

4.0 LANDSCAPE CHARACTER DESCRIPTIONS

4.1 Introduction

- 4.1.1 This section sets out descriptions and guidelines for the Landscape Character Types identified within the Forest of Bowland.

Landscape Character Type Descriptions and Guidelines

- 4.1.2 For each defined Landscape Character Type, its boundaries are mapped (see **Figure 3.4**) and its character described (and illustrated where appropriate) under the following headings:

CHARACTER ASSESSMENT

Location:

- 4.1.3 A short paragraph detailing location of the Landscape Character Type in relation to the AONB and adjacent Landscape Character Types.

Landscape Character Description

- 4.1.4 A summary of the overall landscape character of the Landscape Character Type

Key Environmental Features

Physical

- 4.1.5 A summary description of geology/soils, landform, hydrology and land cover elements that contribute to character.

Ecological

- 4.1.6 A summary description of ecological habitats and their relative nature conservation importance that contribute to character, by reference to designated site citations and the distribution of designated sites.

Cultural and Historical

- 4.1.7 A summary description of the main cultural associations and historical features that contribute to character, by reference to historic landscape characterisation data and distribution of designated assets.

Development, Settlement and Buildings

- 4.1.8 A bullet point list of the main settlement forms/origins and patterns, building styles and vernacular materials that contribute to character, by reference to fieldwork, research and existing assessments.

Landscape Character Areas²³:

- 4.1.9 A bullet point list of the key characteristics that contribute to the unique local sense of place and distinctiveness of the local Landscape Character Area.

LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change:

Past Landscape Changes

A bullet point list of historic and more recent changes that affected this Landscape Character Type.

Current Landscape Condition

A concise description of how the intactness of the different components create a perception of the overall current condition of the landscape.

Future Landscape Changes and Opportunities

A bullet point list of the positive and negative future changes and opportunities that are considered likely to affect the condition of the landscape over the short term (5 years) and long term (20 years +) including:

- Agricultural Change and Land Management
- Climate Change
- Development

Sensitivities and Capacity for Change:

A short paragraph summarising the key positive attributes that are judged to be inherently sensitive and providing a judgement on the capacity of the overall Landscape Character Type to accommodate change.

²³ Bowland Landscape Character Areas reflect geographically specific areas of locally distinctive character that exhibit a unique sense of place within the overall Landscape Character Type.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

A concise statement setting out the overall management strategy for the Landscape Character Type, supported by a bullet point list of specific guidelines for managing landscape change for the overall Type, covering the following specific categories:

- Physical Character
- Ecological Character
- Cultural and Historic Character
- Aesthetic and Perceptual Character

4.2 The Forest of Bowland Landscape in Overview

4.2.1 The Forest of Bowland is still a well kept secret in the north west of England. Its natural beauty is recognised in its designation, and by its many residents and visitors who enjoy its peace and quiet and the wide variety of landscapes. The AONB forms part of the extensive Pennine chain, which extends eastwards into the Yorkshire Dales National Park and southwards across Lancashire. The area's history is entwined with the traditions of farming and sporting estates, and this has created the mosaic of landscapes we see today.

4.2.2 The Forest of Bowland has a unique and varied landscape, with the many diverse areas creating a strong sense of place. The upland areas are known for their grandeur and isolation, traversed by quiet lanes and shooting tracks. Open expanses of moorland create wide panoramic views within the area and out to all directions. These areas have a strong sense of tranquillity, wildness and remoteness.

4.2.3 The moorland hills are defined by their steep scarps and sharply incised cloughs and hidden wooded valleys, which contrast with the lower lying wide river floodplains and meadows. The largely intact network of drystone walls and enclosed pastures with scattered out-barns and small hamlets characterise the cultural landscape of upland farming. Lower down, the moorland fringe landscape often contains relics of its past in the form of vaccaries and deer parks; and patterns of enclosures. The scattered woodlands, hedgerows, meadows and parklands which make up the undulating lowland farmland define the more lush valleys of the many rivers which drain the fells before they join the Ribble and Lune. The contrasting gritstone and limestone geology is visible in the drystone walls and vernacular buildings, and the pattern of stone villages which nestle in the landscape. There is a striking contrast between the upland and lowland landscapes – adding to the natural beauty and sense of tradition of the landscape.



