measured by measuring the amount of colour in the water



Water Tables

We will monitor water tables by setting up 28 clusters of dipwells comprising:

- One automated dipwell that will take samples every hour
- 15 manual dipwells that will be measured every month

3. Carbon Audit

A carbon audit of the MoorLIFE project will:

- Provide a reliable estimate of the carbon footprint of the entire project
- Provide reliable information on the carbon cost of restoration per unit area of land

Any Questions?