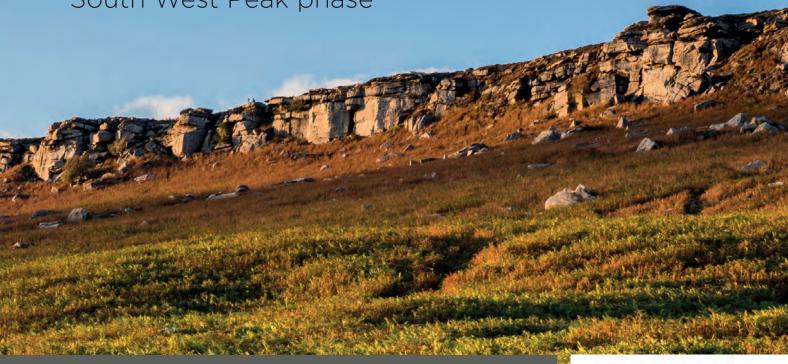
The Peak District Test Final Report

Environmental Land Management
White Peak, Dark Peak and South West Peak
National Character Area Test:
Results from engagement with farmers and
land managers

Incorporating the methodology and results of the second Dark Peak and South West Peak phase



1 November 2019 - 31 October 2021



Executive summary

Defra's Peak District Test and Trial aimed to determine whether a National Character Area (NCA) framework could be used to design some of the Environmental Land Management building blocks. Test focus themes were spatial prioritisation and Land Management Plans, with additional comments on advice, collaboration and payments, three ready reckoner tools and general feedback.

The Test set out to engage farmers and land managers through a series of workshops and one-to-one interviews, with a first White Peak NCA phase followed by a second smaller scale, more targeted Dark Peak and South West Peak NCA phase. Visits to the small scale practical field Trials, run in parallel with the Test, were also undertaken.

In response to the question 'Is there a role for local prioritisation of public goods?' there was unanimous support for local spatial prioritisation by all NCA participants. Farmers and land managers would also like to see local decision-making and advice. The Test posed the questions 'Is there a role for prioritisation of public goods based on NCAs?' and 'Is there a role for NCAs to facilitate collaboration?' Results clearly identified that public goods delivery can be based on NCAs and that they also have a role in collaboration, although this would need facilitation.

Land Management Plans were explored in response to the question: 'What mechanism will scheme participants use to plan and record which public goods they will deliver?'. The main Plan functions were identified as: constructing the offer of public goods delivery; forming the basis of the agreement; the basis of activity for the farmer or land manager, i.e. agreed actions, timescales, what where when, with relevant information and guidance; and a means to demonstrate delivery and progress. In response to the question 'What role do NCAs have in Land Management Plans?', results suggested Plans should be framed by the NCA, focusing on the key public goods that can be delivered within this spatial context.

The Test also asked 'How do you translate landscape scale objectives to the holding level?'. Although unsolicited in the questions posed, participants identified local, trusted advice as the most important factor for achieving this. The need for recognition of the public goods already being delivered was also highlighted.

In response to 'What data/information will scheme participants require?' participants felt Land Management Plans should be map-based, with a large scale printed holding map set in the context of the wider landscape and NCA. Participants would like to see one online platform that brings all their holding information together. A requirement for clarity about carbon as a public good, soil testing, and simple carbon and financial planning tools was also identified.

Local, expert and trusted advice was considered an essential element of Environmental Land Management and was the most prominent response to 'What expert support will participants require to help them plan and record which public goods they will deliver?' Further requirements included regular monitoring, training and peer-to-peer learning/sharing. A prominent Test message was the need for more support in managing visitors, with stronger recognition of access as a public good. Promotion to enhance public understanding about the public goods farmers and land managers deliver was also requested.

Overall, NCAs were determined to be a good framework for Environmental Land Management. White Peak participants easily recognised their holding in the NCA description, felt its relevance and could use it to determine which public goods they could deliver. Identification with the NCA was less instinctive for phase two participants: some Dark Peak participants struggled to relate to what they perceived as a moorland focus to the description that was not sufficiently focused on farming; South West Peak participants did not easily identify with the name of this lesser known NCA. However, phase two participants readily identified with the public goods associated with their NCA and felt they could deliver them on their holdings. They also responded well to the NCA spatial scale and the concept of 'joining up' activity across the landscape. It is therefore concluded that NCAs are a good tool to engage farmers and land managers in Environmental Land Management, enabling Government to achieve the 25 Year Environment Plan targets and the 30 by 30 ambition.

Executive summary 2

Contents		
Executive summary		2
Contents		3
Acronyms and definitions		4
The White Peak		5
The Dark Peak		6
The South West Peak		7
	South West Peak phase	8
Findings		10
Concluding remarks		26
Appendices		27
Appendix 1	Dark Peak NCA Summary	28
Appendix 2	South West Peak NCA Summary	33
Appendix 3	Methodology: phase two Dark Peak and South West Peak	38
Appendix 4	Participants: phase two Dark Peak and South West Peak	43
Appendix 5	Results: phase two workshops and one-to-one interviews	48
Appendix 6	Results: phase two Land Management Plan template design sessions	65
Appendix 7	Results: phase two NCA summaries	78
Appendix 8	Results: phase two carbon ready reckoners	80
Appendix 9	Results: phase two budget ready reckoners	81
Appendix 10	Results: phase two field visits to White Peak Trials	82
Acknowledgements		87

Acronyms and definitions

BPS Basic Payment Scheme

CS Countryside Stewardship

Defra Department for Environment, Food and Rural Affairs

Environmental Stewardship (agri-environment scheme) ES

ha Hectare (equivalent to 2.47 acres)

LMP Land Management Plan

National Character Area **NCA**

NFU National Farmers' Union

PDNPA Peak District National Park Authority

RPA Rural Payments Agency

Facilitation fund Funding under Countryside Stewardship to help groups

of farmers, foresters and land managers improve the

natural environment.

Area

National Character Broad divisions of landscape based on a combination of landscape, ecology, geology, cultural heritage and

economic activity, giving each area a distinctive and

unique 'sense of place'

25 Year Environ-

ment Plan

'A Green Future: Our 25 Year Plan to Improve the

January 2018, sets out what Government will do to

Environment' report produced by HM Government in

improve the environment, within a generation.

30 by 30 A worldwide initiative for governments to designate

30% of Earth's land and ocean area as protected areas

by 2030

The White Peak

The White Peak National Character Area (NCA) is an upland limestone plateau incised by deep, steep-sided valleys. There is a strong sense of place linked with the underlying geology and its influence on natural and human landscape features such as caves, drystone walls and traditional buildings. 78% of the NCA is within the Peak District National Park.

The dales valleys are of significant value to wildlife, and as such are predominantly designated as Sites of Special Scientific Interest and/or National Nature Reserves. All the Peak District's internationally important upland ashwoods are in the White Peak, collectively forming the largest



extent of ravine woods in Britain. However, designated sites for wildlife only cover 6% of the White Peak area, and the White Peak has the most fragmented priority habitats of any NCA within an English national park.

The plateau has been a hub of cultural significance for several thousand years and is rich in archaeology, from Neolithic burial mounds to remains of early lead working. There are distinctive, well-preserved historical landscapes, with ridge and furrow, and field boundaries of medieval field systems around villages.

There is an extensive network of footpaths, multi-user trails and green lanes. The White Peak Ordnance Survey map is one of the most popular in the UK. Many farmers and land managers have taken advantage of this, and have diversified with businesses reliant on visitors.

Around 89% of the White Peak is a farmed landscape and 99% of this is grassland. The plateau has a unique



soil deposit, meaning it is able to support relatively intensive grass-based livestock farming. There is a wide diversity of farm holding size: 143 are larger than 100 ha and cover 47% of the White Peak, with an estimated 900 being less than 100 ha. 85% of the White Peak is classed as Severely Disadvantaged, with plateau land rising to over 400 metres above sea level.

Land is predominantly privately owned and occupied,

with only 6% owned by public or conservation organisations. The White Peak landscape is a major contributor to the Peak District's worth to the regional economy.

Coverage of agri-environment schemes is only 15%, predominantly due to poor payment rates and restrictive options which do not work for this landscape.

The White Peak NCA description (NCA 52) is available online, and provides a full description of the NCA. It was last updated in 2014.

A White Peak Partnership was developed in 2017, which has produced a vision for the future of the White Peak that covers wildlife, farming, cultural heritage and access. It is available alongside this report.

The White Peak 5

The Dark Peak

The Dark Peak National Character Area (NCA) is an upland, gritstone landscape of open moorlands, reservoir valleys and in-bye pasture. It falls almost entirely within, and forms a large part of, the Peak District National Park.

The unenclosed moorlands on peat and mineral soils are made up of blanket bog, heathland, rocky edges and rough grassland. Most of the moorland is of international value for its habitats and species, especially upland birds, with designations covering almost half the Dark Peak. The blanket bog has a history of being in poor condition, but considerable efforts over the past few decades have begun to reverse this.

The moorland edges and in-bye support livestock grazing, either on wet rushy or tussocky

grassland, or more improved grassland lower in the valleys. These fields can provide feeding and nesting areas for wading birds such as lapwing and curlew. Some unimproved pastures support internationally important populations of grassland fungi.

There are several major reservoir valleys in the Dark Peak that provide drinking water to surrounding urban populations, including Sheffield and Nottingham. These valleys are flanked by large conifer plantations, but in smaller cloughs and valleys with fast-flowing streams there are remnants of ancient oak and other broadleaved woodland.

The Dark Peak has been important to people for thousands of years, with Stone Age remains found beneath the blanket bog, Bronze Age stone circles, medieval settlements and field enclosures, and industrial remains related to coal mining, production of millstones and lead smelting.

There are several large historic houses with associated parkland and wood pasture, important for large old specimen and veteran trees.

The position between several large urban populations means there are high numbers of visitors that come to visit iconic stately homes like Chatsworth, walk in the open access areas to achieve a sense of remoteness and tranquillity, or climb the renowned Stanage Edge.

The most common farm size is between 5 ha and 20 ha, accounting for 189 units in the 2016 census. However, these only accounted for 3% of the NCA area. Holdings greater than 100 ha only make up 18% of the total number of farms but over 78% of the total farmed area. Indeed, less than 20 organisations own around 50% of the Dark Peak, with around 20% owned by public or conservation organisations and 17% owned by water companies.

87% of the Dark Peak is classed as Severely Disadvantaged, with an elevation of 600 metres above sea level at Kinder

Scout. Coverage of agri-environment schemes is around 60%, reflecting the high environmental value of this landscape.

The Dark Peak NCA description (NCA 51) is available online, and provides a full description of the NCA. It was last updated in 2015.





The Dark Peak

Photo: Moors for the Future

The South West Peak

The South West Peak National Character Area (NCA) is an area of upland and associated foothills in the south-west region of the Pennines. 65% of the NCA is within the Peak District National Park.

The South West Peak sits at a crossroads where north meets south and east meets west and upland meets lowland at spectacular gritstone edges. The South West Peak is scenically and distinctly diverse. It is an upland landscape, with open moorland at its core dominated by blanket bog and heathland, often enclosed into large parcels. The fringes fall away to gentle slopes, dissected by steep wooded cloughs. Fast-flowing streams at lower elevations open out to form wider river valleys characterised by permanent grassland with rushy pasture, species-rich hay meadows and improved productive farmland. This is a traditional working



landscape created by generations of farming, dominated by livestock farming. The fields are small or medium and mostly bounded by drystone gritstone walls, with some hedgerows lower down the slopes. The landscape is dispersed with small settlements, traditional farmsteads and isolated field barns predominantly built of local stone, reflecting the geology, history and local building traditions.

Nationally important historic landscapes and cultural heritage add to the strong sense of place. The rich heritage ranges from prehistory to the modern day, with features particularly from the medieval period.

13% of the South West Peak is designated as Sites of Special Scientific Interest (SSSI). The area supports internationally important mosaics of habitats, which in turn host species such as snipe, curlew, lapwing and short-eared owl. Grassland fungi communities are also very significant.

The peaty moorland soils, where they are in good condition, can store significant amounts of carbon and water, with wide-reaching benefits for water quality, climate regulation and wildlife. This is also an important area for water supply. Eight rivers have their sources in the uplands of the South West Peak, with several running into reservoirs that supply water both within the area and to nearby towns and cities.

Though lesser known than some other areas of the Peak District, the South West Peak is important for recreation and tourism thanks to open access areas, wide-ranging views and a network of footpaths and



country lanes. Distinctive features such as The Roaches attract visitors from further afield, but visitors and locals alike can appreciate the sense of tranquillity from quiet enjoyment of this relatively undiscovered area of the countryside.

There is a diversity of farm holding size, with the most common being between 5 ha and 20 ha, (257 units in the 2016 census, 36% of all holdings) and over 85% less than 100 ha. 73% of the South West Peak is classed as Severely Disadvantaged and coverage of agri-environment schemes is around 34%.

The South West Peak NCA description (NCA 53) is available online, and provides a full description of the NCA. It was last updated in 2013.

A South West Peak Landscape Partnership was developed in 2013, with delivery of a programme of interventions starting in 2017 and due to end in 2022. It has produced a vision for the future of the South West Peak that covers wildlife, farming, cultural heritage and access. The vision statement for the South West Peak Landscape Partnership is:

By working together in the South West Peak, we are shaping a better future for our communities, landscape, wildlife and heritage where trust and understanding thrive.

The South West Peak 7

The Dark Peak and South West Peak phase of the Test

Organisations and collectives were invited by Defra to submit ideas for designing a new agricultural support scheme, and in November 2019 the Peak District Test became one of the first phase Tests. The first White Peak phase aimed to determine whether an NCA framework could be used as an approach to designing some of the building blocks for Environmental Land Management, and help change the relationship between Government and farmers and land managers. This ran from 1 November 2019 to 31 October 2020 and the outcomes are set out in the report *White Peak Test - Environmental Land Management scheme White Peak National Character Area Test - results from engagement with farmers and land managers*, dated December 2020.

To gain more insight into the feasibility of an NCA approach, a second phase to the Test was established, expanding the approach to the Dark Peak and South West Peak NCAs. As this phase was across two NCAs and was also to be delivered with less financial resource, the learnings from the first White Peak phase were taken and developed further, with less participants but a more intensive focus on certain key areas.

As with the White Peak phase, the Dark Peak and South West Peak phase set out to gather further information to address the following policy questions (and sub-questions):

- 1. Is there a role for local prioritisation of public goods?
 - Is there a role for prioritisation of public goods based on NCAs?
 - Is there a role for NCAs to facilitate collaboration?
- 2. What mechanism will scheme participants use to plan and record which public goods they will deliver?
 - What role do NCAs have in Land Management Plans?
 - How do you translate landscape scale objectives to the holding level?
 - What data/information will scheme participants require?
- 3. What expert support will participants require to help them plan and record which public goods they will deliver?

The Dark Peak and South West Peak phase aimed to answer these questions through a series of four workshops run by a professional facilitator (two for each NCA); five one-to-one interviews, echoing the content of the workshops (two in the Dark Peak and three in the South West Peak); and nine follow up, one -to-one in-depth Land Management Plan template design sessions with farmers who had attended the workshops or one-to-one interviews. For these latter sessions, three were undertaken in each Peak District NCA, including revisiting the White Peak to gain this deeper insight in the NCA covered by the first phase of the Test. These sessions engaged farmers and land managers from 34 holdings.

A series of field visits to the Trial being undertaken in the White Peak, in parallel to this Test, also formed part of the delivery. These visits re-engaged with White Peak farmers and land managers from 17 holdings that had previously been involved in the first White Peak phase of the Test. The field Trial visits also involved 7 additional White Peak holdings, new to the Test.

To support the Test, the National Park Authority and consultants developed:

- A short, simple summary of each of the Dark Peak and South West Peak NCAs (presented as Appendix 1 and 2 of this report).
- Two simple carbon tools carbon ready reckoners tailored to each NCA and designed to show the carbon emissions, sequestration and storage of the different NCA habitats, as well as management interventions.
- Two simple budgeting tools budget ready reckoners tailored to each NCA, that farmers and land managers can use to calculate a hypothetical payment based on their delivery of public goods, and also to see the reduction in BPS.

The learnings from the White Peak phase were incorporated into the approach taken for the Dark Peak and South West Peak phases. The key differences were:

- All workshops were delivered via videoconference due to Covid-19 restrictions.
- In acknowledgment of the fact that online workshops would inevitably exclude farmers with less experience of IT or with poor internet connectivity, a series of socially distanced one-to-one interviews were conducted at a venue that the farmer was comfortable with, taking Covid-safe measures.
- Workshops were split into two sessions because transferring the in-person format to online meant the sessions involved too long a period of screen-time. Therefore, a short follow-up session the following day was held to demonstrate the two ready reckoner tools.
- The budget ready reckoners were available for all workshops in phase two (in the White Peak phase this was available from June 2020 and for just one of the workshops).
- The South West Peak carbon ready reckoner was further developed to incorporate indicators of soil organic carbon, soil organic matter (SOM) and soil health. It also included a feature where users could input SOM soil test results and see how these compared to the ready reckoner results and what they indicated about soil health on their holding.
- In the White Peak phase the Land Management Plans were discussed at the workshops and one-to-ones, however it was considered that gaining greater insight into farmer and land manager thinking about these would be useful in phase two. Therefore, follow up sessions were arranged with participants of the phase two workshops or one-to-one interviews to conduct a 'deep dive' into what an NCA focused Land Management Plan might look like. As this more in-depth insight had not been gathered in phase one, three of these interviews were conducted for each of the three NCAs that make up the Peak District National Park (three in the White Peak and three in each of the Dark Peak and South West Peak).
- Three site visits were arranged for farmers to see the small scale practical field Trials that the Peak District National Park Authority, in partnership with Natural England and seven landowners, have been running in the White Peak, alongside this Test. The aim of the field Trials has been to explore the options for, and practicalities of, delivering a Nature Recovery Network within the productive grassland agricultural landscape of the White Peak, in line with the Lawton principles of 'better, bigger, more and joined' (as outlined in the 2010 White Paper 'Making space for nature'). The summary of the field Trials and first year summary report are available alongside this report.

A detailed methodology for the Dark Peak and South West Peak phase of the Test is given in Appendix 3. Information on participants is available in Appendix 4 and the results are presented in Appendices 5 to 10.



Findings of the White Peak, Dark Peak and South West Peak Test

1. Is there a role for local prioritisation of public goods?

Across the White Peak, Dark Peak and South West Peak NCA Test, there was unanimous support from participants of workshops and one-to-one interviews for local prioritisation of public goods delivery. Equally, participants across all three NCAs urged for local facilitators, advisors and decision makers, feeling that this would be crucial to successful delivery of Environmental Land Management, particularly the coordination of landscape scale delivery.

There was also a strong feeling that spatial prioritisation should recognise the differences in farm type, and natural features such as differing soils and topography, as these will dictate what is practical to deliver.

Is there a role for prioritisation of public goods based on NCAs?

From the responses received through this Test, we would recommend that NCAs are one of the mechanisms that could be used to set and agree local priorities.

- ✓ A good spatial scale
- ✓ Based on soils and landscape, which most influence type of farming/management
- ✓ Almost unanimously, farmers and land managers involved in the Test identify with their NCA description, feel it represents their holding, and are therefore more likely to engage with Environmental Land Management
- ✓ Uses data that is already available, is easily updated and can incorporate local data
- ✓ Includes all six public goods in one place and their relevance in the NCA
- ✓ Easy to extract key features which may be a priority or deliver priority public goods
- ✓ Can be applied across England.

The White Peak phase found this approach seemed to work well for those on the boundary between NCAs, and those whose holding is spread across multiple NCAs, with one such participant saying the description matches "their bit" of the White Peak, and they feel "the line on the ground matches the line on the map" and they could "clearly see that boundary in the landscape".

Workshops and one-to-one interviews demonstrated that farmers and land managers are readily able to identify actions they could take to deliver the public goods set out in the NCA descriptions.

The name of the NCA is a factor in how immediately farmers and land managers identify with it. A sense of identity with the NCA name was strongest in the White Peak, closely followed by the Dark Peak, and diminished in the lesser known South West Peak NCA.

With regards to alternative spatial approaches, the White Peak phase found there was concern about a county- or catchment-based approach, as these were seen as more of a single-interest rather than multi public good description. This sentiment was not specifically expressed in phase two of the Test. Indeed, some South West Peak participants expressed their frustration that the Staffordshire Moorlands (a



geographical and administrative area that comprises 46% of this NCA) was not referenced within the NCA description, as this chimed more strongly with their geographical and cultural identity. However this seems to stem from a lack of familiarity that the landscape character extends beyond their holding and its environs, crossing county and district boundaries and including areas of Cheshire.

Is there a role for NCAs to facilitate collaboration?

Test participants could envisage localised collaboration, indeed acknowledged that certain public goods, such as wildlife and clean water, need a landscape scale approach and thus collaboration. The White Peak phase found farmers and land managers in this NCA had a strong White Peak identity, which could help collaboration through a shared sense of place. This connection to place was also reflected within the Dark Peak phase, with the exception of a minority of participants whose holdings comprised grassland only in the valley bottoms. A sense of identifying with the NCA name was less strong in the South West Peak, although participants recognised their holdings in the NCA description.

In workshops there was discussion about collaboration with neighbours, or amongst those that shared a common landlord, or within a parish. Such units are well established and rooted in experience, so currently more familiar and less abstract than the NCA. It is therefore more natural for participants to imagine collaboration in these contexts. However discussion often alluded to the components of NCAs – shared habitats, landscape features etc., with an insightful comment about the need to collaborate with "not just your adjoining neighbour - sometimes worth doing a big jump across the landscape - then could fill in the gaps".

Participants that visited the practical field Trials that ran alongside this Test found that the experience of attending led them to be able to imagine more clearly what collaboration within Environmental Land Management might look like. One could actually describe an imagined project in a particular location on their holding, involving two neighbouring land owners. However the mixed nature of farming within each of the NCAs was identified as a potential barrier. Specifically, there was concern that collaboration would be difficult with neighbours that had a different approach to the balance between productivity and wildlife. For example they could not envisage how a beef and sheep farmer with unimproved ground might collaborate with an adjacent intensive diary unit, when their systems and inputs were so different. Concerns seemed to be rooted in the fact that they and their neighbour might not be able to deliver the same 'management option' across adjoining fields. This is perhaps indicative of a holding and field scale agri-environment option mindset developed over many years of participation in these schemes, rather than a landscape scale public goods approach, which is very new to Test participants. It did not seem to be clear to participants that neighbouring farms with differing systems could take different approaches to delivering the same public good outcome, as part of a collaboration. Indeed, two very differently managed adjoining farms might be at different points on a 'sliding scale' of delivering a given public good and thus receive different payments to reflect this. Nevertheless they would be helping to form the wider picture across the landscape.

Indeed participants repeatedly expressed that an adviser or facilitator would be required to develop the landscape scale picture and advise each collaborator what might best be achieved on their holding to deliver wider benefit to the NCA. The requirement for expert advice is explored in more detail in question 3 below.

However this Test still supports the assertions that:

- ✓ NCAs bring together similar farming systems that share a commonality (e.g. underlying geology, soils, culture), that could foster collaboration.
- ✓ NCAs helped Test participants consider their own holding as part of the wider White Peak, Dark Peak or South West Peak landscape.
- ✓ NCA-focused groups or events (for example facilitation fund groups or field visits) help farmers and land managers envisage NCA-wide collaboration.