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View of the Hodder Valley from Dunsop Fell



© Tarja Wilson

View of the Ribble Valley from the Nick of Pendle



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View looking south-east across Great Ann Moss

LANDSCAPE CHARACTER TYPE A: MOORLAND PLATEAUX

Key Characteristics

- 1 Some moorland summits are strewn with gritstone boulders.
- 2 Strong sense of elevation with vast, expansive skies and uninterrupted views.
- 3 Colours tend to be muted throughout the year.
- 4 Landcover is predominantly blanket bog or heather moorland and trees are generally absent.



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A: MOORLAND PLATEAUX

CHARACTER ASSESSMENT

Location

- 4.2.4 There are five occurrences of the Moorland Plateaux Landscape Character Type (LCT) within the Study Area. Four of these are situated towards the centre of the area, forming part of the central upland core. Further to the south, this LCT also occurs on the Pendle Hill outlier, to the south of Downham. This LCT is generally surrounded on all sides by the Unenclosed Moorland Hills Landscape Character Type (B).

Landscape Character Description

- 4.2.5 The high Moorland Plateaux lie on the very tops of the Bowland Fells at elevations of 400-560m: a series of wide, flat topped or gently rolling ridges dominating the skyline and views from the rest of the AONB. Here, the sense of tranquillity and remoteness is strongest, with vast skies, extensive panoramic views and strong sense of wildness and isolation. There is little sign of human activity apart from the odd trig point or shooting butt and night skies are almost completely dark. This is a predominantly heather clad landscape, with areas of blanket bog and bare peat. The tussocky nature of blanket bog vegetation and the mats of dense heather contribute texture and pattern to the landscape. The only sounds to be heard are birdsong, including the mournful cries of golden plover, the bubbling calls of curlew, the 'go back' calls of red grouse and the bleating of sheep. The fleeting glimpse of a hen harrier quartering the ground above a heather clad moor; the circling of a peregrine high above the moors on flickering wings and the flashing glimpse of a merlin swooping low across the moor, close to the ground are all distinctive qualities of this landscape.
- 4.2.6 The Moorland Plateaux are underlain by gritstone, and the occasional boulder is visible where peat has been eroded away by the actions of sheep, wind and rain. This hard geology creates ridges and terraces, and these have been steeply incised by upland streams, creating cloughs: sharp, deep lines and folds in an otherwise smooth landscape. Colours tend to be muted throughout the year, although small patches of cotton grass are eye-catching in springtime, and in late summer the heather turns an intense purple hue for a brief few weeks.

Key Environmental Features

Physical

- 4.2.7 The underlying Gritstone geology has created terraces or plateaux and escarpments, which form the highest tracts of land within the Study Area and are dissected by a network of streams. Harder layers of gritstone outcrop form distinctive features of the rugged moorland scenery. Due to the high elevation of the Gritstone Moorland Plateaux, soils are thin and podsoles and gleyed clays are common. Large areas of peat, which initially formed during prehistoric times; and blanket bog now dominate landcover of this Landscape Character Type. Peat would form in the present landscape given favourable management, however, repeated burning and grazing removes much of the organic matter capable of forming peat. Trees are generally absent. Gritstone crags are also a feature of the landscape; they outcrop along the hill sides where the softer shales have been eroded.
- 4.2.8 The high, Moorland Plateaux are the most remote and exposed Landscape Character Type within the AONB. They are generally characterised by a level or gently rolling landform although they may include steep high level escarpments, and are found at elevations between 400 and 720 metres. Rock outcrops occur in some areas and some moorland summits are strewn with gritstone boulders (which may be the result of erosion of peat). Soils are poor and a vegetation cover of acid grassland, dwarf-shrub heath, heather and bilberry (associated with the mineral soil) and sundew, purple moor grass and/or cottongrass (associated with bog or peat). In places, the patchwork mosaic of small heather burns or sinuous cuts of vegetation form firebreaks. Localised erosion of the soils has exposed the underlying rocks and gravels giving rise to crags and peat hags, particularly along the edges of the blanket bog.
- 4.2.9 Looking towards this Landscape Character Type from adjacent, lower landscapes, the Moorland Plateaux occur as a series of wide plateaux, flat-topped ridges, which are scattered with gritstone boulders and coincide with deposits of peat which support extensive areas of blanket bog managed as rough sheep pasture and Grouse Moor.