2. What mechanism will scheme participants use to plan and record which public goods they will deliver?

Four main functions of Land Management Plans have been identified, which are to:

- ✓ construct the offer of public goods delivery
- ✓ form the basis of an agreement or contract
- ✓ set out information/guidance plan for the farmer or land manager, i.e. agreed actions, timescales, what where when
- ✓ demonstrate delivery and progress.

Participants were keen to see the following components as part of the LMP:

- ✓ NCA context (key public goods, e.g. habitats/species)
- ✓ Outcomes to aim for in landscape context (split by 6 key public goods)
- ✓ Clear aims and outcomes (with timeline)
- ✓ Ambition for the holding
- ✓ Staged events to show progress
- ✓ How delivery contributes/is valued
- ✓ A facility for incorporating evidencing and monitoring that are measurable against baselines and aspirations or targets.

There are also some principles that participants required of Land Management Plans, which transcend these functions and components:

- ✓ The main requirement was that the plan must be map-based (there was unanimous support for this in LMP design sessions, it was mentioned in all NCA workshops and by over 60% of one-to-one participants). The maps required are set out in question 2 below in more detail.
- ✓ Flexibility was considered particularly important, so that targets could change and evolve as the situation changes on the ground.
- ✓ Participants commented that the LMP needs to recognise site specificity and be relevant to the local area as well as the realities of farming. This was a particularly strong message from the workshops and one-to-one interviews.
- ✓ The majority of participants said they wanted the creation and delivery of Land Management Plans to be simple and jargon free, as current schemes are perceived as too complicated, which is one of the main barriers to uptake. However, it was pointed out that it needs to be sufficiently in-depth to be a useful, working document.

To create a Land Management Plan and use it to put forward their Environmental Land Management offer/proposal, participants said they would need to know/see on a map their existing features and their potential for public goods delivery. They would then need to know where that public goods delivery 'scores' on a scale, including whether they are complying with the regulatory baseline. For example, the carbon ready reckoner was suggested by 41% of one-to-one participants as being potentially useful to demonstrate carbon storage and sequestration as a public good. To explore and plan their public goods delivery, participants said they would also need to know any designations. Most participants said they would find a soil health test useful, which could be used alongside the ready reckoner tools for business and management planning.

A third of one-to-one participants and two thirds of LMP design session participants said they would like one platform i.e. an online portal, which could have the following advantageous functions:

- Bringing together all existing information to reduce duplication of effort and time. Those that are involved in assurance schemes, certification schemes and/or with milk buyers have said that they often have to send the same information to several bodies.
- ✓ Regulation and scheme guidance is easily accessible.
- ✓ Planning tools are available to help farmers and land managers ensure they have a sustainable business model and schemes are deliverable.

- ✓ Upload new information, for example evidencing and monitoring, and showing progress of public goods delivery.
- ✓ Easily updated.
- ✓ Farmers and land managers can set viewing permissions so everyone can access the information they need to see.
- ✓ Multi-way communication between the farmer or land manager and the people they work with, for example advisers.
- ✓ Collaborative holdings working together can be linked.
- Linked via an app so all those that are involved in scheme delivery on a holding (including multiple people on the same holding) can view it on a smartphone or tablet, receive notifications and reminders, and upload evidence immediately, for example photos.



• What role do NCAs have in Land Management Plans?

In phase one of the Test it was suggested that LMPs should be framed by the NCA and in phase two, participants of the in-depth LMP design sessions unanimously agreed. There was enthusiasm for seeing land management at a wider scale than their holding and how their activities would link with other habitats and public goods.

Some were keen that the link to the NCA should be very explicit and structured. There was support for the Plan containing the NCA summary and enthusiasm for having the Plan focused on the key public goods that can be delivered within this spatial context. This would limit the options available to those that are relevant, making the process simpler, as requested by participants. Relevancy is also likely to encourage engagement in the scheme.

Participants found the NCA and the related public goods a tangible basis for building an LMP. As a result, the design sessions threw up some very practical suggestions as to how to embed NCA-focused public goods into the Plan, and also how to approach the Plan when a holding spanned more than one NCA. For example: "Take the lists of possible actions in the NCA, two tick columns 'could do on holding', 'will do in ELM scheme'"; and "Include all NCAs for the holding with key relevant targets and objectives (e.g. species)".

Some dissent from this position arose from a small number of Dark Peak participants: in one of the broader Dark Peak one-to-one interviews, which ran alongside the workshops, the participant did not fully relate to what they perceived as a moorland-focused NCA description, and so considered the NCA context "relevant to a point, but if there is too much emphasis on the NCA, farmers may view it as lacking relevance and switch off". Comments in the more focused LMP design sessions echoed this: "Farmers unlikely to spend much time thinking about the NCA - if too much focus on this, they might be put off reading the rest - keep it brief and pertinent" and "Reference to NCA/landscape/context/public goods needs to be brief and relevant to agriculture". This underlines the importance of having an accurate and up to date NCA document that is relatable to all land managers whose land falls within its boundaries.

A middle way was proposed by a White Peak participant: "NCA should be embedded into the background of LMP as a core driver, but not explicit – a farmer ... can pick out core characteristics of NCA that relate to the landholding, to link these to wider characteristics".

Overall the Test indicates that NCAs have a strong role to play in developing LMPs, from framing the overall principles, to developing the fine detail of what might be delivered on the ground.

- ✓ LMPs should be framed by the NCA.
- ✓ LMPs should contain an NCA summary document.
- ✓ LMPs should include a map of the holding showing how it relates to the wider NCA.
- ✓ The LMP should be focused on the key public goods that can be delivered within the NCA.

How do you translate landscape scale objectives to the holding level?

The workshop discussions and one-to-one interviews identified a suite of recommendations that could facilitate the translation of landscape scale objectives to a holding level. The discussions were framed within the context of Land Management Plans and also collaboration, so these two elements form a cornerstone of the approach the participants set out.

Firstly it was suggested that a local body should conduct Natural Capital Assessments to identify the most suitable locations for best achieving public goods delivery. (The Peak District National Park Authority was identified as most appropriate for this role.) Then following from this, a long-term, landscape scale, holistic, targeted approach should be developed – again led by the local body. This was envisaged in "real, large scale map" form by some participants. A structured approach should then be established for developing a holding scale LMP as the tool by which the landscape scale objectives are translated to holding level. NCA-wide guidance should then be developed alongside provision of information, education and training. The LMP should be at farm scale but show the connections to the wide scale activity.

There was common support for visual representation of the NCA and how their holding fits both geographically and within the context of public goods delivery. A workshop participant suggestion that was supported by others was for an aerial photograph of the NCA at a local "hub" for example on the village hall or Estate Office wall, so that farmers and land managers could see exactly how their holding related to the wider landscape. Various other suggestions within this vein were large scale paper maps provided as part of a LMP showing the holding in the context of the NCA; and an online interactive map with the ability to zoom in to field and holding scale and out to farm cluster and NCA scale. Both paper maps and a robust online mapping system were seen as necessary, though it was cautioned that not everyone will be able to access an online system due to IT and connectivity issues.

Collaboration between farmers and land managers was seen as an important component of translating the landscape scale to the holding scale – essentially building up a jigsaw of holdings across the NCA. The value of farms working together a cluster was acknowledged. There was a view that there was a need for more regular sharing of information between farmers. Participants commented that facilitation fund groups have increased understanding between farmers and land managers and fostered better collaboration, through meeting and exchanging ideas. It was felt these facilitation fund groups should continue within



Environmental Land Management.

Other units were identified that could be used as a basis for collaboration, to build up from holding to landscape scale:

- LMPs could be developed and shared between neighbours.
- Tenants with a common landlord were identified as a group that could readily work together. (This is particularly feasible in the Dark Peak where the National Trust and water companies own large areas of land with a significant number of tenanted farms.)

• By parish or other smaller units.

It was, however, pointed out that if your adjoining neighbour was not initially keen to participate, it was still useful to do "a big jump across the landscape" to neighbours further afield and then "fill in the gaps" either with corridors or by more sceptical or reticent land managers following the pioneers at a later date. The two important things highlighted for encouraging collaboration were: firstly, to build on existing relationships/partnerships (for example that between landowners & farmers) and secondly, to share the lessons learnt from these existing relationships or groups that have already developed. A local advisor was considered crucial to bring both collaborators and LMPs together and to help translate landscape scale objectives to the holding level.

The Test identified some specific opportunities as well as barriers in translating landscape scale objectives to the holding level.

Payment and recognition for ongoing delivery of public good:

Being properly recognised for public goods that are already being delivered by farmers and land managers was one of the most prominent themes of this Test, particularly in the Dark Peak and South West Peak. Test participants highlighted the need for maintenance payments to be the pinnacle, with the highest payment rate to encourage farmers and land managers to keep their natural assets rather than such habitats being damaged or destroyed and public funds being used to restore or reinstate them. For example one test participant expressed frustration that there are "more benefits for 'destroying' then restoring, rather than managing it right in the first place". Underlining this point, the current CS scheme pays more for restoration of species rich grassland than to maintain existing, thus disadvantaging those who have demonstrated a long-term commitment to delivering this public good, in some cases over decades.

Smaller holdings in particular would like recognition of the public goods they are already delivering, as they are often managed with low inputs or organically (certified and non-certified), in line with individual interests, and are more likely to be part-time holdings. However, this type of holding bears a proportionately higher cost for participation in environmental schemes as compared to medium and large holdings. A minimum base payment could be considered for Environmental Land Management to incentivise participation, as collectively many of these smaller holdings will be instrumental in delivering the networks for nature recovery.

Larger, more intensive dairy farms may have scope to intensify further, which in turn has the potential to negatively impact on natural and cultural assets. Many White Peak holdings have already been intensified in terms of their agricultural productivity, so future payments will need to support a significant change in approach, which is likely to include a more extensive system if nature recovery is to be delivered in this NCA.

Trees:

In the initial White Peak phase there was a lot of interest in expanding tree cover, in particular the creation of wood/scrub pasture. In the Dark Peak and South West Peak phase, there was still strong acknowledgement that expanding tree cover was positive for delivering a range of public goods, however comments were very largely qualified with concerns that it needed to be the "right tree in the right place for the right reason", and that they were feeling pressure from both the government and the public to plant trees, when across some of their land this might well not be appropriate (for example moorland or species rich grassland).

Nevertheless, expanding tree cover appears to be a really good example of multiple public goods delivery that can work in a livestock farming context. In the White Peak, increased tree cover was the most used example of how farmers and land mangers could increase carbon sequestration and storage on their land, whilst also delivering a nature recovery network and potentially slowing water flow and increasing water quality. Scattered tree and scrub cover in a pastoral context could allow farmers and land managers to continue producing livestock, whilst also providing them with shelter and shade, particularly if weather patterns continue to change in response to climate change, e.g. drier summers, wetter winters and more extreme weather events. Trees (and scrub to a lesser extent) could also be used to provide wood fuel.

Reduction in BPS payment due to natural regeneration and an increase in tree and scrub cover was cited as the main reason why many farmers and land managers have not looked to increase cover thus far. Most farmers and land managers in this Test cannot afford this financial loss currently, with 75% of White Peak participants financially dependent on government funding, increasing to 80% in the Dark Peak and 100% in the South West Peak. However, when BPS is phased out, it offers an excellent opportunity for farmers and land managers to explore this option and be properly rewarded for the public goods it can deliver.

Creation of wood/scrub pasture is being explored as part of the small scale practical field Trials in the White Peak. This is particularly important in a productive grassland context such as in this NCA, where soils are fertile, often sown with highly competitive ryegrass for silage, and the tree and scrub seed resource is low or is likely to have been removed entirely. The report of the first year findings from the practical field Trials is available alongside this report.

For woodland creation, large scale tree planting, or the above type of permanent land use change, long-term agreements will be needed to demonstrate financial commitment, with many participants stating they would only be open to this with agreements over several decades (at least 20 years). This is in consideration of the difficulty of reversion and the fact that if using for wood fuel or income, earnings would only kick in after a minimum of 10 years.

Tenanted land:

Affordability of taking on a tenancy was cited as a barrier to being able to deliver public goods or maximise public goods delivery, limiting opportunities. Almost 40% of participants rent land and almost all of these are dependent on national funding, therefore issues around tenancies could have a significant impact on the uptake and delivery of Environmental Land Management. An example was given by one participant: BPS and CS Mid Teir combined was equivalent to over 90% of their rent and BPS was currently greater than their farm annual profit. They therefore felt that any reduction in payment through Environmental Land Management would put their ability to pay rent and retain the family farm in jeopardy.

The ability of a tenant farmer or land manager to deliver public goods on their rented land will depend heavily on their relationship with their landlord and the aspirations of the landlord for their land. Some participants have said that they are restricted in terms of what they can deliver by their landlord.

Short-term tenancies were cited as a particular restriction in delivering public goods. Those with short-term tenancies, which could be as short as one year, are often reluctant to invest financially or invest in a long-term vision for the land. This is also an issue for those neighbouring land in short-term tenancy, as they struggle to work collaboratively due to the above and/or regular changes in the neighbouring tenant. One participant pointed out such land would be "lost environmentally".

There are also financial complications of tenancies. Some participants have stated that their rent includes the assumption that the tenant is receiving BPS, and do not think that their rent will reduce when BPS is phased out. For others, their landlord receives the BPS (and in some cases scheme payments), and some tenants are worried that rent will increase when BPS is phased out. One tenant has cited that their landlord has reserved the right to receive any payments through carbon offsetting, which will potentially become more common as this sort of payment

Photo: Moors for the Future Partnership

becomes mainstream. This could be further complicated by any blended finance models.

Permanent land use change and large scale public goods delivery will need engagement with the landlord and consistency of tenancy agreement, backed by long-term scheme agreements/contracts.

In summary, to translate landscape scale objectives to the holding level the following are needed:

- ✓ Identification of the key locations for public goods delivery across the NCA
- ✓ An NCA focused strategy and plan for delivery of public goods across these locations
- ✓ A physical hub where large scale maps are on display, sharing this strategy and plan, showing farmers and land managers how their holding relates to the wider landscape
- ✓ Map-based LMPs used as the tool by which NCA scale priorities are translated to a holding level at holding scale but show the holding in the context of the NCA
- ✓ Facilitated collaboration between holdings within the NCA
- ✓ NCA-wide advice, guidance, education, training and the continuation of facilitation fund or other similar groups.

Some specific opportunities:

- ✓ The potential for increasing tree and scrub cover across improved landscapes to deliver multiple public goods, as well as benefits to farmers such as shelter for livestock
- ✓ Wider recognition by farmers, land managers and indeed the public of a range of public goods in the landscape.

The barriers to translating landscape scale objectives to the holding level:

- ✓ Disengaging farmers and land managers that have engaged in public goods delivery over the longterm by prioritising payments for restoration of habitats and features over those for maintenance, as is currently the case with some CS options
- ✓ Treating trees and scrub, particularly natural regeneration, as a separate entity within Environmental Land Management, rather than as 'part of the whole' of public goods delivery
- ✓ Financial and contractual constraints associated with tenancies, potentially leading to tenanted farms being a 'public goods delivery gap' in the landscape.

What data/information will scheme participants require?

Maps:

The requirement for maps featured strongly across all three NCAs. For example, there was unanimous agreement across the three NCA workshops and also the more in-depth LMP design sessions that the LMP should be map-based. The range of maps participants said they would require included:

- ✓ Maps of the holding boundary
- ✓ Whole holding map but with field scale detail
- ✓ Map of holding overlaid onto NCA map
- ✓ Multi-holding plans that could foster wider collaborative landscape scale delivery
- ✓ Paper copies to take into account poor internet connection, lack of IT skills, easier reading and quick access
- ✓ Large map for the wall, as a reference copy, provided by government agency because farmers and land managers may not have the ability to print a large size document
- ✓ Online map that can also be printed
- ✓ A robust online mapping system was seen as necessary, though it was cautioned that not everyone will be able to access an online system due to IT and connectivity issues.

A map showing the holding boundary would certainly be needed, however, in practice this is not easy information to obtain. Although the holding boundary should be known by land owner and/or land manager, they may or may not have maps of their holding: deeds are not always straightforward to get hold of and indeed may not be up to date in relation to boundaries etc.; a farmer or land manager may have maps amongst the documentation relating to a previous environmental scheme they have participated in, but not all have participate in schemes; online RPA maps are available, however:

They are not necessarily accessible to all farmers and land managers (IT literacy, broadband

connectivity, ability to print).

Functionality of the current RPA
 platform does not allow tailoring to
 centre on the holding and broaden
 out to see it within the wider
 landscape.

- Current platform does not have functionality to allow for adding features, public good deliverables or land management proposals.
- Not all holdings are registered with the RPA.



Farmers and land managers could be directed to the Defra MAGIC online GIS mapping system, however:

- This Test identified that not all farmers and land mangers are aware of this system.
- Participants that were aware of MAGIC felt they would need training to use it to best effect.
- Although it has more interactive functionality than the RPA platform, it does not currently have all of the features that might be necessary for developing LMPs.

It is therefore recommended that the Defra family explore adding functionality to their current online mapping systems to support the development of LMPs. It would be preferable that the RPA platform is enhanced, as this then would mean that all Plans and agreements would be integrated on the same platform.

Updated full NCA documents:

In order for farmers and land managers to plan and record what public goods they will deliver, they will need an up to date NCA document that fully reflects their holding as part of the wider landscape. The White Peak NCA Profile was last updated in 2014, the Dark Peak in 2015 and the South West Peak Profile in 2013, so these do need updating, particularly in relation to the 25 Year Environment Plan, the 30 by 30 ambition and Agricultural Transition Period public goods language. Indeed, this Test found there was some confusion amongst participants over use of the term ecosystem services and how this related to public goods. Furthermore, there was feedback from a minority of Dark Peak participants that the NCA document did not describe their holding, as it focused too heavily on moorland and didn't include adequate description of the grassland in the valley bottoms, nor did it make enough reference to agriculture. If they are to be used as a key tool within Environmental Land Management, any updates to NCA documents should fully reflect land use and farming throughout the NCA. New opportunities should be considered and included in any review, as these have found to be most useful in the summary.

NCA summaries:

As stated previously, considering their holdings in the context of NCAs and public goods was new to Test participants. They found the full NCA Profile a bit too long, but said the NCAs summary documents were a useful insight into how their holding relates to the wider landscape. The summaries also helped them understand the concept of public goods better and enabled them to see what public goods they are already delivering and what additional public goods they could deliver.

White Peak participants were offered a one page NCA summary, but although this was considered helpful as a familiarisation tool, it was too short. Feedback on the Dark Peak and South West Peak phase slightly longer five page summaries was positive. Indeed the majority of participants felt they provided a useful, informative summary of the full range of public goods delivered by the landscape, in a way which farmers and land managers could relate to.

The carbon ready reckoner:

The need for more and clearer information, about how carbon sequestration and storage might be delivered as a public good and recognised through Environmental Land Management, was highlighted. Carbon tools were seen as a necessary part of this. Participant comments included: "The carbon ready reckoner is spot on and should be used - carbon will be the biggest driver looking forward". Indeed the carbon ready reckoner has been very popular, with high demand for participants to "take it away to play", and other organisations wanting to test its use outside of the scope of the Test.

The carbon ready reckoner is currently intentionally limited by being very simple, as it is aimed at those that are at or near the beginning of their carbon journey. Many thought it was too simple to be able to base any land management or use changes on without full consideration of the whole carbon picture (i.e. fuel use, livestock emissions etc.). However, the carbon ready reckoner proved a positive tool for fostering greater understanding of carbon as a public good. For example, when thinking about carbon on their land, most White Peak participants' first consideration was to plant trees and increase woodland cover. Almost none had considered the carbon storage potential of soils and the impacts their management has on sequestration and storage.

After using the carbon ready reckoner to try different land management scenarios, most participants then went on to think about other changes in land management they could implement in consideration of carbon, including stopping ploughing and replacing ryegrass silage fields with herbal leys. In summary:

- ✓ Further clarity is needed about how farmers and land managers will be rewarded for the carbon they are sequestering and storing on their holding.
- ✓ A simple, accessible carbon tool such as the carbon ready reckoner should be provided. The tool being web-based would make it more accessible but there should also be an off-line version for those with internet connectivity challenges.
- ✓ The tool should have the functionality to be tailored to the habitats relevant to NCAs, with care taken to use language farmers and land managers recognise, rather than the more technical habitat descriptions that agencies and land professionals adopt.
- ✓ The simple carbon tool would need to be regularly updated with the latest adopted/government published carbon factors, for example from the woodland carbon code, the peatland code, the forthcoming hedgerow carbon code and soil carbon code.
- ✓ The soil health functionality of the South West Peak carbon ready reckoner should be explored further with farmers and land managers, as a simple means by which to introduce the concept of soil health and more readily understand soil test results. The soil health data would need to be tailored to the relevant NCA, to reflect the differing properties of various soil types.

More in-depth carbon management assessments and soil testing:

More in-depth carbon management assessment and soil testing was seen as necessary by participants to record changes in soil organic matter, soil carbon and soil structure "to meet the metrics of the relevant level of the ELM agreement". "You need a baseline at the start of the agreement (carbon footprinting/full carbon picture) - then repeat to show how you are progressing."

The budget ready reckoner:

As assumed when commissioning the budget ready reckoner, around 50% of phase one White Peak participants said they financially planned two years ahead or less, and this increased to 60% of participants in the Dark Peak and 71% in the South West Peak. Collectively, over 70% of these planned one year or less ahead. However, in light of such fundamental changes in government payment to farmers and land managers, Test participants strongly conveyed that they require clear information to help them to plan for the future viability of their holding.

The budget ready reckoner has proved a useful tool in demonstrating the level of payments that delivery of Environmental Land Management at scale will require. Of the Test participants that used the budget ready reckoner:

- Half found that increasing public goods delivery, by entering into Environmental Land Management options (at 175% x current CS rates above what they are currently delivering), resulted in them being worse off financially.
- Dairy farms profitable without national support or diversification were most impacted, both traditional and intensive.
- All participants that used the budget ready reckoner to increase their public goods delivery would need a reduction in livestock units across the holding.
- 80% of those that added a woodland option had a resulting decrease in their gross margins.
- Of those that found increasing their public goods delivery increased their gross margin, only three found it increased enough to make up for the loss of BPS and for the farm business to remain viable.

Therefore:

• How payments impinge on scheme uptake needs to be considered, particularly in light of Test participants identifying adequate financial support as one of the key areas of support they require for the delivery of public goods: "If we are being paid for the delivery of public goods, it needs to be a full payment".

- The dairy sector will be one of the most difficult to engage with for Environmental Land Management due to impacts on profitability.
- The need for reduction in livestock numbers, and consequential reduction in income, needs to be reflected in future payments, as well as the value of the public goods delivered.
- If increased tree and woodland cover are to be significant, associated options or outcomes payments will have to be higher than 175% of options currently available.
- Between 80% and 100% of Test participants were dependent on government funding, in the form of BPS and existing schemes. Therefore the loss of BPS is likely to have significant impacts on the viability of a large proportion of farmers and land managers across all three NCAs, with most unlikely to be able to make up the difference by increasing public goods delivery in Environmental Land Management if the payment rate is 175% of current CS rates.