Ecological

- 4.2.10 Extensive areas of blanket bog and heath provide considerable ecological interest within this Landscape Character Type. Areas of acid grassland also occur on parts of Blindhurst Fell and Pendle Hill. Blanket bog is a UK Biodiversity Action Plan Habitat (recognised under the EC Habitats Directive). Where this LCT occurs within the central upland core (Bowland Fells), the blanket bog and heath provide important habitats for breeding bird populations (including hen harrier, merlin, peregrine, golden plover and red grouse). This is recognised by their designation as a Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI). Other birds such as skylark, red grouse, gulls, curlew and the golden plover are also common.

The most extensive plant communities are dry, heather-dominated heathland, and heather and cottongrass dominated blanket bog, which covers the tops of ridges and shallow slopes. These species form a mosaic of upland habitats. Other plants of interest include bog rosemary and cloudberry.

Cultural and Historical

- 4.2.11 Evidence of settlement on the plateaux is rare²⁴, although mesolithic hunter-gatherers who migrated seasonally with the herds utilised the landscape. The discovery of flint and chert implements over most of these plateaux has been taken to indicate the presence of their summer hunting camps. Neolithic forest clearance and agricultural intensification in the Bronze Age on the fragile upland soils, coupled with climatic deterioration to cooler wetter conditions, is thought to have encouraged peat formation across much of these areas. There was abandonment of unproductive land and much has remained uninhabited. Extensive areas are dominated by rough grazing. The peat (which developed from 5,000 BC) is a valuable resource as it contains a wealth of environmental and archaeological data. Despite a general sense of the landscape being devoid of human impacts, there are occasional boundary fences. There is little evidence of recent settlement and economic activity, other than evidence of modern use of the landscape for shooting.

Development, Settlement and Buildings

- Distinctive lack of built structures in this elevated, exposed landscape;
- General absence of stone walls or boundary fences;
- Lines of grouse butts (stone butts with turf tops) are a feature in places;
- Cairns and other stone towers also provide recognisable landscape features;
- Shooting tracks, sheep tracks, footpaths and sheep folds are also landscape features.

Landscape Character Areas

- 4.2.12 Landscape Character Areas within this Landscape Character Type include:

²⁴ Source: A Landscape Strategy for Lancashire: Landscape Character Assessment, 2000, ERM for Lancashire County Council.

Landscape Character Area A1: Ward's Stone



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- Strong sense of isolation and tranquillity within this predominantly open landscape;
- Dramatic, panoramic, long-distance open views northwards towards the purple-blue backdrop of fells within the Lake District and eastwards towards the three dramatic peaks of the Yorkshire Dales (Ingleborough, Pen Y Ghent and Whernside);
- The wind turbines on Caton Moor are a visible vertical landscape feature within middle distance views northwards;
- A generally smooth landscape, cloaked in heath and blanket bog, which is punctuated by frequent rocky outcrops of gritstone and gritstone boulders; and dotted with stone cairns;
- Several surfaced shooting tracks are also contribute to the texture of the landscape;
- The colour of the landscape changes with the seasons, from muted browns and greens in Spring and Summer, to vivid purple when the heather flowers in late Summer and white in the Winter months when the plateaux are snow covered;
- Strong sense of openness, with dramatic, dominant ever-changing skies and far reaching skylines and horizons;
- The Millennium gritstone sculptures, built amongst quarry spoil heaps are also landscape features which contribute to recognisable sense of place;
- Significant gritstone piles, associated shelters and tracks are landscape features;
- The landscape is strongly affected by changing light and weather patterns, which can instantly change the atmosphere from dark and dramatic when cloudy, to light and dynamic, when the sun casts shadows on the moorland;

- Stone cairns on Clougha Pike are visible landmarks on the skyline;
- The 'go back' calls of red grouse all year round and/or the raucous calls of lesser black backed gull on some Fells (notably Tarnbrook Fell and White Moss) during the spring and summer months are a distinctive feature, as is the large gullery on Tarnbrook Fell;
- Mournful cries of golden plover and the bubbling calls of curlew on some fells are distinctive on some fells during the spring/summer months;
- The fleeting glimpse of a hen harrier quartering the ground above a heather clad moor; the circling of a peregrine high above the moor on flickering wings, followed by it stopping at break neck speed onto some unsuspecting prey; and the flashing glimpse of a merlin swooping low across the moor, close to the ground are all distinctive qualities of this landscape;
- This area Forms the backdrop to the view of the Forest of Bowland AONB from the M6 corridor to the west;
- Gritstone cliffs/crags of Thorn Crag, Clougha and Windy ridge are recognisable landscape features;
- Bare areas of peat and mineral soil on Tarnbrook Fell, Brennand Fell and the top of Ward's Stone and wind blasted, short vegetation (including lichen heath) on the very highest part of the Fell contribute to landscape pattern;
- Boundaries are marked in places by drystone walls and fence-lines.
- Traditional shooting butts are also landscape features.

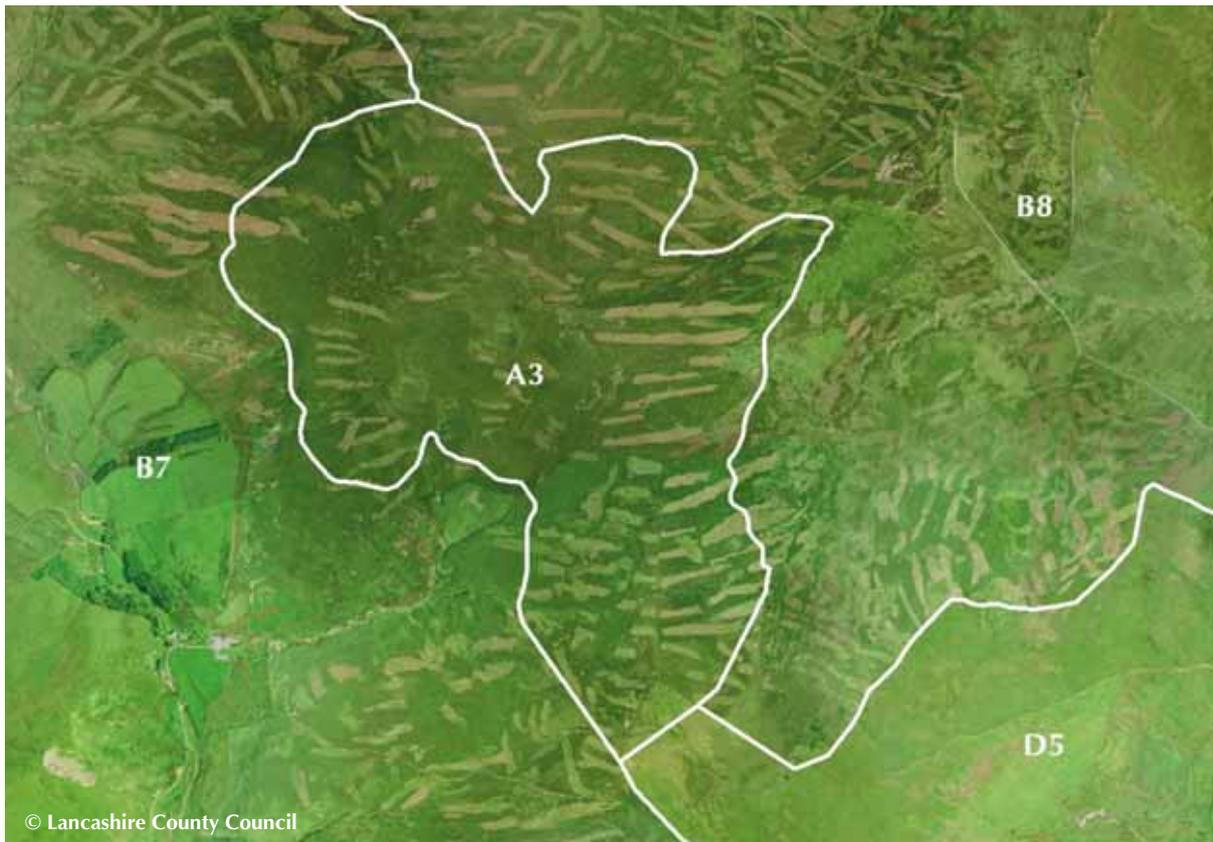
Landscape Character Area A2: Brown Berry Plain and Holdron Moss