These findings imply that major changes to the farming system and the farm or land management business would be required by the farmer or land manager for Environmental Land Management to be part of a viable and sustainable farm business. A significant proportion of participants felt this would require long-term commitment and certainty from Government in the form of agreements or contracts lasting at least 10 years, with some participants preferring 20 or 25 years, with break clauses. For options such as increasing tree or woodland cover, or landscape change, it was suggested this would require a long -term vision and plan of at least 20 years, with agreements or contracts, and payments, to match. Indeed, the Test found participants that are profitable without national support are more likely to plan financially at least five years in advance, implying that to engage with those that are not reliant on national funding as part of their farm business will require longer-term agreements or contracts, with associated payments.

The budget ready reckoner was found to be a useful tool to help Test participants plan how public goods delivery could work financially in the holding setting. Further recommendations about its future developments are as follows:

There should be the option to automatically transfer existing scheme options into equivalent Environmental Land Management options. This would be particularly useful for those in CS as they would be able to see automatically what payment level will maintain a sustainable business.

The budget ready reckoner was intended to be BPS-neutral, indicating payments once BPS had been removed in 2027. However, when tested it was requested that BPS reductions be included. Now the BPS reduction rates have been published, these can be updated in the ready reckoner, and BPS reductions and loss can be integrated in any future budget planning. This is particularly important if farmers and land managers in other NCAs have the same level of financial dependency on BPS as in the White Peak.

In addition to data/information, this Test showed that farmers and land managers will need some other key things to plan and record which public goods they will deliver.

Time:

Farmers and land managers will need time to assimilate thinking in terms of public goods and new ways of working. For example, throughout the Test participants cited facilitation fund groups as fostering collaboration, however these 'units' took time to develop and become a familiar and accepted way of working.

Farmers and land managers being time-poor was a recurring theme throughout the Test. They tend to work long hours and several participants struggled with the extra reading the Test required. Participants pointed out that 'paperwork' is done in the evening after practical work is completed, which poses an issue for alertness and capacity. Many participants said they don't have time to go through all their emails for example, which, on top of any broadband or wifi issues, means many get missed.

Participants of the field Trial visits pointed out that events such as meetings, training or farm visits help carve out time away from the 'day-to-day' for new concepts to be absorbed. The pre and post Test questionnaires completed by participants support this: understanding of 'public goods', 'national character area', 'nature recovery networks' and other associated terms increased by around 20% due to one full day of participation in the Test.

IT and technology:

An important issue this Test has had to address is the low levels of IT and technology skills amongst a significant minority of participants, particularly when Covid-19 restrictions came in in March and engagement had to move online or over the phone. In the initial White Peak phase of the Test, eight participants from the one-to-ones either didn't use a computer or had very low IT skills, with three specifically saying that they rely on someone from a younger generation (usually someone in the family) for access to emails and other online activities. The third White Peak workshop and all Dark Peak and South West Peak workshops were conducted online using Zoom, which most participants had at least heard of, and some had used, providing some level of familiarity and confidence. The professional facilitator and Project Officer ran drop-in sessions before each workshop for those who had not used Zoom before or who weren't confident with IT. The feedback from these sessions was extremely positive, with one participant who had never used an online meeting platform and had low IT skills confidence subsequently signing up to other online webinars run by Government. Support was also available over the phone with the Project Officer, with some participants using this 'service' after the workshop for other purposes.

Lack of access to adequate broadband and wifi in rural areas has been acknowledged, with various Government-backed funding schemes available to try and tackle the issue. However, for many farmers and land managers across all three NCAs, this continues to be a problem. One participant has even paid for their own upgrades at significant personal expense in order to be able to have sufficient broadband for their business needs.

Affordability of up to date technology is also an issue, especially in the context of small family-run upland farms where technology expenses could be a significant proportion of any outgoings. Technology also has to be appropriate for use in an active farm environment, as some technology is easily damaged, adding to costs.

In summary, this Test found that scheme participants need:

- ✓ A range of maps, provided by government agency, including holding maps showing NCA context and multi-holding plans to support wider collaborative landscape scale delivery.
- ✓ A robust online mapping system, with functionality to support the development of LMPs.
- ✓ Update of the full NCA document, plus shorter NCA summaries (this Test suggests 5 pages is a good length).
- ✓ Clarity about how farmers and land managers will be rewarded for the carbon they are sequestering and storing on their holding.
- ✓ A simple, accessible carbon tool such as the carbon ready reckoner, ideally web-based but with an off -line version for those with internet connectivity challenges.
- ✓ Further testing of the soil health functionality of the South West Peak carbon ready reckoner as a simple means by which to introduce the concept of soil heath and more readily understand soil test results.
- ✓ Soil testing, particularly for SOM and SOC.
- ✓ A simple financial planning tool, such as the budget ready reckoner, to help farmers and land mangers envisage the financial implications of entering various Environmental Land Management options and test out different scenarios. For example, it could help choices between delivering more public goods/becoming more extensive or increasing food production/becoming more intensive.

In addition:

- ✓ Farmers and land managers will need time to assimilate thinking in terms of public goods and new ways of working. Interventions such as meetings, training or farm visits may help them carve out time and these may need to be incentivised.
- ✓ There are significant IT and technology barriers, including a low level skills amongst a significant minority, lack of access to adequate broadband and wifi and affordability of up to date technology.

3. What expert support will participants require to help them plan and record which public goods they will deliver?

Advice:

Without it being a specific question in this Test, the requirement for expert advice emerged from all engagement with participants, across all three NCAs, from the workshops, the one-to-one interviews, the LMP design sessions and the visits to the practical field Trials. Advisers were considered essential 'from start to finish', i.e. from the point of considering whether to enter a scheme to the role of ongoing monitoring and a wide range of points in between.

The role of advisers and the potential skills and knowledge they would need to fulfil these various roles was identified as extremely wide-ranging.

Advisers are relied upon to keep farmers and land managers updated on the latest farming issues and funding that is available. They are often the first port of call for interpreting areas of confusion and results of tests or surveys, understanding regulation or simply when something goes wrong.

With regards to the questions posed in this test, there was a role identified for locally-based expert advisers in helping farmers and land managers prioritise NCA-focused public goods delivery on their holding. With respect to NCA-focused collaboration, only one of the 107 of the farmers and land managers that participated in the Test thought that they could collaborate either with neighbours or for landscape scale delivery without someone to advise or facilitate. It was considered crucial to bring collaborators together and focus activity on the most appropriate public goods for the locality. An adviser or facilitator would also alleviate some of the main concerns around sharing sensitive information and lack of confidence in approaching neighbours.

A third of one-to-one participants and many of those in the workshops said they would need an adviser to help them create their Land Management Plan. This was also a strong message from the LMP design sessions. The adviser could be involved in many facets of this, including applying wider context (for example landscape or NCA context), translating the priorities to holding level, how to translate features into public goods delivery, how to maximise public good delivery and what the opportunities are. Advice was also seen as necessary so that the farmer knows what to do in order to deliver what is expected of them, demonstrate delivery and progress, and avoid penalties.

The practical field Trials also highlighted the importance of expert third parties, in the role of facilitators. Farmers involved in the Trials commented that without their intervention, it would not have happened, with one stating: "I wouldn't have the first clue what to do in which field without.. [named facilitators]".

It was also highlighted in workshops and one-to-one interviews that farmers and land managers have limited time, which impacts on both their capacity to think about things outside their holding and also their ability to practically deliver tasks and projects over and above day-to-day farming. Being inspired and supported by facilitators helps to provide the 'head-space' and frame the necessary thoughts, so time spent on actions can be focused and efficient.

A further benefit of a local co-ordinator is that they can be NCA-based and work to focus both minds and activities on the necessary public goods delivery, building relationships across the NCA.

From experience, emphasised by the results of this Test, farmers and land managers prefer one point of contact. Continuity of staff is key to building relationships and trust with farmers and land managers. One participant said "when they go you lose the connections and knowledge"; another that "I like to see the farm as a balance between production and environmental management, but all my environmental work has come out of a decade or more of working relationship with [named facilitator]".

Being unbiased and the ability to build trust were mentioned throughout the Test as key skills that an adviser would need. Other key skills and attributes identified were local knowledge and practical farming and land management knowledge.

An adviser should be available fairly for everyone, not just those that can afford it. Many expressed concerns over having to pay for advisers and specialists, which most would not be able to afford currently, and would probably become more unaffordable when BPS is lost. Recent quotes obtained by the Peak District National Park Authority are a minimum of £400 per day. It is therefore unlikely that many will be able to justify such an expense in fulfilling their Environmental Land Management ambitions.



Peak District National Park Authority was highlighted as a body to fulfil the advisory role, as it "knows the whole area better than others". However concerns were expressed about resourcing with one participant saying "NPA needs more support" to deliver this role, and another stressing the importance of their advisory and facilitation role being extended out to farmers and land managers they have not worked with before.

It is therefore vital that a trusted, local adviser is available to farmers and land managers to

maximise public goods delivery opportunities from Environmental Land Management and meet the targets set out by Government in the 25 Year Environment Plan and the 30 by 30 ambition.

Monitoring and evaluation:

Farmers and land managers recognised the need for monitoring of Environmental Land Management, but wanted it to be complimentary to delivering agreement or contract outcomes, rather than a process to be feared. They suggested that whoever was monitoring needed to work together with the agreement or contract holder to consider any issues or management that wasn't quite delivering the required outcomes, and look at how to make improvements in delivery in a positive way.

Hefty penalties to date that are often not in proportion to the fault or lack of delivery are acting as a huge barrier to participation in the current CS scheme and potentially Environmental Land Management, with many participants in the Test saying they feel scared of 'tripping up' over regulation or process. Understanding of the regulatory baseline and how public goods delivery can be above this needs to be incorporated into Environmental Land Management. Participants suggested this could be done by having the regulatory baseline shown as part of their Land Management Plan, with an adviser to work with them to resolve issues.

There is appetite for farmer and land manager training, for them to be able to do some of the monitoring themselves, although lack of time was cited as a key barrier to this, as well as lack of knowledge and experience. There was recognition that they would not be able to be a specialist in every area, so would continue to need specialist and local, trusted adviser support.

If farmers and land managers do undertake some monitoring and evidencing, all participants said they would like checks to be done. For some elements they requested checks by an adviser when evidence is uploaded; and for other elements they requested monitoring every one to three years, with five years considered "too infrequent". This is to ensure there is accountability in the spending of public money, to keep people "honest", but also to make sure it is being done correctly and to keep scheme participants enthused. "Monitoring progress and success is crucial – it has not happened enough in previous schemes".

Training, peer-to-peer learning and sharing:

There is potential to deliver some elements of the support called for by farmer and land managers throughout this Test in a one-to-many format or through peer-to-peer learning. In the LMP design sessions, peer-to-peer discussion days were considered to be of medium to high importance. Field Trial visit participants said they found sharing ideas and experiences through such events useful and important, with some saying they gained both knowledge and confidence as a result of the visit.

Facilitation groups were mentioned throughout the Test as an important way to learn and potentially form the basis of collaboration, and that they should be retained as an element of Environmental Land Management.

Training was seen as important by participants to gain specific skills, for example: "I would need training on how to get the best out of MAGIC and any other electronic GIS that might be brought in as a result of ELM". Also, more general training was identified was a means to adjust to new ways of working amidst a busy pressured work-life: "it puts aside time to make you think about an given issue". A combination of expert training support and peer-to-peer learning through, for example, field visits, could be used to introduce and familiarise farmers and land managers with public good concepts and also to help understand how landscape scale delivery might work in practice. Some suggestions about format were offered: "It needs to be small groups, local – rather than presentations and graphs, you need to show pictures of the full spectrum of crop in the ground; management practices; yields; forage analysis; and testimonials. This is really important because presentations and graphs mean nothing to a farmer. And also touching and seeing with own eyes is really important – like in this [field Trial] visit."

Public perception of farming and visitors:

A strong finding of this report is that participants want expert support directed not just at them but also at the general public, in the form of a public information campaign about 1) the public goods they deliver and 2) responsible and acceptable behaviour in the countryside. In the White Peak phase, public education on farming and responsible use of the countryside was mentioned in all three workshops and by over a third of one-to-one participants. When Dark Peak and South West Peak participants were asked what barriers there were to delivering public goods and also what support was needed facilitate public goods delivery, by far the most common responses were education of the public, positive PR and recognition and support for managing visitors. Indeed in both these NCAs there were nearly twice as many responses on the issue of public engagement as there were for the next highest priorities identified - adequate financial support and the need for the future scheme to be flexible/site specific. The general feeling was that the public were not at all aware or supportive of farmers' and land managers' endeavours on their behalf. One participant expressed it as follows: "Public goods is a good idea, to get the public on board with what farmers are putting back into the environment and stop the anti-farming feeling that is currently about". Another participant gave an interesting practical suggestion of developing an app that would allow members of the public to see what public goods are where, to help the public "fully enjoy the countryside".

One of the findings of the White Peak phase was the enormous scope for enhancing the visitor experience of using the extensive White Peak rights of way network, by developing nature networks and connectivity along these, in line with the White Peak practical field Trials. The White Peak is one of the most popular areas of the English national parks. Previous research has shown that many people feel more comfortable using the traffic-free trails, green lanes and footpath network in the White Peak than they do in the more remote moorland landscapes of the Dark and South West Peaks. There would therefore be benefits in communication and interpretation of public goods delivery in this area.

The benefits of existing and increasing levels of access across all three NCAs are recognised, but this can lead to conflicts between visitors and countryside users, and the farming and land management community. For example, gates being left open or dogs not on leads can use up a lot of a farmer or land manager's time, can lead to harm to livestock and associated financial losses, and indeed, can impact on mental health. Many farmers and land managers wanted to welcome visitors and help people of all backgrounds to enjoy the countryside for their physical and mental wellbeing, but there is a need to encourage responsible visiting, particularly highlighted when Covid-19 restrictions were eased in June after the first lockdown period. Over a third of participants have diversification enterprises on their holding, most of which are related to tourism, e.g. holiday lets, camping, café and shops/direct sales. Educational visits and public information campaigns could be used to better share the story of the public goods farmers and land managers are delivering, and provide an important opportunity for Environmental Land Management and Government.

In summary, the expert support identified by this Test is as follows:

✓ Advisers

- ° Local, with longstanding relationships, unbiased, trusted, with practical knowledge of farming and land management
- ° Fairly available for everyone with respect to cost and access to opportunities
- ° To support the translation of NCA priorities to a holding level, to support the creation of a LMP and to help understand regulatory and contractual requirements and avoid penalties

✓ Facilitators

- ° to bring potential collaborators together to deliver at a landscape scale
- to see both the big picture and also be familiar with the holding scale detail for each participating farm
- ✓ Regular monitoring and evaluation
 - ° More frequent than in previous schemes
 - ° Supportive, rather than looking to catch participants out
- ✓ Training across themes including: familiarisation with public goods delivery, NCAs etc.; mapping platforms; developing LMPS; self-monitoring
- ✓ Peer-to-peer learning and sharing
- ✓ Support for managing visitors, with much stronger recognition that offering access is a public good
- ✓ Expert support directed at the public to promote understanding about 1) the public goods farmers and land managers deliver; and 2) responsible and acceptable behaviour in the countryside.



Concluding remarks

This Test concludes that National Character Areas are a good framework for designing some of the building blocks for Environmental Land Management. In particular, farmers and land managers identify with and relate to the features which give the White Peak, the Dark Peak and the South West Peak NCAs their sense of place. This means farmers and land managers are much more likely to engage with Environmental Land Management and deliver more and better quality public goods. The NCA summary in particular has highlighted to farmers and land managers that the public goods they are delivering, and could further deliver, are valued beyond food production.

Participants would like recognition of the public goods they are already delivering. Holdings in the Peak District are predominantly family-run farms, with little scope to intensify within the business, so many have been delivering a high level of public goods for several years. One participant said: "we have 500 cows but you wouldn't know it" - low input, no plough and habitat creation are an integral part of their business. This recognition needs to be financial, but also through increased public understanding about the range of public goods farmers and land managers deliver, alongside high quality food production.

What has become apparent is the anxiety farmers and land managers are feeling from the public and Government pressures, in particular around livestock farming and the interaction with climate change. When asked about carbon and climate change public goods delivery, the main response was tree planting, probably in reaction to the high profile this has had in the media. There are multiple public goods delivery benefits from expanding tree and scrub cover, however this Test identified concerns that pressure to do so might impact on other public goods such as species rich grassland, moorland and archaeological features. Ensuring "the right tree, in the right place, for the right reason" was a strong message from this Test.

Many Test participants face the confliction of having diversification enterprises reliant on tourism, but not all visitors behaving or using the farmland and the countryside responsibly. Participants would like Environmental Land Management to help them play their part in public education on responsible visiting and reconnecting the public with farming and the countryside. Several participants expressed their willingness to host educational visits.

This Test has been truly farmer and land manager led. Whilst there have been specific questions to answer to ensure the objectives of the Test have been met, all the findings set out in this report have come from the farmers and land managers involved.

Farmers and land managers that participated have appreciated the chance to input, and have embraced the principle of co-design. The importance of their input and recognition of their value has been emphasised through the payment for their time, and has helped to dispel any thoughts that their input might be 'tokenistic'.

The workshops have been particularly useful in bringing together farmers and land managers who would not normally interact, and have helped to show the full range of opinions that individuals have on different topics and ideas. Valuable learnings from this Test can be used going forward in finding new ways to bring farmers and land managers together and how to share thoughts, opinions and experiences in the wider farming and land manager community.

This Test has stimulated a desire from participants for more information, sharing of ideas and getting ready to explore Environmental Land Management together. This provides a huge opportunity right now to build on the interest the Test has stimulated, but it is currently unclear how to maintain this momentum in the context of limited time and resource.

Concluding remarks 26



Appendices

Appendix 1 - Dark Peak NCA Summary

Appendix 2 - South West Peak NCA Summary



Dark Peak National Character Area

Summary for land managers considering the new Environmental Land Management scheme

Produced by the Peak District National Park Authority as part of Defra's Tests & Trials

The Dark Peak is an upland, gritstone landscape of open moorlands, reservoir valleys and in-bye pasture.

The unenclosed moorlands on peat and mineral soils are made up of blanket bog, heathland, rocky edges and rough grassland. Most of the moorland is of international value for its habitats and species, especially upland birds, with designations covering almost half the Dark Peak. The blanket bog has a history of being in poor condition, but considerable efforts over the past few decades have begun to reverse this.

The moorland edges and in-bye support livestock grazing, either on wet rushy or tussocky grassland, or more improved grassland lower in the valleys. These fields can provide feeding and nesting areas for wading birds such as lapwing and curlew. Some unimproved pastures support internationally important populations of grassland fungi.

There are several major reservoir valleys in the Dark Peak that provide drinking water to surrounding urban populations, including Sheffield and Nottingham. These valleys are flanked by large conifer plantations, but in smaller cloughs and valleys with fast-flowing streams, there are remnants of ancient oak and other broadleaved woodland.

The Dark Peak has been important to people for thousands of years, with Stone Age remains found beneath the blanket bog, Bronze Age stone circles, Medieval settlements and field enclosures, and industrial remains related to coal mining, production of millstones and lead smelting.

There are several large historic houses with associated parkland and wood pasture, important for large old specimen and veteran trees.

The position between several large urban populations means there are high numbers of visitors that come to visit iconic stately homes like Chatsworth, walk in the open access areas to achieve a sense of remoteness and tranquillity, or climb the renowned Stanage Edge.

Public goods

The new Environmental Land Management scheme is being designed using public money to support the provision of public goods.

In this context, public goods are benefits to society for which there is no direct financial or economic return to the land manager.



Cultural heritage and recreation

The Dark Peak is known for its underlying gritstone. There are several important geological features, including one of the largest inland landslides in England at Alport Castles and one of the best examples of a rotational landslide at Mam Tor. There are 11 geological Sites of Special Scientific Interest (SSSIs) in the Dark Peak; all except one are in favourable condition, plus an additional 75 designated local sites of geological interest. The edges and tors and their boulder-strewn slopes and screes make particularly distinctive features in the landscape, and are extremely popular with rock climbers and scramblers.

Around 50% of the Dark Peak is open access land, and with over 800 miles of public rights of way plus several long-distance walking trails, the area is popular with visitors looking to experience a sense of 'wildness' in the landscape. The dramatic moorland plateau in particular, with its long views, gives a strong sense of place.

With the area popular for a range of other outdoor activities, including gliding, cycling and watersports, providing responsible visiting opportunities, with capacity to accommodate the increasing numbers, will be important in protecting the full range of public goods the Dark Peak can deliver.

The importance of the area for people has been enshrined in the mass trespass on Kinder Scout in 1932,



which led to the formation of the UK's first National Park - The Peak District - in 1951, covering 84% of the Dark Peak. However, there is a rich sense of history which pre-dates this by several thousand years, with archaeological remains from the Stone Age, around 10,000 years ago, having been discovered beneath the blanket bog. Extensive woodland clearance by the Bronze Age led to the formation of the peatland landscape we know today, but the area has been in continuous use by communities since, with archaeological evidence ranging from cairns and burial mounds, to coal mining, lead smelting and,

perhaps most iconic, the production of millstones.

The barrows in particular are indicative that whole farming communities have been living and working in the Dark Peak since the Bronze Age. The in-bye valley fields are typically enclosed by dry stone walls, with hedgerows either alongside or replacing the walls in the valley bottoms. Most of the valley enclosure patterns and settlements that can be seen today are from the medieval period, with some strip fields from this time remaining around valley settlements like Castleton. Higher up towards the enclosure line, some farmsteads represent intake from the moor between the 14th and 17th centuries. The challenge now will be to retain this distinctive sense of history, whilst making sure habitats and species can adapt to a changing climate through sustainable land management.



Thriving plants and wildlife

The peatland hosts a distinctive array of wildlife, from rare plants such as bog rosemary and sundew, to a rich variety of upland invertebrates such as bilberry bumblebee and green hairstreak butterfly. Important populations of wading birds like curlew and upland specialists such as merlin and red grouse that prefer the open feel of the moorlands breed here. The Dark Peak and South Pennines are host to England's only mountain hares.

Almost half the Dark Peak is designated for its important habitats and species. Ecological SSSIs cover almost 41,000ha, but only around 4,000ha (10%) are in favourable condition. Blanket bog and heathland make up most of the area of the SSSIs, covering over 35,000ha, but only 1% of bogs are in favourable condition, whilst 15% of heaths reach this status. There is a long history of the blanket bog being in very poor condition due to a multitude of factors including air pollution, drainage, burning, wildfire and overgrazing, so it is likely they will take a significant amount of time to recover.

There has been a huge effort by moorland owners in the past 20 years to restore the blanket bog by gully-blocking, sphagnum moss reintroduction and revegetation, which has helped to move much into Unfavourable Recovering condition. Of the bogs and heath that are not yet in Favourable condition, 96% of bogs and 99% of heath are said to be recovering. Of these, 30% haven't been reassessed by Natural England in the past 10 years, which means more may be in favourable condition due to the restoration conducted in this time. Of the bogs that have been recently assessed, the main reasons for not achieving favourable condition were due the length of time they take to recover, plus remaining gullies which have not yet been blocked and small areas of bare peat, meaning sphagnum moss cover and plant diversity aren't yet high enough. For heath, bracken invasion and localised overgrazing are a problem in many areas.

The Moors for the Future Partnership have produced guidance for land managers on the best ways to improve and manage bog and heath habitats, depending on its state¹.

Issues that still pose a risk to moorland habitats and species include wildfire, bird of prey persecution and infrastructure.

The ancient and semi-natural oakwoods are important for birds that are experiencing large population declines elsewhere. Patches of broadleaved woodland tend to be small and isolated, with the majority of the woodland made up of conifer plantations. There is opportunity to convert conifer plantations to broadleaf, as is already happening in the upper Derwent and Longdendale, and to increase the amount of native woodland and scrub.



Areas of bracken often contain plants that indicate there was once open woodland present, such as bluebells, so could be suitable for tree planting. Wood and scrub pasture in the in-bye, such as that present as part of existing and former estates, can offer opportunities to graze livestock whilst providing them with shade in hot weather, along with several other public goods.

The majority of the land is agricultural grade 4 or 5, so there is opportunity to introduce flexibility into the management of the marginal land, including extensive grazing that will allow a more diverse mosaic of habitats and vegetation to develop, including species-rich grasslands, which can help species respond to climate change.

¹ www.moorsforthefuture.org.uk/our-resources



Clean and plentiful water

High rainfall combined with impervious rocks makes the Dark Peak a valuable drinking water catchment and a large number of reservoirs have been constructed, such as in the Longdendale and Derwent Valleys. Reservoirs in the Peak District provide about 450 million litres of clean drinking water each day to adjacent areas and urban populations such as Manchester, Sheffield, Derby and Leicester.

When the blanket bog is in good condition, the water that runs off it into the reservoirs is cleaned thanks to special sphagnum mosses. However, much of the blanket bog in the Dark Peak has been damaged, meaning carbon from peat dissolves in the water, staining it brown, heavy metals can be flushed into the water causing pollution, and streams may become more acidic. Gully blocking and subsequent sphagnum and other vegetation build up can result in a 90% reduction of particulate organic carbon² in the water flowing from the moors, having a significant effect on water quality.

Most abstraction in the Dark Peak is for public water supplies, which severely limits the water available for other requirements. For example, there is no water available in the rivers Alport and Ashop, and the Noe is over-abstracted. The River Derwent as a whole is over-licensed and as a result no water is available in all tributaries to protect flows in the Derwent.

The Derwent is the main river that flows from the Dark Peak. All tributaries of the Derwent in the Dark Peak are classed as moderate due to persistent hazardous substance called PBDE. As sewage treatment works get better, the amount finding its way into these rivers should decrease, but this is the only known way to decrease the load.



Environmental hazards - flooding

Many fast-flowing streams drain the moorland plateau and the headwaters of many rivers including the Derwent, Don, Noe, Goyt and Etherow (the latter are both tributaries of the Mersey) rise in the Dark Peak.

The blanket bog has a significant impact on the speed with which water reaches communities at risk of flooding because so much water passes over and through it. In good condition, bogs store and slowly release large quantities of water, but when the vegetation is damaged or removed, rain water flows more quickly off the moors. Re-vegetating bare peat and blocking grips helps reduce the rate and amount of water flowing downstream during high rainfall. Sphagnum moss can absorb up to 20 times its weight in water, keeping the water on the hill for longer, reducing the likelihood and impact of flooding in the streams. Restored catchments can increase the storm-flow lag time by over 250% and decrease the amount of water flowing from the moor during a storm event by almost 40% ².

Further downstream, natural flood management techniques offer cost-effective ways to reduce flood risk: re-naturalising watercourses, creating 'leaky' woody dams within and alongside streams, and planting or allowing trees and taller vegetation to grow next to watercourses or on vulnerable steep slopes.

² Restoration of Blanket bogs; flood risk reduction and other ecosystem benefits. Report of the Making Space for Water project. Moors for the Future, 2015.



Carbon and climate change

Significant climate regulation is provided by the large expanses of deep peat habitats (37,000ha or 43% of the Dark Peak), which have a carbon content of 20-50% and provide high levels of carbon storage. In the Peak District, around 20 million tonnes of carbon is stored in the peat. Blanket bogs therefore play a vital role in tackling climate change. Unfortunately these soils have been extensively damaged by atmospheric pollution and historical land use, and many blanket bogs in the Dark Peak were in such poor condition that they were releasing carbon rather than taking it in.



As a result, the restoration and management of the peatlands to allow them to take in carbon and increase carbon storage are hugely significant. Bare and eroded areas of peat need to be re-wetted and re-vegetated with sphagnum and other plants, and any activities which may damage the bogs should be restricted, for example overgrazing, the creation of tracks, soil compaction and unsustainable burning regimes.

Other soils are also important for carbon storage, particularly permanent pastures with healthy soils, and especially if they have a diverse range of plant species. Herbal leys can have a similar effect, as growing plants with different root lengths can bring up a variety of different nutrients from the soil. Deep rooting plants in particular help take carbon into the soil, where it's used by bacteria to unlock nutrients that would otherwise be unavailable to the plants. These processes help to build soil fertility so reduce the need for artificial fertilisers, as well as offering extended grazing during drought periods.

The existing woodlands perform a role in taking in and storing carbon, though this is limited due to the relatively low woodland cover of 10%. The area of woodland cover could be expanded, especially in moorland cloughs, and along moorland edges and river valleys. It is important to ensure that the existing woodlands are in long-term sustainable management. Well-managed woodlands and wood pasture could be used for grazing livestock, local wood fuel and sustainable timber products alongside their carbon role.

Agriculture accounts for 51% of UK methane emissions, which accounts for around 5.5% of the country's total greenhouse gas emissions. 90% of methane emissions from agriculture come from livestock. Although greenhouse gas emissions from UK beef are about half the global average, British farming has an ambitious goal to reach net zero greenhouse gas emissions by 2040.



Clean air

The agriculture sector is the main source of ammonia air pollution, accounting for 88% of UK emissions in 2016³. Ammonia reacts with nitrogen oxides and sulphur dioxide to form secondary particulate matter which significantly impacts on human health. Ammonia is deposited as excess nitrogen, which wild plants can't cope with. Ammonia is emitted during storage and spreading of manure, slurry and artificial fertilisers. Key measures that can reduce ammonia emissions include covering slurry and manure stores, using low-emission spreading equipment such as slurry injectors, trailing shoes or hoses, and optimising feed dietary protein content, matching to nutritional needs. New regulation to require some of these actions is likely to be introduced in the next 5-10 years.

³ Clean Air Strategy. Defra, 2019.

South West Peak National Character Area

Summary for land managers considering the new Environmental Land Management scheme

Produced by the Peak District National Park Authority as part of Defra's Tests & Trials

The South West Peak sits at a crossroads where upland meets lowland at spectacular gritstone edges, north meets south and east meets west. The South West Peak is scenically and distinctly diverse. It is an upland landscape, with open moorland at its core dominated by blanket bog and heathland, often enclosed into large parcels. The fringes fall away to gentle slopes, dissected by steep wooded cloughs. Fast-flowing streams at lower elevations open out to form wider river valleys characterised by permanent grassland with rushy pasture, species-rich hay meadows and improved productive farmland. This is a traditional working landscape created by generations of farming, dominated by livestock farming. The fields are small or medium and mostly bounded by drystone gritstone walls, with some hedgerows lower down the slopes. The landscape is dispersed with small settlements, traditional farmsteads and isolated field barns predominantly built of local stone reflecting the geology, history and local building traditions.

Nationally important historic landscapes and cultural heritage add to the strong sense of place. The rich heritage ranges from prehistory to the modern day, with features particularly from the medieval period.

13% of the South West Peak is designated as Sites of Special Scientific Interest (SSSI). The area supports internationally important mosaics of habitats, which in turn host species such as merlin, curlew, lapwing and skylark.

The peaty moorland soils, where they are in good condition, can store significant amounts of carbon and water, with wide-reaching benefits for water quality, climate regulation and wildlife. This is also an important area for water supply. Eight rivers have their sources in the uplands of the South West Peak, with several running into reservoirs that supply water both within the area and to nearby towns and cities.

Though lesser known than some other areas of the Peak District, the South West Peak is important for recreation and tourism thanks to open access areas, wide-ranging views and a network of footpaths and country lanes. Distinctive features such as The Roaches attract visitors from further afield, but visitors and locals alike can appreciate the sense of tranquillity from quiet enjoyment of this relatively undiscovered area of the countryside.

Public goods

The new Environmental Land Management scheme is being designed using public money to support the provision of public goods.

In this context, public goods are benefits to society for which there is no direct financial or economic return to the land manager.



Cultural heritage and recreation

The South West Peak has a strong cultural heritage, with a sense of history going back many thousands of years with the remains of Mesolithic and Neolithic settlements, field systems at Lismore Fields and the many Bronze Age barrows visible around the margins of the valleys. The medieval dispersed settlement pattern is still a distinctive feature. Remnants of coal mining, including spoil heaps and buildings, and surviving mill buildings along the rivers provide links with the area's more recent industrial past.

The history of upland farming can be seen in the distinctive intricate medieval field patterns and the later stone wall enclosures of the 18th and 19th centuries, mainly in the lower lying areas. Aspects of social history important to residents and tourists include the large estates of Lyme Park and Swythamley Hall.

Other historic features reveal the inter-relationships between geology, climate, ecology and land uses and activities. They include the pack horse routes crisscrossing remote parts of the moorland, the small stone-built bridges and traditional fords crossing streams, and the use of local gritstone as the main traditional building material.

The South West Peak offers some of the most accessible upland outdoor recreation opportunities in England. Open access land covers around a sixth of the area, and is a popular destination for walkers and climbers from the surrounding towns and cities, including rock climbing on the distinctive Roaches and Ramshaw Rocks. There are over 1,000 km of rights of way, which offer local people and visitors the opportunity to experience the traditional patchwork created by generations of working the landscape, as well as easier walking at reservoir sites such as Tittesworth, Errwood and Fernilee.

This area is extremely important in providing an experience of open spaces for the many people living in the adjacent urban areas. The relative accessibility and road links from major urban populations in the West Midlands and Greater Manchester suggests that current visitor pressure will continue, particularly in 'honey pot' locations such as The Roaches and Goyt Valley. Careful management may be required to safeguard some of the South West Peak's special qualities and sense of place. A sense of tranquillity is still strongly associated with the smaller, quieter river valleys and the core of high open moorland.

The South West Peak has the potential for visitors to better enjoy and understand its historic features and distinctive landscapes through improved interpretation and access, and education to encourage responsible visiting. Promoting sustainable tourism that integrates visiting with enhancement of the natural, cultural, archaeological and geological features would allow visitors to better experience this traditional landscape, whilst preserving what makes it special and providing income for local people and marginal farm businesses.



Thriving plants and wildlife

The South West Peak supports a range of habitats in an intimate mosaic of moorland, grassland and woodland. It is the interaction of this mosaic of habitats which contributes to the wildlife interest of the area, creating the complex and distinctive landscape we see and enjoy today.

The high value for biodiversity is reflected in the proportion of the area that is protected through national and European nature conservation designations. A total of 13% of the area is covered by international and national nature conservation designations - Special Area of Conservation (for habitats), Special Protection Area (for wildlife) and SSSI. A further 9% is designated as local sites of importance.

Leek Moors SSSI covers the largest proportion of the area, representing an extensive tract of semi-natural upland and upland fringe typical of the southern Pennines and supporting several plants and animals at the southern limits of their English distribution, such as cloudberry. Much of the Leek Moors are in Favourable or Recovering condition due to the ongoing work to restore the blanket bog, which needs to continue by re-wetting and careful management with appropriate grazing.

The diversity and condition of the moorland habitats, and their flow into the fringes of grassland and wet rushy pasture is incredibly important. Associated with this intimate mosaic of vegetation, maintained by traditional livestock farming, is an outstanding assemblage of upland breeding birds that often rely on both the moorland and enclosed farmland. The South West Peak is a particularly important hotspot for wading birds like curlew, lapwing and snipe, that take advantage of the closeness of moorland and wet grassland for nesting and feeding. Although populations are declining, as elsewhere throughout the country, the decline is less severe here, and with appropriate management by grazing and controlling rushes, the area has the potential to be a focus area to target recovery of these birds.

The enclosed grasslands are varied, with a combination of wet rushy pasture, semi-improved and improved

fields. Although rare, hay meadows are still a distinctive feature in the South West Peak, and are among the most diverse in the Peak District. There are many opportunities for restoration and creation of hay meadows and speciesrich pasture that can highlight and enhance the farming heritage of the area.

Despite the strong character of the habitat mosaics, many habitats have become fragmented. Opportunities to restore and enhance links, for example by expanding and



linking areas of native woodland, would restore the diversity to the mosaic and ensure a strong and resilient nature network that can adapt to climate change and support its unique range of wildlife.

The South West Peak Landscape Partnership is a group of organisations working to restore, protect, and improve this distinctive landscape of the south western area of the Peak District National Park. The Partnership is working with local communities to enhance the public goods that flow from the natural environment, by supporting sustainable farming in the area alongside hay meadow restoration and working to save iconic species like curlew and the endangered white-clawed crayfish.



Clean and plentiful water

Due to its location, the South West Peak receives relatively high rainfall. The headwaters for many major rivers are found on the moorlands. The geology makes the area suitable for reservoir construction to hold water from these upland streams and rivers. The Errwood and Fernilee reservoirs fed by the River Goyt provide drinking water for Stockport and its surrounding area. Lamaload reservoir in the west supplies Macclesfield, and Tittesworth reservoir in the south provides for any increase in water demand in Leek, Stoke-on-Trent and the surrounding area.

Fast-flowing streams dissect the South West Peak landscape, forming cloughs on the moorland edge. Flow rates vary, especially after heavy rain. Work to restore the blanket bog and other moorland habitats will help to slow erosion of peat into the water as it flows from the moors, reducing the amount that ends up in the rivers and reservoirs. This means the water needs less processing to make it drinkable, reducing costs for consumers.

There are issues with water availability in the area: the River Dove and the River Manifold are 'over abstracted', whilst the upper River Dane has 'no water available'.

Water quality is mostly 'Moderate', but some watercourses are classed as 'Poor'. Main issues are diffuse pollution and agricultural run-off, sewage effluent and, locally, industrial discharges. Farmers and land managers have a part to play in addressing sources of pollution.

Maintaining and enhancing the mosaic of habitats and good soil management, particularly along watercourses, will prevent erosion and manage run-off and diffuse pollution.



Environmental hazards - flooding

The topography of the South West Peak means that watercourses respond rapidly to high rainfall events and may cause rapid run-off and large amounts of sediment being washed off into the water, causing localised flooding along the valleys and affecting settlements downstream beyond the South West Peak.

Restoring the blanket bog and increasing sphagnum moss and other vegetation provides a natural solution

to slowing surface water flows and increasing water storage.

Natural flood management of watercourses, including increasing vegetation along the riverbanks, installing woody debris and allowing rivers and streams to take their natural course, is a cost-effective way to slow the flow. This is particularly important



considering likely changes to rainfall patterns, especially more storm events, arising from climate change that could increase sediment run-off and hydraulic scour of rivers. The South West Peak Landscape Partnership's Slowing the Flow project aims to reduce flood hazards for at risk communities and protect local water sources by reducing silting and agricultural run-off.

Land management practices are important to improve soil structure, water infiltration, and storage of surface water run-off. Minimising compaction and the risk of capping on wet soils by not over-grazing, not encouraging poaching and reducing mechanised activities will retain water for longer in riverside meadows and pastures.



Carbon and climate change

In the Peak District, around 20 million tonnes of carbon is stored in the peat. Blanket bogs play a vital role in tackling climate change. Peatlands in the South West Peak offer a significant carbon storage function. Blanket bogs sequester carbon where there is an active sphagnum moss layer, while damaged bogs can release their stored carbon.



As a result, the conservation, restoration and management of the peatlands to allow them to take in carbon and increase carbon storage are significant and a priority for action. Bare and eroded areas of peat are being re-wetted and re-vegetated with sphagnum and other plants. Any activities which may damage the bogs need to be restricted, for example overgrazing, the creation of tracks and soil compaction. Climate change

that results in warmer drier summers could cause peat soils to dry out and cause further losses of carbon, as well as affecting the vegetation and wildlife.

Other soils are also important for carbon storage, particularly permanent pastures with healthy soils, and especially if they have a diverse range of plant species. Herbal leys can have a similar effect, as growing plants with different root lengths can bring up a variety of different nutrients from the soil. Deep rooting plants in particular help take carbon into the soil, where it's used by bacteria to unlock nutrients that would otherwise be unavailable to the plants. These processes help to build soil fertility so reduce the need for artificial fertilisers, as well as offering extended grazing during drought periods.

Existing woodlands need good, sustainable management so their role in sequestering and storing carbon is maximised. Small-scale native woodland cover could be expanded in some areas.



Clean air

The agriculture sector is the main source of ammonia air pollution, accounting for 88% of UK emissions in 2016¹. Ammonia reacts with nitrogen oxides and sulphur dioxide to form secondary particulate matter which significantly impacts on human health. Ammonia is deposited as excess nitrogen, which wild plants can't cope with. Ammonia is emitted during storage and spreading of manure, slurry and artificial fertilisers. Key measures that can reduce ammonia emissions include covering slurry and manure stores, using low-emission spreading equipment such as slurry injectors, trailing shoes or hoses, and optimising feed dietary protein content, matching to nutritional needs. New regulation to require some of these actions is likely to be introduced in the next 5-10 years.

¹ Clean Air Strategy. Defra, 2019.

Appendix 3 - Methodology for the Dark Peak and South West Peak phase

Participants

Two workshops were held for each NCA, one where all participants were members of local facilitation fund groups, and one of which was advertised more widely.

In the Dark Peak the opportunity to attend the facilitation fund group workshop was shared with members of the Hope Valley Farmers, Bradfield Farmers and Peak District Estate Farmers facilitation fund groups. A maximum of ten places were made available (for separate holdings). Holdings that wished to send more than one participant were judged on a case-by-case basis. Participants were selected on a first-come basis. Participants completed an online pre-workshop survey, which served both as an expression of interest (replacing the paper expression of interest used in the White Peak phase) and was also used to assess knowledge and understanding of the changes in farming and land management support, before and after the workshop. This process was repeated for the South West Peak Farmer facilitation fund group.

The mechanisms used to promote the open workshop had to be adapted from the White Peak phase due to Covid-19 restrictions. Letters were sent electronically to contacts, talks to NFU groups and other farmer and land manager meetings were via videoconference, and as previously, independent agricultural advisers and partnership organisations were asked share details. No posters were produced as was the case for the White Peak phase, because entry to veterinary clinics, agricultural suppliers and livestock markets was restricted due to Covid-19.

The aim was to select participants from the pre-workshop surveys to get a full representative range of farm type, and farmer and land manager demographic from across the NCAs (based on national statistics and the National Park Authority's extensive farmer database). However, the number of potential participants was lower than hoped, perhaps due to more limited advertising and zoom fatigue. In some instances good weather coincided with the date of the workshop and farmers made apologies or did not attend. Therefore, for all workshops we offered participation to all those that wished to attend. Despite diminished numbers, participants still represented a good range of ages, holding types, and holding sizes. Indeed Defra agreed numbers were acceptable and participants were a representative range and that the Test should proceed if the quality of outcomes remained positive, in spite of the limitations posed by Covid-19.

To overcome the potential barrier posed by holding workshops online rather than in person, participants were offered Zoom training drop-in sessions hosted by the facilitator in the days before the workshop.

Due to Covid-19 restrictions, there were limited means of advertising the Test widely, beyond those farmers and land managers that were already engaged with groups, partner organisations or independent agricultural advisers. To address this, Farm Advisors and partner organisations suggested farmers and land managers that were known to them but were not generally involved in groups or projects and perhaps had limited IT connectivity.

Taking the learning from the White Peak phase, all participants were emailed a link to, and completed, an online pre- and post-session questionnaire before and after their engagement (an electronic equivalent of the two-page paper or pdf questionnaires used for the White Peak phase). As previously, these were to gauge changes in opinion and levels of knowledge resulting from participation in the trial, but the SmartSurvey format avoided the need for paper to exchange hands during the Covid-19 pandemic and also the convoluted process of receiving a PDF via email, printing, completing and either scanning in or taking pictures of forms to return via email. It also allows automated rather than manual compilation of responses. For participants in the selected one-to-one interviews that had challenges with IT and using virtual platforms, the pre-questionnaire questions were posted out and completed prior to interview and then entered into SmartSurvey by the project team.

After completing the pre-session questionnaire, but before engagement, participants received a map of their NCA area, a copy of the NCA five-page summary (see ready reckoners below) and the full NCA document (either electronically or a hard copy).

Each participating holding was offered a day rate of £150 (or up to £200 with evidence of employed cover) in recognition of the value of their time. All participants were expected to contribute one full day.

Ready reckoners

The Peak District National Park Authority developed NCA summaries for the Dark Peak and South West Peak and funded the development of two 'ready reckoner' tools, tailored for each NCA. The purpose of these was: to help familiarise farmers and land managers with the characteristics of their NCA, through an introductory summary; to introduce the concept of public goods; and to encourage the exploration of different public goods delivery scenarios for their holding.

NCA summaries:

A five-page summary of each NCA was produced by the Peak District National Park Authority, as feedback from participants of the White Peak phase suggested that a slightly more detailed and inspiring NCA summary document would be useful. These were produced in consultation with the Peak District Land Managers' Forum Brexit sub-group and are available as Appendix 1 and 2 of this report.

Budget ready reckoner:

The results of the White Peak phase showed that almost 40% of the 59 respondents did no financial planning, or planned up only to one year in advance. The Dark Peak and South West Peak phase gathered further information in this respect.

A budget ready reckoner was produced for each NCA, including a simple list of public goods which can be delivered in that NCA, based on habitats, in relation to farming type. The tool is designed for farmers and land managers to see the impacts of entering Environmental Land Management (using hypothetical payments) and increasing or decreasing their public goods delivery on their farm management budget and stocking rate. The tools were developed with a choice of three different payment scenarios. For the Test, the rates were set at 175% of CS where appropriate. Some rates were those used in the practical field Trials.

All Dark Peak and South West Peak workshops had a short second session where the budget ready reckoner was demonstrated. Participants were also offered a follow-up session where they could input their own data.

Carbon ready reckoner:

There has been a lot of information in the public domain regarding carbon emissions and climate change, with particular reference to agriculture. However, one of the assumptions of the White Peak phase, which was indeed borne out in the Test results, was that farmers' and land managers' understanding of and engagement with carbon sequestration and storage was low, leading to low awareness of the influence of land management on carbon.

A bespoke carbon management tool for the Peak District was developed in 2009 by consultants ADAS as part of the Peak District Environmental Quality Mark's Carbon and Water Management Pilot Project to help businesses improve their environmental sustainability. The tool is very detailed, and most farmers and land managers require support to complete it. We understand it is the only carbon tool that models natural habitats with any nuance, that models carbon sequestration and stored carbon as well as carbon emissions, and also can take into account farm diversification activities and report them alongside the agri and land emissions. The Pilot highlighted the limitations of relying on carbon footprinting as opposed to the whole carbon story. For example, the carbon footprint of intensively produced beef will be lower than that produced on an extensive holding delivering species-rich grassland for conservation, but when the stored carbon is taken into account, then the more extensive holding delivers greater carbon public goods.