- Dramatic, long distance, open views across the adjacent Unenclosed Moorland Hills (B) and Moorland Fringe, Undulating Lowland Farmland with Wooded Brooks (F) and parkland (G) Landscape Character Types;
- A windswept, bleak landscape, which is strongly affected by changing weather and light patterns;
- Large areas of blanket bog and heath cloak the rounded fells and stretch far into the distance within views across the area;
- Large areas of extremely wet active Blanket bog are features of the landscape on top of Marhsaw Fell and Holden Moss, whilst bog pools on top of Holdron Moss, Brown Berry Plain and Holme House Fell contribute to landscape pattern;
- The large area of peat hagg/bare peat, lawn of acidic grassland and degraded heath on top of Hawthornthwaite Fell/Langden Head provide texture to the landscape;
- The colour of the landscape changes with the seasons, from muted browns and greens in Spring and Summer, to vivid purple when the heather flowers in late Summer and white in the Winter months when the plateaux are snow covered;
- The landscape is strongly affected by changing light and weather patterns, which can instantly change the character from dark and dramatic when cloudy to light and dynamic, when the sun casts shadows on the moorland;
- The 'go back' calls of red grouse all year round and the raucous calls of lesser black backed gull, especially on White Moss during the spring and summer months, contribute to recognisable sense of place; as do the mournful cries of golden plover on some fells and the bubbling calls of curlew;

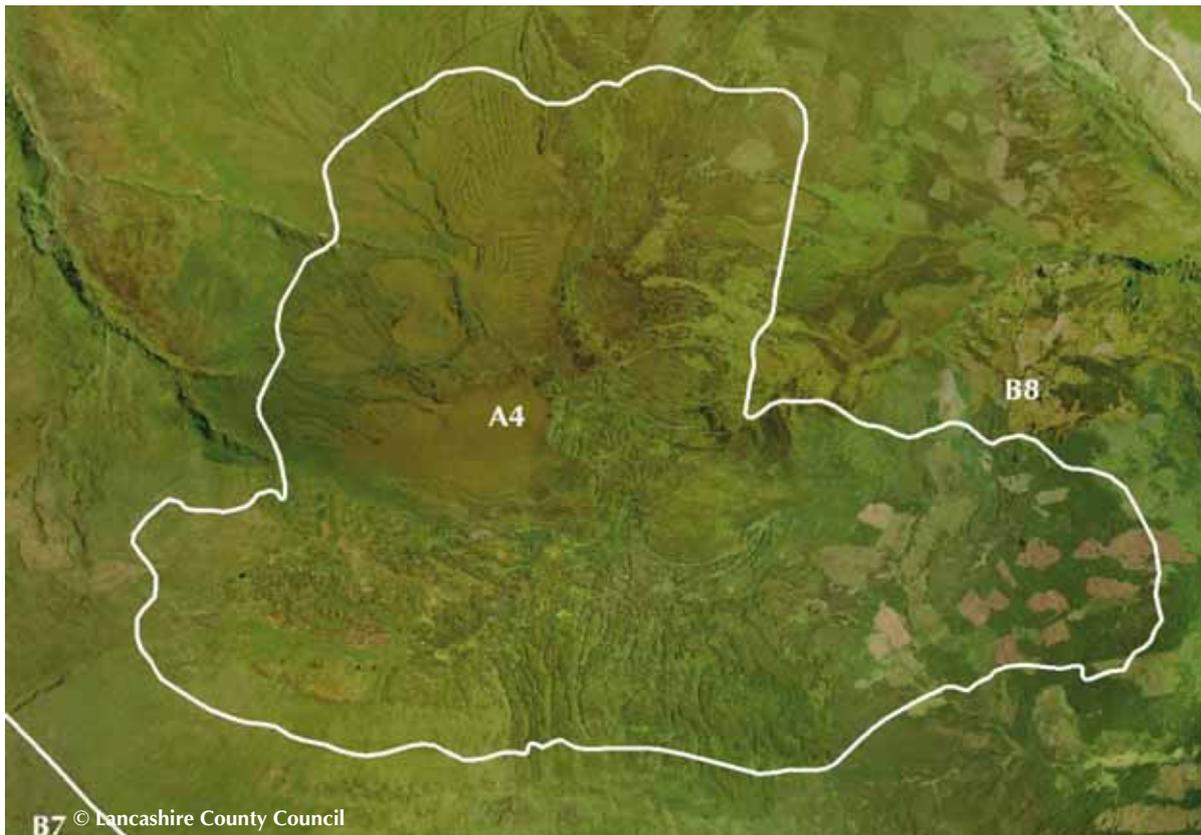
- The fleeting glimpse of a hen harrier quartering the ground above a heather clad moor; the circling of a peregrine high above the moor on flickering wings, followed by it stopping at break neck speed onto some unsuspecting prey; and the flashing glimpse of a merlin swooping low across the moor, close to the ground are all distinctive qualities of this landscape;
- The mosaic of grassland and heather contributes to a distinctive landscape pattern;
- The large gullery of lesser black backed gulls on White Moss is a feature of the area;
- Holdron Moss (a large area of Blanket Bog) is a key landscape feature, the colour of which varies seasonally with the bloom of white cotton grass in June;
- A large number of water courses originate in this area, contributing to the landscape pattern;
- A large area of eroded, exposed peat is visible within the landscape at Langden Head, Hawthornthwaite Fell.

Landscape Character Area A3: Baxton Fell



- Dramatic, panoramic open views across adjacent Croasdale and Lythe Fells, with Ward's Stone Gristone Moorland Plateaux Landscape Character Area (A1) forming the skyline within views westwards;
- The colour of the landscape changes with the seasons, from muted browns and greens in Spring and Summer, to vivid purple when the heather flowers in late Summer and white in the Winter months when the plateaux are snow covered;
- Patches of wet landcover in places and large sweeping areas of heather clad blanket bog on the rounded Fells contribute to landscape pattern;
- Bog pools on the top of Botton Head Fell (White Hill) are recognisable landscape features;
- Strong sense of remoteness, exposure and tranquillity;
- The 'go back' calls of red grouse all year round, the mournful cries of golden plover on some fells and the bubbling calls of curlew all contribute to recognisable sense of place;
- The fleeting glimpse of a hen harrier quartering the ground above a heather clad moor; the circling of a peregrine high above the moor on flickering wings, followed by its stooping at break neck speed onto some unsuspecting prey and the flashing glimpse of merlin swooping low across the moor, close to the ground are also distinctive features.

Landscape Character Area A4: White Hill



- Three stone towers on White Hill provide recognisable landmarks;
- Strong sense of isolation, tranquillity and wildness within this landscape;
- Gritstone boulders and rocky outcrops are landscape features;
- Dramatic views into the Croasdale and Whitendale river valleys within the adjacent Moorland Hills (B) Landscape Character Type;
- The colour of the landscape changes with the seasons, from muted browns and greens in Spring and Summer, to vivid purple when the heather flowers in late Summer and white in the Winter months when the plateaux are snow covered;
- The distinctive calls of birds including the Golden Plover, Gulls, Red Grouse and Curlew all contribute to recognisable sense of place.