For the White Peak phase, the consultant involved in the development of the carbon management tool was commissioned to develop a simple carbon ready reckoner, based specifically on White Peak habitats, that farmers and land managers could use to explore what public goods they might deliver in terms of carbon sequestration and storage.

For this second phase, the White Peak carbon ready reckoner was updated with the latest data following the update of the larger carbon management tool in 2020/2021. Two bespoke versions were then created for the Dark Peak and South West Peak NCAs, each with a simple, tailored list of habitats/land management interventions. When the user enters the area of each habitat on their holding, the tool multiplies these by the known figures for carbon emissions, sequestration and storage and the results show the carbon public goods delivery and how changes in habitats/land management could affect carbon storage and release.

Feedback was taken on board from the White Peak phase, that participants found the terminology and meaning of sequestration and storage confusing, did not find it clear whether figures were good or bad, and whether changing scenarios was improving carbon storage and sequestration or not. A simple colour-coding system was incorporated into the design of the Dark Peak and South West Peak carbon ready reckoners, to allow the figures to be more easily interpreted.

It was suggested that more consideration be given to soil type and health, so the Peak District National Park Authority secured funding from the Environment Agency for this work in the South West Peak, helping to link up the work done by the Dove Catchment Partnership and South West Peak Landscape Partnership. Thus the South West Peak carbon ready reckoner was further developed to incorporate indicators of soil organic carbon, soil organic matter (SOM) and soil health. It also included a feature where users could input SOM soil test results and see how these compared to the ready reckoner results and what they indicated about soil health on their holding.

All Dark Peak and South West Peak workshops had a second session where the carbon ready reckoner was demonstrated. Participants were also offered a follow-up session where they could input their own data. The carbon ready reckoners were also demonstrated at four of the five on-to-one interviews.

Workshops

Two workshops were held for each of the two NCAs. Due to Covid-19, and following on from the third workshop held in phase one, all four phase two workshops were delivered by video conference.

Dark Peak workshop one was held in February 2021 with nine participants from eight holdings. Dark Peak workshop two was held in March 2021 with six participants from six holdings. Both South West Peak workshops were held in March 2021 with 16 participants from 14 holdings. Numbers were lower than hoped and possible reasons for this are discussed in Participants, above. Participants were offered Zoom training drop-in sessions the week before the workshop, which were taken up in some instances.

A professional facilitator ran all four workshops. Again, following on from the previous online format, workshops were each split into two sessions over two consecutive days. Session one was to provide background to the Environmental Land Management Test and address the key questions posed by Defra (to explore whether NCAs are a good approach for spatial prioritisation, and whether they are effective for the development of Land Management Plans); session two was to demonstrate the two ready reckoners. Participants were also offered an extra session at a later date to go through either or both of the ready reckoners to input their own figures with the Project Officer. Four participants took part in an extra session.

The Project Officer and Project Lead were present at each workshop to give presentations, and prompt and guide discussion. Results from each workshop were written up by the facilitator, along with additional comments noted by staff.

After a brief introductory exercise (see workshop results), the Project Officer and Project Lead gave a short presentation on the background to Environmental Land Management, the principles of Environmental Land Management design and the Dark Peak/South West Peak phase of the Test.

Participants were then split into groups and asked what could be delivered under specified public goods. A brief definition of public goods, particularly in the relevant NCA context, was provided. They were then asked what farmers and land managers would need in order to deliver the public goods identified.

The workshop then explored what a Land Management Plan for public goods might look like in practice. The headline findings from the White Peak Test workshops were shared. As well as setting out what they thought the key elements of the Plan might be, they were also asked: how their plan might fit with their neighbour's plan and the wider NCA in order to contribute to landscape scale delivery; and how they would demonstrate to Defra they were delivering the public goods, above the legal regulatory baseline, agreed in the Plan. Any other messages for Defra were also invited.

One-to-ones

As Covid-19 restrictions came into place and the Test workshops moved online, it was acknowledged that this would inevitably exclude some Dark Peak and South West Peak farmers and land managers. IT literacy, IT equipment and internet access were major restrictive factors in the White Peak Test. IT skill levels were not high amongst participants, with many relying on relatives (usually younger generations) to help. Most of the participants that were interviewed by phone in the phase one White Peak Test did not know how to use a computer. Some did not have access to microphones or cameras to enable them to use the online methods. Internet connectivity and speed is also an issue in rural locations, with some experiencing intermittent connections only.

Furthermore, the means by which the workshops were promoted had to be adapted from the White Peak Test due to Covid-19 restrictions. Farmers and land managers involved in facilitation or other groups, or engaged with professional advisers, were likely to have heard of the Test through these avenues. However, since entry to veterinary clinics, agricultural suppliers and livestock markets was restricted due to Covid-19 and consequently no promotional posters were produced, those less proactively engaged may not have been aware of the Test.

To address these issues and ensure that input was sought from a full range of participants, a number of farmers and land managers from each NCA were suggested by the National Park Authority Farm Advisers and partner organisations, and invited to participate in one-to-one interviews. Farmers were given the option to be interviewed either by telephone, or at a Covid-safe space they were comfortable with. The content of these interviews echoed the workshops held in each NCA.

As a result, five one-to-one interviews were conducted by the National Park Authority Farm Advisers and also, in one case a consultant farm adviser. Farm Advisers were provided with the background to the Test and regular progress updates from the Project Officer and Project Lead. They also received a training session from the professional facilitator to help them with conducting interviews online and over the phone.

Due to some easing of Covid-19 restrictions, interviews were all conducted at the interviewee's farm, with adequate ventilation, social distancing and personal protective equipment in place.

Land Management Plan template design sessions

This session sought to generate suggestions for what a Land Management Plan for public goods might look like in practice.

In the White Peak phase of the Test, the Land Management Plans were discussed at the workshops and one-to-ones, and this approach was followed through into phase two workshops and one-to-ones. However, it was considered that gaining greater insight into farmer and land manager thinking about the structure, content and format of Land Management Plans would be useful in phase two. Therefore follow up sessions were arranged with workshops or one-to-one interview participants from both Test phases, to conduct a 'deep dive' into what an NCA focused Land Management Plan might look like.

Three of these interviews were conducted for each of the three NCAs that make up the Peak District National Park (three in the White Peak and three in each of the Dark Peak and South West Peak). The White Peak was included as this more in-depth insight had not been gathered in phase one.

The results from the phase one workshops were used to create a table of thematically grouped Land Management Plan potential requirements. These tables were presented to design session participants and they were asked to agree or disagree with these potential requirements. Additional comments and suggestions were also recorded.

Visits to White Peak field Trials

Alongside this Test, the Peak District National Park Authority, in partnership with Natural England and seven landowners, have been running small scale practical field Trials in the White Peak. The aim of the field Trials has been to explore the options for, and practicalities of, delivering a Nature Recovery Network within the productive grassland agricultural landscape of the White Peak, in line with the Lawton principles of 'better, bigger, more and joined' (as outlined in the 2010 White Paper 'Making space for nature'). These include a series of land management options including field margins, herbal leys and structurally diverse wildlife pastures.

Encouraging farmer and land manager buy-in and collaborative learning are further aims of the Trials, as these were considered essential to the success of a Nature Recovery Network, particularly one seeking to influence management of productive farmland. The Trials were all co-designed with the participating farmers. All sites were enrolled in the Field Margin app © Field Margin Limited, with farmers encouraged to track their trial sites progress by uploading photographs and insights into management. The ambition was for this to serve as a platform for knowledge sharing, collaboration and development of shared outcomes essential to delivering change at the landscape scale.

The summary of the field Trials and first year summary report are available alongside this report at https://www.peakdistrict.gov.uk/looking-after/living-and-working/farmers-land-managers/white-peak-practical-field-trials

As part of this phase, three visits to the White Peak field Trials took place on 9 June 2021, 30 June 2021 and 14 July 2021, with 33 farmers and land managers from 27 holdings in attendance. With the exception of two Dark Peak and one South West Peak participant, these were White Peak farmers and land managers that had previously been involved in the White Peak phase (20 from 17 holdings) and White Peak participants new to the Test (ten from seven holdings).

During the visits, each Trial participant spoke about what new land management options they had adopted and why, and what the positives and negatives were for the farm. Comments and questions from the visiting Test farmers were encouraged, for example the 'nitty gritty' of delivery; how establishment techniques and management could be 'tweaked' to make the outcomes better; the financial incentives from the Peak District National Park Authority; the financial and farming benefits of implementing the management (for example less tractor passes and no fertiliser use); and the benefits for soil and wildlife.

Ostensibly the purpose of the visits was to explain the nature and benefits of different land management techniques and encourage farmers to adopt them. However the field trial visits also aimed to explore the following themes relating to collaboration, through discussion and observation:

- Sharing ideas and experiences
- Importance of facilitator(s)
- Would they have approached anyone before about collaboration?
- Does it need 'pioneers'?
- What would help further collaboration, either between themselves or bringing in new farmers?
- What was it about this project that made them want to engage?
- How are Trial participants finding the Field Margin app?

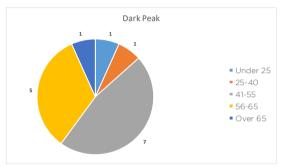
Appendix 4 - Participants

The Dark Peak and South West Peak phase has engaged with 36 farmers and land managers from 31 different holdings across these two NCAs. Each holding is classed as one participant, therefore results are for a total of 31 participants, 15 of which are Dark Peak, 16 of which are South West Peak.

Phase two of the Test also re-engaged with farmers and land managers from three White Peak holdings that had previously been involved in the phase one of the Test through the Land Management Plan template design sessions, and 17 through the field Trial, with one participant contributing to both (thus a total of 19 re-engagements). The field Trial visits also involved seven additional White Peak holdings, new to the Test.

Age of Dark Peak and South West Peak participants

All age ranges were represented by participants, although there were none under 25 for the South West Peak. As with the White Peak phase of the Test, the majority of participants were aged 41 and over.



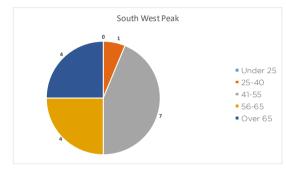
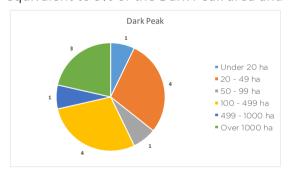


Figure 1: Dark Peak age range

Figure 2: South West age range

Holding size

The Dark Peak element of the Test has engaged participants who manage land covering at least 7800 ha, equivalent to 9% of the Dark Peak area and representing around 3% of Dark Peak holdings*.



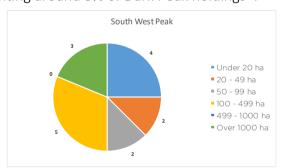


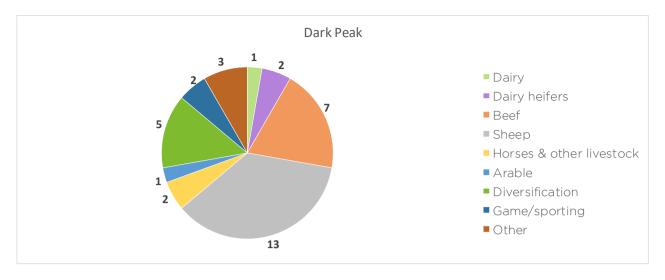
Figure 3: Dark Peak holding size

Figure 4: South West Peak holding size

The South West Peak element of the Test engaged participants who manage land covering at least 6500 ha, equivalent to 15% of the South West Peak area and representing around 2% of South West Peak holdings*.

*Total number of Dark Peak and South West Peak holdings from 2016 www.gov.uk data - Structure of the agricultural industry in England and the UK at June - GOV.UK (www.gov.uk).

Farm enterprise type



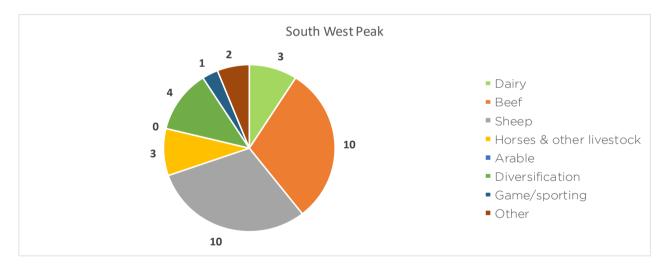


Figure 5: Dark Peak farm enterprise types

Schemes

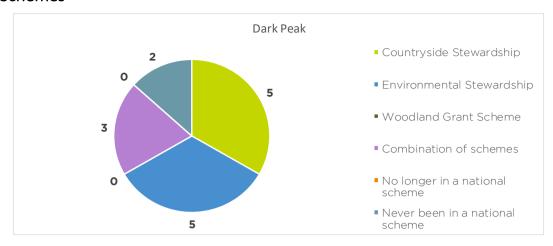


Figure 7 : Environmental schemes—Dark Peak participants

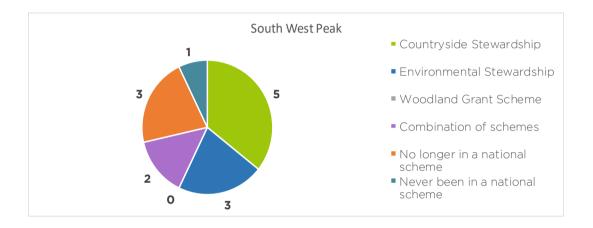


Figure 8: Environmental schemes—South West Peak participants

In the Dark Peak phase, 87% of holdings are currently in a national scheme and for the South West Peak, this figure is 71%. By comparison, 73% of White Peak participants were in national schemes.

None of the holdings participating in phase two of the Test are in receipt of the National Park Grant Scheme*, in contrast to the White Peak phase, in which seven holdings were in receipt of funding from both national schemes and the National Park Grant Scheme, and two holdings were in the National Park Grant Scheme and not in a national scheme.

In the Dark Peak, of those that are no longer in a national scheme or have never been in one (2):

• **2** are dependent on diversification.

In the South West Peak, of those that are no longer in a national scheme or have never been in one (4):

- **1** is a newly registered business not yet 'up and running' with aspirations to "run as a business"
- **2** are dependent on receiving BPS
- **1** is dependent BPS and diversification.

^{*}The National Park Grant Scheme is the PDNPA's state aid approved Environmental Improvement through Agriculture, National Parks, (England and Wales) Scheme 2016-2021.

Finance - The Dark Peak

All holdings except three participating in the Dark Peak phase are in receipt of Basic Payment Scheme, with two of these stating that someone else receives the BPS for their land.

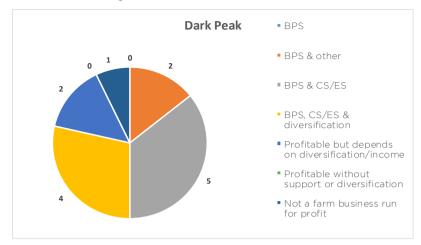


Figure 9: Funding dependence of participating holdings in the Dark Peak

Figure 9 shows which funding Dark Peak farm businesses are dependent on. Of the 14 holdings run as a farm businesses, 11 (almost 80%) are reliant on national support. Of the remaining three, one is not a farm business and has no need to be profitable, the other two are dependent on diversification. Indeed, of the six holdings with diversification enterprises, all six are reliant on these to top up their farm business income.

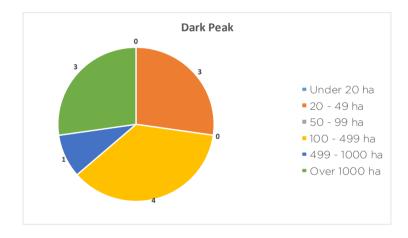


Figure 10: Funding dependence of participating holdings in the Dark Peak (see Figure 9) split by holding size

Holdings of a range of sizes are reliant on national funding, as can be seen in Figure 10. All holdings run as a farm business over 100 ha are reliant on national funding. (This is in contrast to the White Peak phase where all farms under 20 ha were reliant on national funding.)

Three of the four farms in the 20-49 ha category are reliant on national funding; the other is dependent on diversification.

Similarly to the findings of the White Peak phase of the Test, all participants that rent land (five holdings), with the exception of one, are reliant on national funding. The business that is the exception in this case is reliant on their diversification enterprise to be profitable.

Finance - The South West Peak

All holdings except three participating in the South West Peak phase are in receipt of Basic Payment Scheme. One participant has land that is not eligible, the other two state someone else receives the BPS for their land.

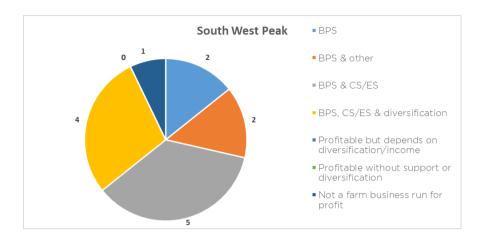


Figure 11: Funding dependence of participating holdings in the South West Peak

Figure 11 shows which funding the South West Peak participating farm businesses are dependent on. Of the 13 holdings run as a farm businesses/land-based enterprises, 100% are reliant on national support. Of the four holdings with diversification enterprises, all are reliant on these to top up their farm business income. Two further holdings are reliant on other employment to top up farm business income.

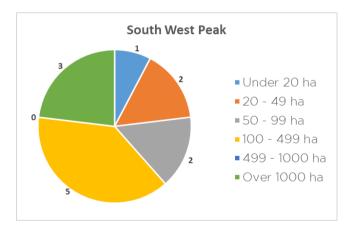


Figure 12: Funding dependence of holdings in the South West Peak (see Figure 11) split by holding size

Holdings of all sizes amongst the South West Peak participants are reliant on national funding, as can be seen in Figure 12.

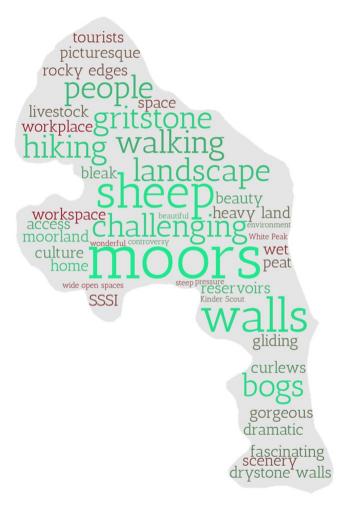
Echoing the White Peak and Dark Peak findings, both South West Peak participants that rent land (2 holdings) are reliant on national funding.

Appendix 5 - Results from Dark Peak and South West Peak workshops and one-to-one interviews

The Dark Peak

The Dark Peak phase engaged with 15 farmers and land managers from 13 different holdings. This was through two one-to-many workshops and also two one-to-one interviews conducted with people for whom the online format of the workshops may have been a barrier. The content of these interviews echoed the content of the workshops.

In the workshops, an introductory exercise asked individuals to introduce themselves and share three words that first sprang to mind when they thought about the Dark Peak. A total of 44 different words/phrases were used.



Responses can generally be grouped into eight categories:

- 1. Visual landscape (27)
- 2. Recreation (7)
- 3. Cultural heritage (7)
- 4. Lived experience (6)
- 5. Food and farming (4)
- 6. Soils and geology (4)
- 7. Physical nature of landscape and environment (4)
- 8. Wildlife (2)

The South West Peak

The South West Peak phase engaged with 16 farmers and land managers from 13 different holdings. This was through two one-to-many workshops.; and also three one-to-one interviews conducted with people for whom the online format of the workshops may have been a barrier. The content of these interviews echoed the content of the workshops.

In the workshops, an introductory exercise asked individuals to introduce themselves and share three words that first sprang to mind when they thought about the South West Peak. A total of 44 different words/phrases were used.



Responses can generally be grouped into nine categories:

- 1. Visual landscape (20)
- 2. Wildlife (10)
- 3. Physical nature of landscape and environment (9)
- 4. Cultural heritage (7)
- 5. Food and farming (5)
- 6. Tranquillity (3)
- 7. Lived experience (2)
- 8. Water (1)
- 9. Soils and geology (1)

Public goods

Workshop participants split into groups and were asked what could be delivered under specific public goods within their NCAs. One-to-one interviewees were also asked this question. In summary, responses were as follows (one-to-one interview responses that were additional to or differed from the workshop responses are shown in blue text):

(Full workshop reports and one-to-one interview records are available upon request.)



Clean and plentiful water/Environmental hazards - flooding

Dark Peak workshop 1 and interviews:

- Herbal leys
- Maintenance of walls, hedges and ditches
- Maintenance of water courses and surrounding habitat
- Moorland restoration
- Natural regeneration of scrub/woodland
- Nutrient management plans
- Path restoration
- Reduction/elimination of fertiliser use
- Semi improved grassland
- Soil restoration/management
- Species rich grassland
- Tree planting right tree, right place
- Works that could help to alleviate flood risk downstream

South West Peak one-to-one interviews:

(Not discussed at South West Peak workshops)

- No use of fertilisers
- Responsible slurry and muck management

Carbon and climate change:

Dark Peak workshop 2 and interviews:

- Increased tree cover
- Elimination of fertiliser use
- Moorland restoration
- Natural carbon sinks
- Reduced fossil fuel use
- Reduced stock emissions
- Soil health/management
- Species-rich grassland

Both South West Peak workshops and interviews:

- Fire prevention
- Hedgerow management
- Maintaining a mosaic of habitats
- Maintenance and management of existing woodlands and trees
- More grass fed livestock
- Natural regeneration of scrub/trees
- No ploughing/minimum tillage
- Organic farming
- Permanent grassland
- Reduce herbicides/pesticides
- Reduced stocking density/extensive farming
- Renewable energy
- Rewilding
- Soil health/management
- Tree planting right tree, right place

(No differing responses from one-to-one interviews)



Both Dark Peak workshops and the interviews:

- Birds
- Grass margins
- Habitat diversification
- Habitat for most threatened species
- Habitat management
- Hedgerow management
- Herbal leys
- Landscape scale design
- Meadows/ hay
- Moorland sphagnum and grazing exclusion trials
- Open Farm Sunday (public engagement)
- Organic farming
- Protecting tranquillity
- Scrapes for water for wildlife
- Soil restoration/management
- Tree planting right tree, right place

Both South West Peak workshops and the interviews:

- Bird habitat and boxes
- Co-operation across landscape
- Flood management/increase wetlands
- Habitat management
- Less intensive practices
- Protect what we already have
- Protecting tranquillity
- Protection of threatened species (waders/curlew)
- Reduced stocking density/extensive farming (cattle)
- Rewilding
- Species rich hay meadows
- Tree planting right tree, right place

During the workshop discussions, the vast majority of responses were not suggestions of public goods, but instead were **comments** expressing concerns around the implications of the proposed scheme, **barriers** that may prevent them from engaging or **support that participants feel they will need** during the transition to the new scheme. (72% in the Dark Peak workshops and 71% in the South West Peak workshops). These are set out below.

This is likely to be due to a number of factors, including impacts from Brexit and the Covid-19 pandemic. For instance, we saw a large influx of visitors to the Peak District during lockdowns, which farmers and land managers have had to manage.

We have separated the responses about support needed and included those with the responses to the relevant question asked later in the workshop.