Landscape Character Area A5: Pendle Hill



- Long distance panoramic, 360 degree views, including dramatic views southwards across Lancashire, north-eastwards across the Yorkshire Dales and eastwards to the Central and South Pennines;
- Dramatic views north-westwards across the Ribble Valley towards the Moorland Plateaux and Hills Landscape Character Types within the core of the Forest of Bowland, which form a dramatic skyline backdrop;
- This Landscape Character Area also forms a dramatic skyline backdrop to several views towards Pendle Hill from adjacent Landscape Character Types and Areas within the Forest of Bowland to the north and Lancashire to the south;
- The colour of the landscape changes with the seasons, from muted browns and greens in Spring and Summer, to vivid purple when the heather flowers in late Summer and white in the Winter months when the plateaux are snow covered;
- Strong sense of openness, remoteness and tranquillity;
- The sweeping, heather clad moorland and blanket bog is windswept and exposed;
- Scout Cairn and a landmark circular shelter of stones (commemorating a former Clitheroe Doctor and Scout District Commissioner) and contribute to recognisable sense of place and orientation;
- The distinctive 'go back' calls of red grouse, the mournful cries of golden plover, the bubbling calls of curlew, the cascading calls of meadow pipit and trilling calls of skylark contribute to recognisable sense of place;
- The distinctive pattern of stone walls contributes to recognisable landscape pattern;
- The deep valley of Ogden Clough is key landscape feature which incises the Moorland Plateau.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.2.13 Observable changes in the past include:

- Glacial activity and continual weathering, which has shaped geology and created a distinct upland landscape;
- Increase in acid grassland in some places due to high grazing pressures;
- Drainage of blanket bogs in some areas; and
- Blocking of Moorland Grips.

Current Landscape Condition

4.2.14 The overall condition of the Moorland Plateaux Landscape Character Type is considered to be moderate. In places, the condition of the blanket bog and heather moorland (dwarf shrub heath) is poor as a result of historic overgrazing, which has damaged the composition and structure of these habitats (causing a loss of heather to bilberry and cottongrass bog). Sphagnum moss is generally sparse due to a combination of the effects of past burning practices and the creation of drainage grips. This is, however, improving with lower stocking rates and grazing levels. The tick-bourne virus 'louping ill' has also resulted in economic losses to sheep (reduced grazing) and red grouse (leading to a reduction in the viability of grouse shooting in places). The condition of heath is, however, improving with lower stocking rates and grazing levels, as well as areas of blanket bog, especially where grip blocking has also taken place to re-wet the fells. In some areas of poor condition, improvements can be seen where the moorland is managed under Environmental Stewardship. There is also evidence of erosion of the blanket bog, resulting in the formation of peat hags at the edges of the Plateaux. Some of this is due to severe winter weather and subsequent wind erosion which further accelerates erosion once the surface habitat has been degraded.

Future Landscape Changes and Opportunities

4.2.15 In the short term (5 years) it is likely that there will be continued positive future changes in the form of improved stock management on the moorland, further blocking of grips and more sensitive heather burning management on moorlands (i.e. blanket bog and dwarf shrub heath), in some places, for grouse shooting. Further positive changes are likely to include agreed improved heather and grass burning practices.

4.2.16 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool for managing landscape change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within the Moorland Plateaux are outlined below:

- *Agricultural Change and Land Management* – Following programmes of grip blocking, blanket bogs should be restored, whilst areas of heath should be restored following further stock reductions. The sustainable management of heath will help to contain excessive erosion and retain a key habitat. There may also be pressure for an increase in the number of shooting tracks and related structures, which could be visually intrusive if not designed sensitively. There is significant potential for positive management of this landscape through Environmental Stewardship Schemes (such as stock management, grip blocking and burning agreements). There is also pressure for the abandonment of hill farming due to changes in the structure of agriculture.
- *Climate Change* - Fluctuating temperatures, precipitation and general weather patterns will continue to affect this dynamic landscape, leading to potential increases in the incidences of moorland fire and excessive erosion, the possible spread of invasive species and changes in the species composition of habitats. It is also possible that climate change will lead to increased flash flooding and gully erosion in upland cloughs and sykes.
- *Development* - Large-scale renewable energy development would break up the uncluttered skylines and key views and erode the open and undeveloped character of the area. There is also increasing pressure from mountain bikes and motorbikes, which could lead to problems of erosion through overuse of certain routes, involving soil compaction, attrition and erosion of vegetation and the underlying fragile peat body and mineral soils. Increased pressure for vehicular access along the Salter Fell road and estate tracks might also arise, but existing policies, measures and law regarding off road use should prohibit this.