Dark Peak workshops and the interviews:

South West Peak workshops and the interviews:



Clean and plentiful water/Environmental hazards - flooding:

- Lack of financial support for natural regeneration (1)
- Long time for habitats to recover (1)



Carbon and climate change:

- Not enough clarity on the payments available for carbon and climate change opportunities and what is required (1)
- Tree planting right tree, right place (1)
- Buyers pressuring farmers to farm more intensively, to reduce carbon emissions (2)
- Large buyers want farmers to plant more trees

 should also see the value of grasslands for carbon (1)



Thriving plants and wildlife:

- Concerns about financial viability (3)
- Decline in ground nesting birds, increase in 'wrong' birds, e.g. corvids (1)
- Organic profit in the conversion rather than the organic farming (1)
- Potential weed burden associated with herbal leys
 (1)
- Public perception (1)
- SSSI designation for particular habitats and species, no opportunity to diversify the landscape; works benefit some species but no opportunity for others (1)
- Struggle with muck incorporation opportunities wet land. (1)
- Tree planting might not be appropriate for a hill farm or where important upland birds are (1)

- Impact of/disturbance by visitors (10)
- Public perception (3)
- Cooperation is a challenge (3)
- Cultural change (1)
- Difficult to make changes when there isn't a lot of information (1)



Cultural heritage and recreation

 Have not got the time to do educational talks for Duke of Edinburgh, school parties, walking groups etc. like in the past (1)

Additional comments about delivering public goods

Dark Peak workshops and the interviews:

South West Peak workshops and the interviews:



Clean and plentiful water/Environmental hazards -

- Seeking recognition of what has already been achieved (2)
- Access issues need to improve visitor engagement, education and behaviours (1)
- Active blanket bog largely on tops perhaps more foresight needed for the management of reservoirs e.g. Wentworth Estate do manage water flow in water channels (1)
- Concern about the 'unfavourable but recovering' status of moorland - still - took generations to damage so will take generations to restore (1)
- Concern re tree planting on drained grassland can damage and create more water run-off. Loss of some reservoirs and impact scope to restore? (1)
- Semi improved grassland helps filtration of water, percolation and root penetration (1)
- Some evidence of the benefits of such things as drain blocking and tree planting in terms of alleviating flooding - are exaggerated (1)
- Woodland clough planting perhaps some mixed views on how far to go (1)



Carbon and climate change:

- Consider the whole carbon picture (1)
- Are targets for eating less red meat realistic? Need to consider the comparison with various imports and carbon story behind the products. (1)
- Concerned about livestock being kept outside longer - risk of compaction on wet land (1)
- Concerned about impacts of climate change (1)
- Need to consider planning for renewables (1)
- Seeking recognition of what has already been achieved (1)
- Large buyers putting pressure on farmers (1)



Thriving plants and wildlife:

- Long-term thinking/policies/planning needed (4)
- Predator control is important habitat management/ needed (3)
- Concerns about financial viability (2)
- Arable different variety of wildlife (1)
- Bare soil might not be allowed (1)
- Can provide the environment but some of the above will still be needed (1)
- Decline in ground nesting birds, increase in 'wrong' birds, e.g. corvids (1)
- Don't forget food production (1)

- Concerns about financial viability (8)
- Concerns about uncertainty/need clarity to plan (5)
- Seeking recognition of what has already been achieved (3)
- Predator control is important habitat management/needed (2) (2)
- Good place/core area to provide public goods/ wildlife, maybe more than a lowland farmer (2)
- Balanced approach to tree planting needed (1)
- Balancing productive, less intensive farming and wilding across holding (1)

Additional comments about delivering public goods continued

Dark Peak workshops and the interviews:

South West Peak workshops and the interviews:



Thriving plants and wildlife continued:

- Grass is best natural resource as livestock farmer (1) Being in a national park is a good thing (1)
- Green desert, but this area is more traditional (1)
- Is the term National Park right? Some view the area as a 'traditional' park (1)
- Low inputs mostly here (1)
- Moors are part of livestock breeding programmes, part of the cycle. Three tier system of farming, would have a knock on effect if remove one of the tiers. Dark Peak is the main part of the first tier (1)
- More benefits for 'destroying' then restoring rather than managing it right in the first place (1)
- Need somewhere to nest, summer food and winter food for birds (1)
- Not a lot of mixed farming, potentially less winter food for birds etc. (1)
- Open access is also important for wildlife (1)
- Over- or under-grazing? (1)
- People have to accept that some level of keepering may be required to address the balance or protect specific species (1)
- People have to help farmers to help the public in 'producing' wildlife as a public good (1)
- Public goods is a good idea, to get the public on board with what farmers are putting back into the environment and stop the anti-farming feeling that is currently about (1)
- Opportunities for supporting business, e.g. grouse shooting, but consider other valuable benefits (1)
- Sit back and see what the birds like, see where the birds are (1)
- Tell us how to do it, pay fairly, and will do it! (1)
- Wader project was really beneficial, helped in understanding what the birds required (1)
- Where does farming future fit into it? Subsistence farming will probably not work for the future, creating sustainable businesses. (1)

- BPS is a scheme that no one sees the benefit of apart from the farmer, the public see it as a subsidy to prop up farms with no particular benefit to the public, leaving a bad impression of farming. All payments should have a focus on the environment. (1)
- Break down into land features, how and what can be protected, incorporate all public goods (1)
- Could do collaboration with tenants with a common landlord (1)
- How to engage with more intensive landowners/managers (1)
- Inspections from multiple agencies (1)
- Lots of cross over with carbon, benefits for carbon as well as wildlife, multiple benefits / public goods being delivered (1)
- Moving away from cattle to sheep in this area (1)
- NCA profile is text heavy, maps better (1)
- Needs to deliver on the ground (1)
- Other users apart from walkers, e.g. mountain bikers, off-road motorcyclists have different impacts, e.g. noise (1)
- There isn't any part of the countryside that isn't managed. (1)

Support needed to deliver public goods

Participants were then asked what farmers and land managers would need in order to deliver the public goods they proposed could be delivered in their NCA. In summary, responses were as follows, ranked from most frequent to least frequent (full workshop reports are available upon request):

Dark Peak workshops:

- Public education/training / PR (12) (1)
- Flexible/site-specific approach (6)
- Adequate financial support (5)
- More (clear) information on long-term carbon storage/impacts (3)
- Examples of best practice/science-based evidence (2)
- Recognise and use knowledge of those on the ground (2)
- Recognition and support for managing visitors
 (2)(2)
- Carbon tools (2)
- Assessments of current public good/impacts
 (1)
- Education and behaviour change (1)
- Facilitating collaboration/peer support (1)
- General advice and support must be clear
 (1)
- More evidence of true impact of livestock grazing methods on public good delivery (1)
- Practical, viable rules and proportionate penalties (1)
- Support so farmers feel less isolated (1)
- Trust between farmers/land managers and DEFRA/inspectors (1)

South West Peak workshops:

- Adequate financial support (8)
- Flexible/site-specific approach (6)
- Carbon tools (4)
- General advice and support must be clear
 (4)
- Recognition and support for managing visitors
 (4) (1)
- Support with transition timely, manageable changes and good communication (4)
- Baseline/benchmarking and roadmap (3)
- Site-specific advice (3)
- Advice on soil carbon storage (1)
- Examples of best practice/science-based evidence (1)
- Explanation and agreement on approach to rewilding (1)
- Incentives to stay in cattle farming (1)
- Needs to fit with the business (1)
- Opportunity for different habitat management (1)
- Overarching strategy across landscape (1)
- Planning authorities need to work with farmers and land managers (1)
- Public education, face-to-face rangering (1)
 (1)
- Regulation of buyers and prices (1)
- Trust between farmers/land managers and DEFRA/inspectors (1)

Spatial prioritisation - workshops

The findings from the White Peak workshops clearly demonstrated that the NCA was considered to be a useful framework for both spatial prioritisation and for farmers and land managers to start thinking about developing their Land Management Plans. Dark Peak and South West Peak workshops participants were provided with both the full and summary version of the NCA prior to the event. During the workshop participants were asked to consider if the NCA would work as a framework for prioritising public money for public goods delivery for the future Environmental Land Management approach. Participants went on to explore a number of public goods in greater detail.

There was unanimous support for some level of local prioritisation and the majority of the participants considered that the NCA provided a helpful framework. Quotes from the workshop include "we can relate the NCA description to our farm", "it helped us understand what public goods are", "we hadn't considered the old smelting works on the moor as a public good — until now", "Targeted approach to fund habitat restoration. Right habitat, right place — taking a map-based approach".

Identification with the NCA name

The Dark Peak is well-recognised as the name for this landscape and participating farmers and land managers clearly felt comfortable with this term and easily related to the Dark Peak NCA description and the public goods the area provides. The South West Peak name was not as easily recognised or identified with by workshop participants; however, they still considered that the South West Peak NCA description reflected their holdings and found the document helpful in identifying and prioritising public goods.

NCAs as a mechanism to set and agree local priorities:

It was agreed that overall the NCAs recognise what is unique/iconic about both the Dark and South West Peak landscapes.

The existing information provided in the full NCA document was considered relevant and informative but perhaps needed some updating to include:

- Public goods language
- Recognition of the changes farmers and land managers had already made in the Dark Peak for moorland restoration and clough woodland expansion/creation
- Greater recognition of the range and quality of public goods already being provided by farmers and land managers in both NCAs.

The levels of access and recreation following Covid-19 lockdown increased dramatically including an increase in new audiences (people who had not visited the countryside before). At the time of writing this report it is not yet known whether these increases will become permanent or not.

Who would be involved in the decision making?

Whilst this question was not asked in the workshops, the discussions did echo the findings from the White Peak:

- Defra/national body should be responsible for a national framework with local collaboration.
- Local collaboration would need local facilitators, advisors, specialists and decision makers, for the successful delivery of Environmental Land Management, particularly the co-ordination of landscape scale delivery.

Spatial Prioritisation – one-to-one interviews

The one-to-one interviewees were asked to consider whether localisation of the national scheme was needed, and how this might work in the Dark Peak and South West Peak. The full NCA document and the NCA summary document were given as reference.

There was unanimous support for some level of local spatial prioritisation. Statements included:

Dark Peak interviews:

- Localisation is a good idea for any scheme as the farming situation differs so much
- Localisation good idea
- Localisation of the scheme would be beneficial.
- "The differences between farming in the White Peak only a few miles away and farming in the Dark Peak with heavy soils and fields more prone to waterlogging for example."

South West Peak interviews:

- Localisation is essential to get the best results for each farm
- Localisation of the scheme is needed as every farm is different and the habitats and farming methods are different.
- Localisation is needed as conditions are different on every farm.
- "Just a mile down the road is good dairy land but you can't do that here."

In its current form there were some reservations of the NCA as a mechanism to set and agree local special priorities:

Dark Peak interviews:

"...but can't do it with this document."

South West Peak interviews:

- The NCA document is maybe too sweeping and it must be understood that conditions change from farm to farm in this area.
- "It is not detailed enough, can't use it as a definitive document on its own."
- "I found it very wishy washy."

A particular observation was that there isn't enough focus on farmers and farming in the NCA document. Statements included:

Dark Peak interviews:

- "farming in the valley bottoms [is] not recognised and covered properly."
- "it wasn't particularly aimed at farmers and did not make much reference to farming."

South West Peak interviews:

- The NCA document was useful as a starting point but its lack of information on the farming aspect of the SWP was disappointing.
- It doesn't represent the farming aspect of the area.
- There should be more on the present and future of farming, it focuses too much in the past.
- There is not enough about actual farming in the document, if you want farmers to read the document you have let them know their efforts are helping the landscape around them otherwise they feel unrecognised.

Land Management Plans

Participants were asked to generate suggestions for what a Land Management Plan for public goods might look like, specifically 'Which elements would be the most important to include in a Land Management Plan for public goods?'. In summary, responses were as follows (one-to-one interview responses that were additional to or differed from the workshop responses are shown in blue text):

What elements would a Land Management Plan require?

Dark Peak workshops and 1:1 interviews:

South West Peak workshops and 1:1 interviews:

Principles: should a Land Management Plan be...?

NCA based?

 NCA descriptions relevant to a point, but if there is too much emphasis on the NCA, farmers may view it as lacking relevance and switch off (1)

Map based?

- Options shown on maps with clear simple instructions on map (1)
- Info should be provided, where possible, on a parcel by parcel basis, using a combination of maps and tables (1)
- Maps are the best way of portraying info relating to land management, regulation, public goods opportunities, etc. (1)
- Maps in GIS based app which could be uploaded to the GIS system in the tractor - could allow for accurate manure, fertiliser and lime application, and might deliver other benefits (1)
- Long-term?
- Challenge of tenancies being on 1 or 3 year FBTs. Stewardship currently on 5-year cycle. (1)

Simple?

- Needs clear and straightforward paperwork/process
 (1)
- Simple, plain English, easy to use, clear instructions
 (1)
- Keep the plan succinct and relevant needs to be a working document rather than something that sits on a shelf (1)

- Needs to be map based (1)
- Maps with easy to read codes (1)

Needs clear and straightforward paperwork/ process (1)

Flexible?

- Needs to be flexible (e.g. movable targets, ability to update it over time) (2)
- Recognise many elements of farming/diversification
 are hard to predict (1)
- Something that is holistic & works. Simple & flexible with continuity to what's gone before (1)
- Flexible no set dates to carry out management as timings differ each season (1)
- There should be trust in the farmer on their knowledge of dates for certain management that is needed and also the number of livestock you can put on the ground. (1)

Principles: should a Land Management Plan be...? (continued)

Computer/online based with paper map for wall?

- Online deliverability needs to be simple and foolproof (1)
- Hard copies preferred to email, texts or apps/"not good with IT" (1)

Paper based preferred (1)

Explore availability on app?

Not everyone will want to use an app (1)

Other?

- Recognise/reward current contributions to public goods (4)
- Recognise local/site specificity needed for each plan (3)
- Recognise farmer/land manager knowledge (1)
- Provide confirmation when info submitted by farmer (1)

What should the components of a Land Management Plan be?

General context i.e. 'in a National Park, county?' or NCA context (key public goods, e.g. habitats/species)?

- Include boundary features, access land, within National Park etc. - allows recognition of the value of the landscape and contribution to tourism economy (1)
- Needs clear and straightforward paperwork/ process (1)

Outcomes to aim for in landscape context?

 Agree the relationship between LMP implementation and wider work across the landscape (1)

Current and previous schemes/past management?

 Ability to transfer existing plans/actions into a LMP (1)

Business/ profitability/finance?

• Confidentiality is an important issue - financial and commercial information should not be included in the report (1)

Ambition for the holding?

 Include brief explanation of the interest on the farm and how you plan to achieve the delivery of public goods (1)

Links to other funding (consequences of any changes e.g. buildings, CSF, woodland creation)?

• Identifying funding opportunities in plan, alongside identifying public goods (1)

Process for creating/writing - constructing the offer

NCA context/outcomes to aim for in landscape context?

- Needs a mechanism to show how various plans contribute to wider vision for the area
 (1)
- Plan should be at farm scale, but showing connections to wider landscape scale activity
 (1)

Baseline survey?

- Baseline/natural capital assessment of current
 situation (1)
- Baseline assessments can be quite costly (1)
- An accurate baseline is vital component of plan
 (1)
- Surveys should be done by local trusted advisers (1)

Business/profitability/finance?

 Baseline/natural capital assessment of current situation (2) (1)

Opportunity cost analysis to inform what we want to deliver (1)

Evidencing public goods delivery & value for money?

- Concern there may be different levels of payment depending on condition of the features (1)
- Support to maintain current works (1)

Advice & guidance?

- Farmers need advice/guidance to draw out aims for the farm/holding (1)
- Farmers need advice/guidance with creation of
 LMP time poor (1)
- Farmers need clarity over what to evidence and
 when (1)
- Farmers need clarity on objectives of the scheme and what this means for the farm (1)
- Important to have local adviser with good knowledge of farming and the area (1)
- Local adviser longevity important to build trust/relationships (1)
 - Local adviser needs to be available by phone and take decisions (1)
 - Local adviser to liaise between farmers and those managing the scheme (e.g. to deliver feedback from farmer) (1)
 - Support within local office/base to demonstrate a plan and the key features that need to be considered, with PDNPA officer support available (1)

Overall the prominent responses to the questions posed in the Land Management Plan section of the workshops and interviews were as follows:

Participants in both the Dark Peak and South West Peak were seeking recognition and reward for their current contributions to public goods (eight instances in total - four for each NCA).

Respondents were keen that the plan recognised the local/site specificity (six instances in total, four Dark Peak and two South West Peak).

The concept of the Plan being simple was supported, with a need for a clear and straightforward paperwork/process (five instances, three Dark Peak and two South West Peak).

In response to what advice and guidance might be required, participants were keen that a baseline/natural capital assessment of current situation was undertaken (three instances, one Dark Peak and two South West Peak).

In the Dark Peak, it was stated twice that the Plan needs to be flexible (e.g. movable targets, ability to update it over time - two instances, both Dark Peak).

There was also a call to recognise farmer/land manager knowledge (two instances, one for each NCA).

Two responses in the South West Peak highlighted the need for the Plan to be at farm scale, but showing connections to wider landscape scale activity (two instances, both South West Peak).

Again, two comments from South West Peak participants suggested the Plan needs to be an amendable template to build on and learn from others (two instances, both South West Peak).

Collaboration

Participants were asked about public goods delivery in a landscape/collaborative context.

• How could the plan fit with your neighbour's plan/the wider NCA in order to contribute to land-scape scale delivery?

Dark Peak workshops and 1:1 interviews:

South West Peak workshops and 1:1 interviews:

Mechanisms for collaboration:

1. Landscape scale, holistic, approach led by expert local body

- Some public goods (e.g. clean water) need joined
 up working
- Role of NPA: assist with wide area Natural Capital Assessments; begin to enable people to look at the wider picture; identify most suitable locations for achieving biodiversity gain or delivering other public goods
- Real, large scale map preview of a long-term, holistic view (4)
- Plan should be at farm scale, but showing connections to wider landscape scale activity
- Not just your adjoining neighbour sometimes worth doing a big jump across the landscape then could fill in the gaps
- Wildlife needs landscape scale

2. Ensuring plans work together

- Local advisor/hub to bring neighbours and plans together (7)
- Structured approach/guidance for the area to help neighbours develop plans that work together
- Everyone should get the same info/education
- Local advisor/hub to bring neighbours and plans together (17)
- Structured approach/guidance for the area to help neighbours develop plans that work together (2)

3. Value of groups, clusters and existing relationships

- Value of farm clusters working together (3)
- Build on existing relationships/partnerships (2)
- Share LMPs between neighbours
- Could group tenants from a particular organisation (e.g. United Utilities or National Trust)
- Sharing of enjoyment of farming
- Facilitation fund group has fostered better collaboration/increased understanding of each other (2)
- Facilitation fund group should continue, to meet and exchange ideas
- Importance of existing relationships between landowners & farmers
- Need more regular sharing of info between farmers.

- Value of farm clusters working together
- Build on existing relationships/partnerships
- Share LMPs between neighbours (3)
- Could group tenants from a particular organisation (e.g. United Utilities or National Trust)
- Could group tenants with common landlord
- Group by parish or other smaller areas
- Share lessons learned from existing groups/ relationships already developed.

Collaboration continued

Dark Peak workshops and 1:1 interviews:

South West Peak workshops and 1:1 interviews:

Incentivising, supporting and encouraging collaboration

1. Financial incentives

- Need adequate payment for existing and new delivery, including maintenance work (3)
- Need fair distribution of payments according to who is doing more/less (4)
- Financial support for any additional costs for collaboration

Need adequate payment for existing and new delivery, including maintenance work (3)

2. Support and encouragement

- Need support (guidance and financial) to bring farmers together (e.g. forums/discussion groups) (2)
- Need guidance/advice on the best actions to deliver the public goods
- Unbiased advice

- Early adopters/innovators to show what can be done and encourage others
- Needs good communication from scheme officers
- Advisor longevity is important when they go you lose the connections and knowledge
- Takes a certain skill to bring people together
- NPA needs more support knows whole area better than others

3. Recognising each farm is different

- Recognise different farms have different needs/priorities/goals/opinions (6)
- Recognise different farms have different needs/priorities/goals/opinions (3)

4. Other

• Templates to get final carbon figures.

Collaboration continued

Dark Peak workshops and 1:1 interviews:

South West Peak workshops and 1:1 interviews:

Barriers to collaboration

1. Relationships and joined-up working

- Social relationships/co-operation with neighbours can be difficult (2)
- Commitment may depend on individuals' background, reasons for being in agriculture, reliance on farming for income etc. (2)
- May need a whole mindset change for some
- Individuals may want to protect, preserve and enhance own economics
- Would you get penalised if your neighbour is doing something wrong?

2. Issues relating to tenancies

- Breakdown of relationship/payment between tenant and landlord could impact delivery (3)
- Landowners might have more influence than tenants would do more/less on different land
- Difficult when different lengths of tenancy agreement

3. Technology

- Data ownership management, access and consent considerations (2)
- Different IT skills/broadband speeds could be a barrier
- Needs a good mapping system online, but not everyone will be able to access it
- Cost of new technology

4. Time limitations

- Farmers have limited time
- Possibly fewer 'on the ground' staff?
- 5. Other

- Social relationships/co-operation with neighbours can be difficult (5)
- Small individual farms need to take an interest to collaborate
- Some neighbouring landowners might not be present on their land
- Might become 'farming by committee'

- Farmers need the opportunity to create capacity to think about things outside their holding
- Concern that potential options under ELM might get taken away if they become regulation.

Appendix 6 - Results from Land Management Plan design sessions

Follow up sessions were arranged with participants of the both the phase one and phase two workshops or one-to-one interviews, to conduct a 'deep dive' into what an NCA focused Land Management Plan might look like. Although it was intended that ten such sessions would take place, due to Covid-related constraints, nine interviews were successfully undertaken - three for each of the three NCAs that make up the Peak District National Park (three in the White Peak and three in each of the Dark Peak and South West Peak). The White Peak was included as this more in-depth insight had not been gathered in phase one.

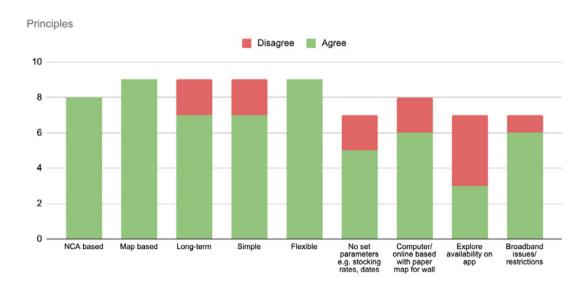
Initially, they were asked: Which elements would be the most important to include in a Land Management Plan for public goods? Across a range of categories, they were asked whether they agree or disagree with suggestions presented (based on responses from phase one of the Test). They were also given the opportunity to make further suggestions and additional comments.

Results are presented below in the order they were asked during the interviews. Charts show the total number of responses across all 3 NCAs.

The interview template sheet and breakdown of responses by NCA are available alongside this report and offer a wide range of insightful comments across all the following elements of what a plan should comprise.

Principles: should a Land Management Plan be...?

- NCA based
- Map based
- Long-term
- Simple
- Flexible
- No set parameters e.g. stocking rates, dates
- Computer/online based with paper map for wall
- Explore availability on app
- Broadband issues/restrictions.



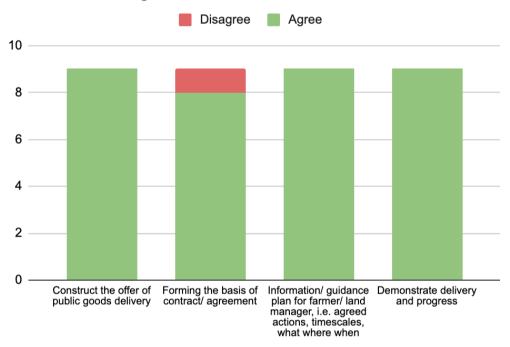
Additional suggestions from participants:

- Needs to be succinct and action focused
- Plan should be parcel based
- Mix of map and tables, with supporting text
- An app for the public to see (e.g. if a walker is in the area, they can pull up the app and see where the flower rich meadows or ground nesting bird areas are etc.)
- Plastic reduction and recycling potential.

What is a Land Management Plan for?

- Construct the offer of public goods delivery
- Forming the basis of contract/agreement
- Information/guidance plan for farmer/land manager, i.e. agreed actions, timescales, what where when
- Demonstrate delivery and progress

What is a Land Management Plan for?

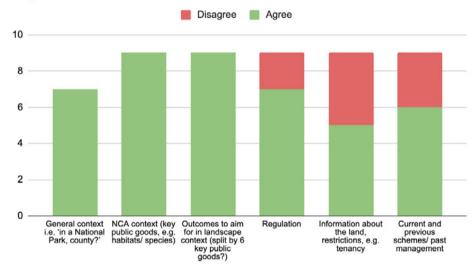


No additional suggestions from participants.

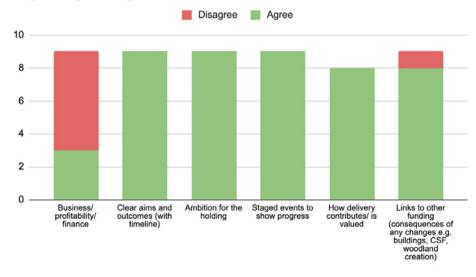
What should the components of a Land Management Plan be?

- General context i.e. 'in a National Park, county?'
- NCA context (key public goods, e.g. habitats/species)
- Outcomes to aim for in landscape context (split by 6 key public goods?)
- Regulation
- Information about the land, restrictions, e.g. tenancy
- Current and previous schemes/past management
- Business/profitability/finance
- Clear aims and outcomes (with timeline)
- Ambition for the holding
- Staged events to show progress
- How delivery contributes/is valued
- Links to other funding (consequences of any changes e.g. buildings, CSF, woodland creation)





Components (continued)



Additional suggestions from participants:

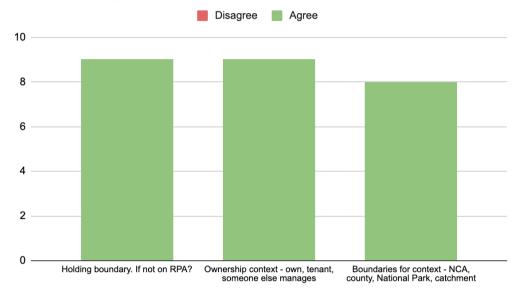
- Needs to show how public goods relate to commercial priorities on the farm
- Could we add 'co-operative multi landownership applications' to the 'components' list, maybe as part of 9 or 11?

Process for creating/writing - constructing the offer

1. General context

- Holding boundary. If not on RPA?
- Ownership context own, tenant, someone else manages
- Boundaries for context NCA, county, National Park, catchment

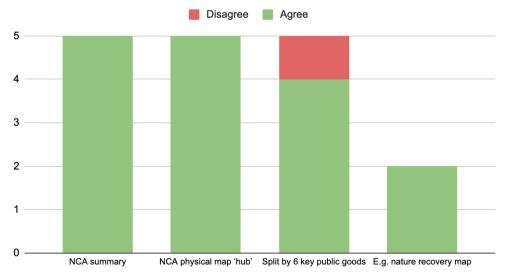
Process for creating/writing (constructing the offer) - General context



2. NCA context/Outcomes to aim for in landscape context

- NCA summary
- NCA physical map 'hub'
- Split by 6 key public goods
- E.g. nature recovery map

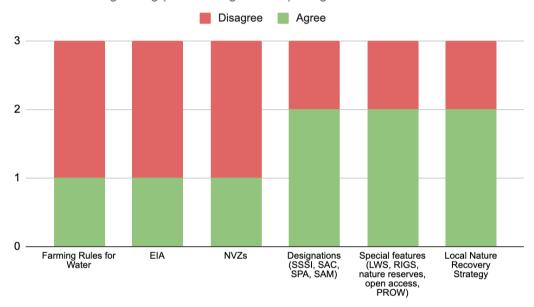
Process for creating/writing (constructing the offer) - NCA context/Outcomes to aim for in landscape context



3. Regulation/Advisement

- Farming Rules for Water
- EIA
- NVZs
- Designations (SSSI, SAC, SPA, SAM)
- Special features (LWS, RIGS, nature reserves, open access, PROW)
- Local Nature Recovery Strategy

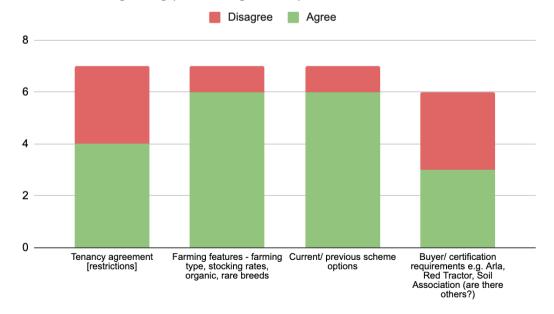
Process for creating/writing (constructing the offer) - Regulation/Advisement



4. Other information about the land

- Tenancy agreement (restrictions)
- Farming features farming type, stocking rates, organic, rare breeds
- Current/previous scheme options
- Buyer/certification requirements e.g. Arla, Red Tractor, Soil Association (are there others?)

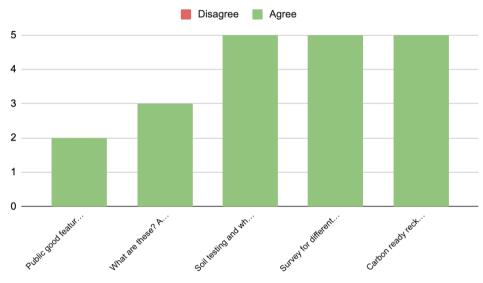
Process for creating/writing (constructing the offer) - Other information about the land



5. Baseline survey

- Public good features under the 6 categories
- What are these? And condition? (See NCA public goods tables below)
- Soil testing and what for?
- Survey for different things at different times of year or all at specific time of year? Multiple visits at different times, can't access certain options until certain surveys have been done?
- Carbon ready reckoner/Peak Carbon Tool

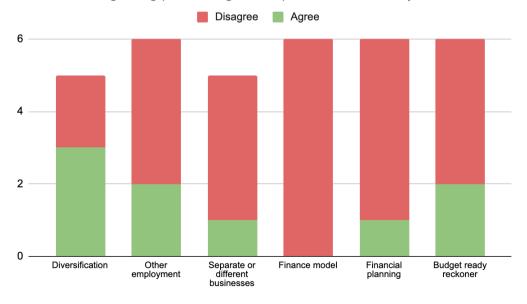
Process for creating/writing (constructing the offer) - Baseline survey



6. Business/Profitability/Finance

- Diversification
- Other employment
- Separate or different businesses
- Finance model
- Financial planning
- Budget ready reckoner

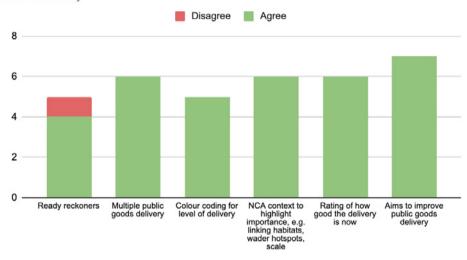
Process for creating/writing (constructing the offer) - Business/Profitability/Finance



7. Evidencing public goods delivery & value for money

- Ready reckoners
- Multiple public goods delivery
- Colour coding for level of delivery
- NCA context to highlight importance, e.g. linking habitats, wader hotspots, scale
- Rating of how good the delivery is now
- Aims to improve public goods delivery

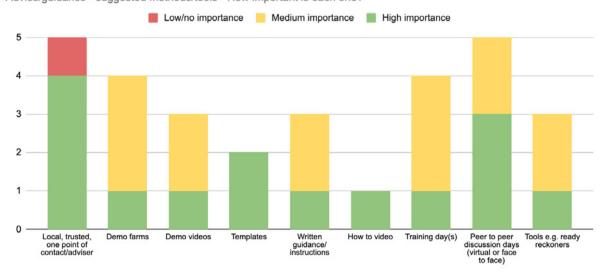
Process for creating/writing (constructing the offer) - Evidencing public goods delivery & value for money



8. Advice & guidance

- Local, trusted, one point of contact/adviser
- Demo farms
- Demo videos
- Templates
- Written guidance/instructions
- How to video
- Training day(s)
- Peer-to-peer discussion days (virtual or face-to-face)
- Tools e.g. ready reckoners

Advice/guidance - suggested methods/tools - How important is each one?



Public goods

- Clean and plentiful water
- Clean air
- Protection from and mitigation of environmental hazards
- Mitigation of and adaptation to climate change
- Thriving plants and wildlife
- Beauty, heritage and engagement

Suggestions of what to record under each public good (specific to each NCA) were shown to participants to agree/disagree with (see table below).

The majority of suggestions were generally agreed with. Two suggestions were specifically disagreed with by at least one participant:

- Stocking rates (listed under 'Clean and plentiful water') were disagreed with by two participants across all three NCAs (one of whom responded to this section for both the Dark Peak and White Peak, as they have land in both NCAs). While not stipulated here, we can reasonably assume the objections to including stocking rates in this section link to responses given in the 'Principles' section above.
- Covered slurry (listed under 'Clean air') disagreed with by one participant from the Dark Peak, who says slurry is "less of an issue in Dark Peak"



Clean and plentiful water

What to record? All NCAs: Artificial inputs, stocking rates, CSF options

DP and SWP only: moorland restoration

White Peak

- Agree with these, except stocking rates
- All of these are influential and, while not necessarily understood in the context of 'public goods', they are understood as a broad concept
- Watercourse buffering
- Tree planting
- Re-using water
- Slope and aspect and distance from rivers and streams
- Clarify pathways to water features as more complex geology/hydrology
- Need to consider impact of feeding regime - more concentrate fed, more nutrient rich slurry/FYM
- Dipping and parasite control

Dark Peak

- Agree with these, except stocking rates
- All these but farmers not always sure what they all are
- Slope and aspect and distance from rivers and streams
- Clarify pathways to water features as more complex geology/hydrology
- Need to consider impact of feeding regime - more concentrate fed, more nutrient rich slurry/FYM
- Dipping and parasite control
- To date water quality issues have been lower down the agenda (not a CSF priority or ST area)
- Nutrient management plans are a useful tool for avoiding run off

- South West Peak
 - stocking rates

 Slow the Flow

• Agree with these, except

Grip blocking



What to record? All NCAs: Covered slurry

White Peak

- Yes, if funding is sufficient
- Important to highlight safety issues around covered slurry stores - asphyxiation
- Correct spreading techniques to limit nitrogen in atmosphere
- Could be clean water too
- Application method dribble bar/shallow injection vs splash plate application on dairy farms

Dark Peak

- Yes, if funding is sufficient
- Important to highlight safety issues around covered slurry stores - asphyxiation
- Also management of slurry on floors/yards - regular scraping
- Slurry less of an issue in Dark Peak - more sheep and beef, so FYM rather than slurry

South West Peak

 Waste regulations on burning



Protection from and mitigation of environmental hazards

What to record? All NCAs: Rainwater harvesting, compaction

White Peak

- Include tree planting where appropriate
- Keen on rotational paddock grazing

Dark Peak

- Wildfire risk? Links to recreation and visitor numbers
- Keen on rotational paddock grazing

South West Peak

- Recycle plastic waste from silage bags and plastic drums
- LMP should include how to get rid of farm waste including plastics (local council is ok but doesn't go far enough)
- Slow the Flow techniques to stop flooding



Mitigation of and adaptation to climate change

What to record? All NCAs: Ploughing, renewables, rainwater harvesting, tree planting/natural regen, artificial inputs, stocking rates, machinery

DP and SWP only: moorland restoration

White Peak

- Correct stock breeds where applicable (reduce methane)
- Rainwater harvesting could go in clean water?
- Sequestration on permanent grassland carbon storage
- Organic material inputs
- Composting anaerobic digestate

Dark Peak

- Natural flood management
- Carbon sequestration, especially on peat soils and moorland
- Organic material inputs
- Composting anaerobic digestate

South West Peak



Thriving plants and wildlife

What to record? All NCAs: Habitats (use FEP? Or other?), how to do species?

DP and SWP only: Wader hotspots

White Peak

- Overlaps with most of the others - water, air, climate
- Specialist surveyors
- FEP style probably works, but not sure of other techniques i.e. NVC
- Bird surveys
- Plant species
- Weather conditions and timing of survey
- Create a record of habitat quality, location and size on

Dark Peak

- Bird surveys
- Plant species
- Weather conditions and timing of survey
- Create a record of habitat quality, location and size on the farm

South West Peak

- Yes to all of these, with access to self help ID tools online
- Bees should be introduced to all farms to improve pollination, bee roads/ corridors should be created, linking one farm to another



Beauty, heritage and engagement

What to record? All NCAs: PROW, open access, diversification, interpretation, viewpoints, SAM, cultural heritage features, walls

White Peak

- Recreation/access issues
- Past management and effect on landscape/heritage
- Behaviour of visitors (good and bad) - people swimming in the river, leaving lots of litter, having fires etc. - impact of occurrences such as the pandemic/lockdown on heritage/environmental features

Dark Peak

- Recreation/access issues
- Past management and effect on landscape/heritage
- Behaviour of visitors (good and bad) - people swimming in the river, leaving lots of litter, having fires etc. - impact of occurrences such as the pandemic/lockdown on heritage/environmental features
- Concern over cost to farmers of PROW maintenance and liability regarding safety

South West Peak

 Open farm days should be encouraged

Other comments

White Peak

Dark Peak

n/a

• LMP should show the stage that the farmer is in in their career (experienced/retired/new entrant)

South West Peak

- Things change season to season so farmers shouldn't be pulled up for a bad a season (e.g. wet season for ground nesting birds) - should account for variability
- A lot of farmers don't earn enough money from farming alone and need diversification - public should be able to see this
- Can do monitoring if training available - self-monitoring open to misuse or lack of understanding/ knowledge - use local advisers if required to check on farmers' selfmonitoring once every 3 years
- Public are more interested in what actually happens in the countryside than people realise - great way to connect if the LMP is shared, especially via an app.

- Agree that these are all important - loads of overlap though, e.g. all climate change affects the other public goods
- These are good examples of things to explain to the public what a public goods based land management scheme is
- Not much for White Peak but, for what is there, it needs some explanation of reasoning and expectation as to how they help public good
- Terminology vague needs refinement of terms (e.g. 'what to record' or 'what to deliver'? also 'ploughing' becomes 'date/ area of ploughing' or 'reduced ploughing')

Results of Land Management Plan design sessions: Commentary

Principles

At least six of the nine LMP design session participants agreed with the suggested principles, except for 'No set parameters e.g. stocking rates, dates' and 'Explore availability on app'. There was unanimous agreement with the LMP being 'NCA based', 'map based' and 'flexible' (though one participant did not answer regarding 'NCA based').

Mirroring what was said in the workshops, two participants commented that the LMP needs to be relevant to the local area and to farming. One participant added that the LMP "must have some educational use to the owners/managers/farmers" and that an advisor will be essential.

There was unanimous support for the plan to be map based. Furthermore, four of the participants said that it should be parcel based, using a mix of maps and tables/lists - two of whom reiterated this multiple times throughout their interview.

Seven out of nine participants agreed the plan should be long-term. Two participants said the plan should last for at least ten years, one suggested a minimum of 20 years and another said 25 years (with five-yearly reviews). The two who disagreed suggested five years as a reasonable timeframe.

In terms of simplicity, there was a balance of views. Two participants called for the plan to be understandable for the farmer, jargon free and not too complex. Another participant, however, stated that it shouldn't be too simple, as it needs to be a useful, working document.

All participants agreed that the plan needs to be flexible, to allow them to assess, revaluate and change directions if needed.

Five out of seven participants agreed with 'No set parameters e.g. stocking rates, dates' (two did not answer). Two participants commented that the LMP "needs to allow for seasonal variation", while another two said there should be "no stocking rates on individual fields - rotational paddock grazing used/need to move stock to suit the conditions". One participant, who disagreed with this principle, stated "Record of stocking rates at the start could be a useful baseline, to show change/consistency".

There was general agreement with it being online based, with a paper map for displaying on a wall. Six out of nine deep-dive participants agreed, one did not answer. Four of those who agreed stressed that they would definitely need a paper based map. Four participants expressed a lack of confidence using online platforms.

When asked if restricted broadband is an issue, six out of seven deep-dive participants who responded agreed that it is an issue for many rural areas (two did not answer). One commented that poor mobile network signal (4G) is also an issue. Therefore, an online portal or app may not be accessible to everyone all the time.

The practicalities of farmers accessing LMP documents, particularly maps, whilst out on their land also needs to be considered. An app may not be suitable, due to the signal restrictions already mentioned and mobile phone screen-size being too small to display maps at a user-friendly scale. Weather is also a concern for some of the participants, and one suggested that waterproof maps be provided for this reason.

One participant expressed concern that money will be spent on developing an app that could be better spent on land management.

A participant gave an interesting additional suggestion around IT: having an app for members of the public use, that would allow them to see what public goods are where. The idea is this would help to educate them about the public goods farmers are delivering, demonstrate how much extra work farmers need to do to make a living ("many farmers don't earn enough money from farming alone and need diversification") and also help the public to "fully enjoy the countryside".

What is a Land Management Plan for?

Participants almost unanimously agreed with the four suggestions given to them in this category. The only suggestion that prompted a 'disagree' response from one participant is 'Forming the basis of contract/ agreement'. That participant stated that the LMP "should be a guide, not a legal contract - the ELM agreement should be a separate document". Supporters of this suggestion did express some caution in their comments. For instance: "Using a LMP as a basis of a contract would be a good start, provided monitoring happened, which has not always been the case".

A number of comments were made alluding to the importance of advice and guidance, so that the farmer knows what to do in order to deliver what is expected of them, demonstrate delivery and progress, and avoid penalties. 2 participants stated outright that 'Information/guidance plan for farmer/land manager, i.e. agreed actions, timescales, what where when' would be the most important of the four suggestions.

Components

At least six of the nine deep-dive participants agreed with all but 2 of the suggested components ('Information about the land, restrictions, e.g. tenancy' and 'Business/profitability/ finance').

Other suggestions that prompted at least one 'disagree' response were: 'Regulation', 'Current and previous schemes/past management' and 'Links to other funding (consequences of any changes e.g. buildings, CSF, woodland creation)'.

Opposition to regulation information being included centres around the potential of the plan getting too complicated and requiring too much of the farmer's time, duplicating information held elsewhere and putting too much of a negative slant on the plan.

Process for creating/writing - constructing the offer

The 2 proposed areas of discussion around 'Process for creating/writing - constructing the offer', which prompted the least positive response were 'Regulation/advisement' and 'Business/profitability/finance'.

Regulation/advisement: Participant agreement/disagreement was overall quite evenly split across the across six suggested elements in this section. Objections included concern over repetition/duplication and suggest that they should only be referred to where pertinent to the plan/agreement - linking to relevant documentation where necessary, rather than including too much in the LMP. However, some participants also expressed a need for guidance on regulations and welcome the inclusion of regulation information in the plan.

Business/profitability/finance: This section received the highest number of 'disagree' responses of all (25 'disagrees' to nine 'agrees' across six suggested elements). Objections included concern over sharing private, commercially-sensitive information beyond their business/family and third parties who already have reason and permission to access the information. One participant expressed concern that such information could be used as a precursor to means testing of grants. On the other hand, some participants recognised the benefit of including diversification information (one of the elements suggested in this section). One participant stated that "many farmers don't earn enough money from farming alone and need diversification" and that the "public should be able to see this".

Facilitation fund groups were mentioned numerous times in the discussions as a very useful resource.

Complied responses from the Land Management Plan design sessions are available alongside this report and offer a wide range of insightful comments across all the above elements of what the plan should comprise.

Appendix 7 - Comments on the Dark Peak and South West Peak NCA summaries

Workshop comments are shown in black, one-to-one interview comments are shown in blue.

Dark Peak:

- Helped in understanding public goods/A useful introduction to the public goods concept/prompt to help consider things they hadn't though of as public goods before (2) (1)
- Gave a good overview of the Dark Peak Characteristics (2)
- Subjective in places (2)
- Too heavily orientated to sphagnum moss and moorland, not enough about lowland grassland/Didn't include adequate description of the valley bottoms, which made it less relatable to their holding (2)
- A bit technical but generally readable (1)
- Could relate to the aspects within it that related to our farm (1)
- Helpful background for farmers who might be less familiar with public goods and similar themes (1)
- Language was clear and an understandable format (1)
- Quite general and seems to be targeted at a wide audience, not specific enough to agriculture, which may limit its relatability to farmers (1)
- Strongly identifies with the term Dark Peak and considers themselves to be a Dark Peak farmer (1)
- Very informative (1)
- Know they are located in the Dark Peak, could relate to this term, but perhaps considered it was more relevant to the Hope Valley and Derwent (1)

One workshop participant gave detailed technical feedback as follows:

- Page 4. 3rd para: unsure what the statement 'There is no-water available in R Alport & Ashop' means.
- Re 'the Noe is over abstracted' I thought very little is taken out of the Noe and most is allowed to flow on as compensation water.
- Page 4 Flooding paragraph: The moorland restoration benefits are rather overstated as figures are from small scale studies. We do not know if that will have that impact at catchment scale. It will do little when we get 3 inches [of rain] in 24 hrs.
- Do we know if and where re-naturalising watercourses could take place in the Dark Peak? Very few have been contained as they are generally the headwaters, not at the meandering stage.
- Page 5, 2nd paragraph: Given the definition of bogs is anything over 40cm of peat even if it is dry, ten tracks can be beneficial in the right places for moorland and environmental restoration. Soil compaction on moorland? From what? Most likely peat cutting rather than burning.
- 3rd paragraph: end of last sentence '.... as well as offering extended grazing during drought periods.' I think that has been lifted from the White Peak not usually a problem in the Dark Peak!
- 4th paragraph: Add in hedges, as they are an important feature in the Dark Peak valleys and are a good way of capturing carbon.
- 5th paragraph: Given methane breaks down after 20 years then as long as livestock number don't increase it is not an issue. GWP calculations are now being modified to reflect that. Nitrous oxide is really the bigger issue. Not really sure how this paragraph fits with a description of the Dark Peak. Given cattle and sheep are largely grass fed in the Dark Peak, virtually no cultivation of the land, then better to produce them there than off-shoring the production of food.
- Page 5, Clean Air: Again not sure why this is key in the Dark Peak. Cattle numbers are much lower in the Dark Peak than they once were. Nearly every farm produced milk in the 1960's now there is only 1 in the Hope Valley used to be 43 in the early 1970's. Ammonia is one of the least of the environmental problems in the Dark Peak.

South West Peak:

- Short/to the point and clear/easy to follow/understood the language (5)
- Very interesting & informative (4)
- Very comprehensive and useful/ Very helpful summary (3)
- South West Peak is a made up term/Annoyed that the term Staffordshire Moorlands isn't used in the NCA document (2)
- Aligns with what I think of the area (1)
- Buzzards/predator control fencing should be mentioned in the document (1)
- Contradictions in the NCA between access and tranquillity (1)
- Controlled burning should be mentioned as a traditional management tool because it provides control of the heather beetle (1)
- Don't identify as being in the South West Peak, but rather Staffordshire Moorlands/ Feels South
- Having mentioned the term South West Peak to other local residents, many are unaware that the area is known by this term (1)
- Moorland description should include the role of gamekeepers and include shooting (1)
- Reinforced what he already knows about public goods (1)
- Repeats itself in places (1)
- Should mention the future of farming more in the NCA document (1)
- Too much emphasis on some things and not others (1)
- Would help other farmers and also the public in understanding what farmers are doing for the countryside (1).

In contrast to the White Peak phase, where most participants identified with the NCA descriptions, the outcomes from the Dark Peak and South West Peak were more mixed. In the Dark Peak four responses positively related to the NCA description, whereas an equal number felt the document did not chime with them. Specific criticisms were that it focused too heavily on moorland, and didn't include adequate description of the grassland in the valley bottoms or was not specific enough to agriculture, which may limit its relatability to farmers.

In the South West Peak, only one contributor stated it aligned with their thoughts of the area, whereas two felt the South West Peak was a "made up term", with another saying that having mentioned the term South West Peak to other local residents, many are unaware that the area is known by this term. Three identified more strongly with the Staffordshire Moorlands, which has a stronger sense of cultural and geographical identity.

However it was considered to be clear, informative and helped in understanding public goods.

Appendix 8 - Comments on the carbon ready reckoner

Following on from each of the Dark Peak and South West Peak workshops, which were held via video conference, there was a dedicated workshop session to demonstrate and discuss the ready reckoners, the day after the main session. The ready reckoners were also demonstrated by the adviser in four of the five one-to-one interviews. Comments were broadly similar across the workshops and the one-to-ones, with most participants pleased with their experience of the ready reckoner, finding it interesting, useful, simple and easy to use.

Comments are below with workshop participants shown in black and one-to-one interviewees in blue.

Dark Peak:

- Interesting idea/useful tool to give a guide for farmers/ to get farmers thinking about carbon (3) (1)
- Simple to use (2) (1)
- Needs a 'health warning' they are only a guide/ every carbon calculator will give a different outcome for any one farm (2)
- Hold the Peak District Environmental Quality Mark [environmental award] and would be very interested in the carbon ready reckoner (1)
- I think I understand them (1)
- Interested to use the full carbon footprint tool to see emissions associated with fuel etc. (1)
- Needs more detail (1)
- Potentially very good (1)
- Surprised about how much stored carbon there is in soils (1)
- Though basic, they are a good way to build people's knowledge (1)
- Very useful to illustrate how important the soils are (1)
- Well thought out (1)
- Would be good to play around with the tool (1)
- Would like to be part of this initiative for their farm (1)

South West Peak:

- Excellent/very impressed/really good/brilliant idea (3) (1)
- Simple to use (3)
- Found it interesting (1) (1)
- Good introduction for farmers/ Exactly what the target audience wants to know (1) (1)
- Helps understanding of the benefits of traditional management (2)
- Reinforced belief that they are already 'doing the right thing' (2)
- Surprised/an eye opener/a real aid to help farmers understand how much carbon is stored in soils. Thought it was mainly trees that stored carbon (2)
- Very useful tool (2)
- Would like a copy/would like to learn more (2)
- Could be used to help initial planning/applying for new scheme/shows what you can do in relation to carbon(1)
- Good way to get a rough idea of what situation we may find ourselves in post BPS (1)
- It is a completely new concept to me so would be good to have more instruction on how assess which categories your land falls into (1)
- Shows how important the management of soil is
 (1)
- The two reckoners could be rolled into one (1)
- Would be better as web-based tools rather than stand-alone spreadsheets (1)
- Would be good if they were made available nationwide to all farmers/land managers through DEFRA (1)
- Worry that they have limitations and may not provide a meaningful alternative to the arduous task of carrying out full research into carbon footprint status (1)

Workshop participants were offered follow-up sessions where they could put their own, more detailed figures into the carbon ready reckoner. Two participants from the Dark Peak and one participant from the South West Peak took this opportunity.

Appendix 9 - Budget ready reckoner

The budget ready reckoner was developed in response to the assumption that a lot of farmers and land managers did very little or no financial planning. Of the 29 participants that responded, five do no financial planning, and seven plan up to one year in advance, totalling almost 41% of respondents. This is, on average, consistent with results from the White Peak phase of the Test (almost 40% of respondents). However when broken down between the two phase two NCAs, a larger proportion of those doing short-term or no financial planning are respondents from the South West Peak (27% of Dark Peak respondents compared to 57% of South West Peak respondents). 47% of those with holdings greater than 100 ha plan up to or over five years in advance, with this equally true in both phase two NCAs (this was 50% in the White Peak). Both of the phase two participants that were profitable without BPS or other national support, but depend on diversification, plan over five years in advance.

The majority of participants from the four Dark Peak and South West Peak workshops attended the short second session where the budget ready reckoner was demonstrated. The budget ready reckoner was also demonstrated by the adviser in four of the five one-to-one interviews. Three phase two participants also participated in in-depth one-to-one sessions where they inputted their own data.

Comments were broadly similar across the workshops and the one-to-ones, with most participants pleased with their experience of the ready reckoner, finding it interesting, useful, simple and easy to use.

Comments are below with workshop participants shown in black and one-to-one interviewees in blue.

Dark Peak:

- Useful tool to give a guide for farmers/ will be useful when value of ELM options are known (3)
- Though basic, they are a good way to build people's knowledge/help farmers getting feel for how they can replace some of the lost BPS payments (2)
- Simple to use (2)
- Budget ready reckoner is less applicable as we are a very small outfit (1)
- I think I understand them (1)
- Needs more detail (1)
- Needs a 'health warning' only a guide (1)
- Potentially looks very good (1)
- Problem with the calculator? Didn't take into account when farmers were already delivering under existing HLS/CS and so under ELM there may be no land-use change (1)
- Quick to use (1)
- Well thought out (1)
- Would be good to play around with it (1)
- Would like to be part of this initiative for their farm (1)

South West Peak:

- Excellent/ Very impressed/ Really good/ A great idea (3) (1)
- A good way to get a rough idea of what situation we may find ourselves in post BPS/ Helps you budget if you know what you are going to get paid/ A good idea to have a budget tool so you can see exactly what you can earn before you sign up (3)
- Useful/ Very useful (2) (1)
- DEFRA could use to measure public goods being proposed and the associated payment (1)
- Exactly what the target audience wants to know
 (1)
- Found them interesting and would like to learn more (1)
- Helps you to understand which areas of the farm are more financially valuable in terms of environmental management (1)
- More useful for someone who is better with computers and figures (1)
- Needs to be made a bit easier for someone who is new to this and doesn't already receive BPS funding (1)
- The two reckoners could be rolled into one. (1)
- Would be good if they were made available nationwide to all farmers/land managers through DEFRA (1)
- Worry that they have limitations and may provide a meaningful alternative to the arduous task of carrying out full research into business finances (1)
- Would be better as web-based tools rather than stand-alone spreadsheets (1)

Appendix 10 - Field visits to White Peak Trials

Three visits to the White Peak field Trials took place on 9 June 2021, 30 June 2021 and 14 July 2021, with 33 participants from 27 holdings in attendance.

With the exception of two Dark Peak and one South West Peak participant, these were White Peak farmers and land managers that had previously been involved in the phase one of the Test (20 participants from 17 holdings) and White Peak participants, new to the Test (ten participants from seven holdings).

The first visit Trial visit, 9 June 2021:

This was attended mainly by participants from the White Peak Test, with the addition of a seed company representative, the Catchment Sensitive Farming officer (who also attended the subsequent visits, to explain how CSF grants could fund similar interventions) and a farmer who has adopted herbal leys across the whole farm.

The second Trial visit, 30 June 2021:

For this second visit, farmers and land managers were targeted based whether they might be interested in taking up one or more of the options from the White Peak Trials, including holdings that had not participated in the White Peak phase of the Test. These were mostly White Peak, with one participant from the Dark Peak. The event was used to recruit participants for a Severn Trent funded herbal ley project.

The third Trial visit, 14 July 2021:

Participants were further farmers and land managers who had been involved in the White Peak phase of the Test, plus two White Peak holdings new to the Test, one Dark Peak holding and one South West Peak holding. The Chair of NFU Peak District Uplands Forum attended and gave positive feedback, summarised at the end of this Appendix 10.

The responses to the questions on the theme of collaboration:

Sharing ideas and experiences:

All three events proved to be a very valuable way of sharing both what was actually being delivered on the ground, and views from both the landowners involved and the participants on the visits. Discussions were enthusiastic and wide ranging. Participants said they found it useful to see things they had either tried or were considering 'on the ground' and hear what the pros and cons were from Trial farmers. Those with less experience of the various land management options of the Trial found it useful to gain ideas from the experience of others; those with more experience still found it really positive 'comparing notes' and exchanging the detail of cutting times and protein content and residual fertility etc. One participant said: "the visit gave more confidence to have more leys for grazing, rather than just silage – we've gone from 5 ha to 20 ha for grazing. (We've increased our silage herbal leys from 10 ha to 40 ha.) [Trial farmer] said red clover/chicory was not as suitable for grazing, so we modified our seed mix in light of this". Participants also felt it was important to learn from each other: "you learn more from other people than you do from things on paper – from people that are older than you and have more experience and also the young ones that are coming up". "Our hay meadow had not turned out how theirs did, so we followed up with them afterwards to see how theirs were more successful than ours – explained how they'd done all different things on each field. We harrowed, they'd sprayed off and seeded at different times of year (spring and back end). So we were learning off them."

The facilitation fund groups were also given as a good means of sharing ideas and experience.

Importance of facilitator(s)

The establishment of the Trials involved significant time from both Natural England and Peak District National Park Authority staff, acting as facilitators, and also financial investment from the Peak District National Park Authority. Trial participants expressed their reliance on these interventions, with one saying: "I wouldn't have the first clue what to do in which field without [named facilitators]" and another comment: "All we did is provide the field". One Trial farmer was asked about being the 'manager' of the forage analysis element of the Trial and his response was: "No I'm not, [named facilitator] does all the work, I just put my name to it". Another Trial farmer said "I'd like to see the farm as a balance between production and environmental management, but all my environmental work has come out of a decade or more of working relationship with [named facilitator]."

Those visiting the Trials also considered a facilitator essential. Their role was identified as:

- Getting people [collaborators] together
- Putting a structure in place
- Setting the 'rules' between the parties
- Understanding both the big picture (what is appropriate in the landscape) and also the detail (how big an area makes it worthwhile, what stocking rates etc.)
- To be an 'expert' about the varying nature of the locality "What you are trying to do in Dark Peak is different from in a limestone valley. [The facilitator would] Offer some ideas on how you could do things, what would work and what wouldn't work."
- To advise—for example "what seed mix to use"
- To be knowledgeable about participants farming systems "Because [named facilitator] knows your farm and knows the way you farm, they can tailor the discussion, and make recommendations to suit our farming system."
- Linking everything together
- Getting the message across to farmers
- To keep everyone on the right track
- Someone to report to
- To remind to take photos
- Monitoring
- To share progress with others
- To mediate collaboration between people that may not be confident interacting directly with each other.

An example was given about the importance of the mediator role, for example "rather than farmers presenting directly to each other (you won't get most farmers doing that!), it would work better if the farmers share with the facilitator and the facilitator then disseminates. Your 'Traditional' farmer is not necessarily forthcoming, maybe introverts, so having a varied format - discussions, visits etc. - and a facilitator who has an overview and is drawing out information from participants - you get these kind of people feeling comfortable enough to share."

One participant said: "During the visits the facilitators kept the discussion on track on the day. Otherwise farmers together might talk about anything!"

Would they have approached anyone before about collaboration?

"Yes probably, if I could find the right person – but without that visit I wouldn't know where to start on collaboration. The farmers round me [around my farm] have got different ideas to me. I think there should be a balance – some farmers are totally obsessed with production - but there needs to be a balance across the landscape – a mosaic of pasture fields and hay meadows, of production and conservation land."

"If you've got like minded people around you, you could (we are surrounded by dairy farms – very different to beef and sheep – they use a lot of fertilizer). I wouldn't have a problem approaching someone to collaborate – we have done before with cattle handling. [Has this changed because of the visit?] Not really changed because of the visit, but the visit makes you think. Issue is finding collaborating partners. Because the Peak District is so mixed – some like us [extensive beef and sheep], some dairy, some focused on tourism, it's more difficult to collaborate. Round here no two farms are the same."

"No. But I wouldn't really have known what I was approaching them about! Now, probably, depends what options were! Biggest driver is that BPS is going and rents are going up. So if we need to collaborate to achieve payments we will! Currently BPS is just over half of our rent. On top of this, just less than half is covered by CS. So most of rent is covered by government funding. We are already claiming mid-tier and the BPS is currently greater than our farm annual profit, so when this goes, we will be in a loss-making situation.

Would they have approached anyone before about collaboration? (continued)

Will ELM equal BPS plus mid-tier? If we are being paid for delivery of public good, it needs to be a full payment – cost+profit. In CS we took a hedge planning option that covered 60% of the costs of planting the hedge. Thankfully our landlord wanted that hedge in and paid other 40%. But there were other unanticipated costs like a digger for establishment and strimming. So we made a loss. We can't have this in the new scheme if we are planting the hedge as something we are providing for the good of the public. And footpaths – if ever there was something that was just for public good! We have to put our cows and calves in different fields so they can walk through".

Does it need 'pioneers'?

"You've got to have someone to do it first so people can go and look at it. If you read about it in papers you don't necessary take it all in, but on a visit like that you can see what goes right and goes wrong."

"Yes, it does help because you might see a successful one, but also unsuccessful one - good to see what other people are doing."

"It helps but if the payments are good enough and someone wants to do an option, they will. Helps, but not necessary."

What would help further collaboration, either between themselves or bringing in new farmers?

"Depends what the options are – you could have very different farmers next door to each other. Could have sheep farmer next to dairy with highly productive grass, so how you get them to collaborate?"

"It needs to be small groups, local – rather than presentations and graphs, you need to show pictures of the full spectrum of crop in the ground; management practices; yields; forage analysis; and testimonials. This is really important because presentations and graphs mean nothing to a farmer. And also touching and seeing with own eyes is really important – like in this visit. But the first job is getting them in a room together – facilitator has to do this bit. Unless you are really good mates with a farmer you happen to be able to collaborate with, you need someone to bring people together."

"You need the information and know-how to be able to collaborate – you need to know all the information is right... to be able to properly talk to someone about collaboration, in case they don't understand it as well as you. A lot of people on the visit didn't understand the collaboration side of the future scheme – they were going to look at what was going on in the Trial. They would need Peak Park to do something. I would be happy to do it myself (paperwork), but might need back up from PDNPA or NE – back up knowledge."

"A facilitator would have to come up with an idea to put to a group of farmers – like a wildlife corridor, you'd have to put a plan in place to do X metres across this field, that field and that field, this is what it should look like in 5 or 10 years time and this is the reward you'll get."

"The location needs to work with your farm – so my land at [location with unimproved fields away from the farm] yes, but land next to buildings wouldn't work."

What was it about this project that made them want to engage?

"To know what's coming, prepare yourself, to see what kind of things they [the bodies developing/delivering the schemes] want."

"[Facilitator] thought I would get something from it."

"I wanted to go and look at what had been achieved to see what other people were doing."

"I knew the farmers in the Trial were working farmers that are knowledgeable and I respect them as farmers that produce food but are also prepared to engage with conservation. They have an eye on profit and looking after animals but also was to see some wildlife on the farm – flora and fauna, not just fantastic crop of grass."

"This kind of event – local and small numbers – means there is good conversation straight away."

How are they finding the Field Margin app?

Use of Field Margin was not discussed at the visits. The Trial participants had abandoned the Field Margin app in favour of a WhatsApp group. The Trial participant farmers spoke about using the WhatsApp group and getting pleasure out of sharing, for example sending photos.

Have they done collaborative working before?

"Not really"

"Yes, but I can't think what!"

"Yes. We work with neighbours to share cattle and sheep handling equipment; Hope Valley Farmers facilitation fund group; collaborating to do with fencing and stone walling with neighbours - helping them with stone. Often discuss where the birds are, especially relating to harrowing – they are [our neighbours are] very good at that."

Would they collaborate on a shared LMP?

"Yes, if you had the right facilitator to put it together to work out what the right balance would be. All the farmers don't have to do the same thing, but it would make a bigger area where nature benefits."

"Depending on what type of farming your neighbours does – our neighbours are high input and we are low input. We could jointly do wildlife, or boundaries, but couldn't do inputs because theirs is very different (we have bedding muck, they have slurry; we have lots of wild flower banks; they could go into margins options next to ours)."

"100% yes. As long as it worked for them and us and we were rewarded for it and it worked along with our farming system... If they want us to change our farming system they have to pay us a hell of a lot! You've got to factor in the fixed costs as well as the margin."

Would they now approach other farmers about collaboration?

"I wouldn't have done before — as long as I'm happy I'm doing my bit, that was as far as we've been able to go. But now if somebody came to me and said I'd like to do this on 15 acres of your land with 15 acres of my field, I'd definitely look at it. So in [location with unimproved fields away from the farm] I could see one with [named neighbour] and [named neighbour] running from [named village] to [dale below village] would work. But there'd have to be some food production within it. In my fields I've got rare things - leadwort, saxifrage, so by adding bits to it [land managed for conservation] things could develop — that would be a good thing. Now I've got more understanding and more confidence, but not necessarily the right neighbours — it's not a criticism, everyone's got their own approach. But rewilding and under grazing makes habitats go wrong — you need grazing and little bit of poaching. Grazing gets rid of rubbish [dead grass etc.], footprints push seed in — otherwise you get bushes and stronger grasses."

"Yes. I'd need support to do the paperwork – mostly because of time. It'd need a facilitator. "

How to get others interested in collaborative working?

"The Facilitation Fund group offers knowledge, you see each others practices, it's a forum to discuss. It also puts aside time to make you think about a given issue. Otherwise you'd be too busy working and never make that time."

"More meetings like this visit. Make it free, with a lot of people involved. You've got to show something real. You'll not do it by sending emails and having posters – get one farm interested and see who you can get involved around it. It's hard for a farmer to approach another farmer because they don't want to bully a neighbour into doing something they don't want to do. Also we don't know what we're expected to do – no information. Need someone else [a facilitator] to approach the collaborators. I wouldn't know how to put a wildlife corridor in – area involved, what would work, and what you're going to get – no use planting a load of trees if trees aren't wanted. It's not about what farmers want, it's what Peak Park needs or what overall benefits are wanted."

"All these bodies have to not be 'safe', sticking to all the farms they know – they need to work with more people and broaden out. Good place to get people would be Bakewell market – getting confidence in people. And don't expect people to be on social media."

Trial visit feedback from the Chair of NFU Peak District Uplands Forum

- Very interesting visit, learnt a lot, plenty to think about for the future
- The benefit of herbal leys was clear
- Interested to see how the woodland pasture will look and develop in time after grazing management
- Interested to learn more in particular how payment rates are set for the woodland pasture with the income foregone model used for the Trial
- Buffer strips disproportionately affect the many small fields we have in the White Peak
- Through shared knowledge and working together the Trials show a clear opportunity for improved grassland farmers
- Has to be funded correctly. This is why Defra should ensure the CS GS4 option reflects the work being done with herbal leys in permanent grassland
- PDNPA have done a lot of work with hay meadows and the land management of unimproved land and also these Test and Trials with improved land
- Real concerns around intensification of grassland, particularly in relation to the SFI: the land in the White Peak that falls between improved and semi-Improved has been ignored because it does not at the moment fit in to any scheme category. There is already much work been done with habitats, margins, copses etc., with inputs nearly always FYM although not classed as 'very low inputs'. Under the present CS (option GS4), it still does not attract anywhere like enough payment, however this is where many beef and sheep producers are, or at least have some of this land. The real worry is this "forgotten" land which delivers for the environment, produces food with a low environmental footprint, and will be needed (as store producers) to produce livestock for farmers in other areas for use in arable rotations.

Acknowledgements

The White Peak, Dark Peak and South West Peak Test has been run by the Peak District National Park Authority, specifically Sarah Bird (Peak District Test Project Officer) and Suzanne Fletcher (Head of Landscape). Special thanks go to Sarah Bird for her unfailing positive approach and ability to find new ways of working through the Covid-19 pandemic. This report has been written by Faith Johnson and Steph Mullen of the Environmental Quality Mark Community Interest Company and Suzanne Fletcher, Head of Landscape (PDNPA) and Test lead, using data compiled by Sarah Bird, Suzanne Fletcher and the PDNPA Farm Advisers.

Our thanks go primarily and overwhelmingly to those farmers and land managers who have offered their time and shared their considerable knowledge and insights with ourselves and the Farm Advisers during this Test. Their passion for the industry and desire to help design a scheme that works for all those who live, work in and visit the White Peak, Dark Peak and South West Peak NCAs, to help keep it special for the generations to come, has been truly inspiring.

We would also like to thank the significant efforts of the Peak District Land Managers' Forum, particularly the Brexit sub-group, for kick-starting this process and compiling the initial ideas. The White Peak Partnership Steering Group was also instrumental in developing the initial idea for the Test for the White Peak - your collective vision for an even more special White Peak is what has driven much of this work.

Thank you to Defra for providing the funding to pay for the Project Officer, Farm Advisers, Environmental Quality Mark Community Interest Company (consultants), workshops and most importantly the farmers and land managers that have been involved. Particular thanks go to our Defra Project Officer Joe Tilbury for his invaluable help and guidance.

Our sincere thanks also go to Pete Spriggs, who facilitated the workshops and adapted them to run online due to Covid-19 restrictions, overcoming all the challenges of IT so we could carry on, we really couldn't have done it without him!

For the development of the carbon ready reckoners for each NCA, and the soil health ready reckoner for the South West Peak, our thanks go to Faith Johnson, John Moseley and Jack Weston of the Environmental Quality Mark Community Interest Company. Our thanks to Paul Silcock, Sue Steer and others at 3D Rural who developed the budget ready reckoners.

Thanks go to the Peak District National Park Authority who have funded the practical field Trials, and Natural England for providing essential support. In particular, our thanks go to Rebekah Newman and Ben Rodgers, for their efforts and skill in devising these pioneering Trials. For the trailblazing farmers and land managers who are delivering the Trials, our gratitude goes out for your involvement, commitment and motivation.

Finally, thank you to the Peak District National Park Authority for providing staff and funding to support the Test. Many thanks to the National Park Farm Advisers who have used their considerable experience to carry out the one-to-one interviews and get the best results to be able to influence the new scheme.

Acknowledgements 87