Sensitivities and Capacity for Change

4.2.17 The Moorland Plateaux Landscape Character Type is considered to have very high visual sensitivity as a result of the very open character, the simplicity of the uncluttered skylines and associated panoramic views. Areas that appear to be hidden within one viewpoint are likely to be highly visible and exposed from another. There is strong intervisibility with the Unenclosed Moorland Hills (B) and Enclosed Moorland Hills (C) Landscape Character Types and also with surrounding lower Landscape Character Types. This Landscape Character Type also forms a striking backdrop to views from adjacent landscapes. In addition, the Moorland Plateaux encompass an extensive mosaic of rare and fragile habitats, recognised by the fact that much of this landscape is designated as SAC or SSSI. There is also rich archaeological potential. Sense

of remoteness, tranquillity and wildness is generally very strong throughout this Landscape Character Type. Landscape Character Type is also considered to have high landscape character sensitivity. As a result, overall capacity to accommodate change, without compromising the key characteristics of this Landscape Character Type is considered to be very limited, apart from change which reinforces positive attributes, such as habitat enhancements.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.2.18 The overall strategy for this character type is to conserve and enrich the mosaic of habitats (including blanket bog, heath and acid grassland) which support rare birds and scarce plant species. The uncluttered skylines and general absence of tall built structures should be maintained; as should the feeling of remoteness and tranquillity. The impact of human activity should be minimised

4.2.19 Specific guidelines include:

Physical Character

- **Restore** areas of degraded blanket bog and peat;
- **Block** moorland drainage grips to reverse the impacts of past drainage and re-establish active blanket bogs;
- **Avoid** large-scale tree planting within this landscape where trees are generally absent;
- **Avoid** drainage of moorland blanket bog;
- **Encourage** avoidance of fencing in open, highly visible locations, except where its short-term benefits outweigh related landscape or wildlife loss;
- Where required, **encourage** good practice grass/heather burning agreements, based on the Heather and Grass Burning Code²⁵;
- **Remove** redundant fencelines where possible;
- **Maintain** and where appropriate **enhance** crags and gritstone rock outcrops as landscape features;
- **Promote** the use of gritstone and turf for surfacing, shelters and shooting butts in preference to other materials.

Ecological Character

- **Maintain** the mosaic of ecological habitats, including scrub;
- **Encourage** the re-wetting of blanket bog and the sustainable management of heath to restore and repair areas of erosion and retain key habitats;

²⁵ The Heather and Grass Burning Code, Natural England, 2007; <http://www.moorlandassociation.org>

- **Encourage** grazing management that promotes more favourable condition of upland semi-natural vegetation;
- **Encourage** habitat linkage to increase robustness to climate change;
- **Promote** the restoration of dwarf shrub communities and bog-mosses (*Sphagna*);
- **Maintain** upland spring and flush habitats through appropriate management and **ensure** that they are not adversely affected by tree planting projects;
- **Conserve** remnant ancient semi-natural woodlands;
- **Maintain** a balance between bracken and acid grassland – avoid the excessive use of herbicides to control bracken where it leads to the degradation of vegetation;
- **Increase** upland oak woodland cloughs, where appropriate and seek opportunities for the creation of woodland connections with long distance ecological networks along cloughs to downstream river valleys²⁶.

Cultural and Historic Character

- **Ensure** that visitor facilities such as car parks, signs and interpretation boards are not located on the Moorland Plateaux and discourage vehicular access;
- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Ensure** effective planning for controlling moorland fires;
- **Avoid** the introduction of visitor facilities such as car parks, signs and interpretation boards;
- **Discourage** vehicular access;
- **Conserve** footpaths, bridleways or byways along with their associated features such as traditional stiles and gates, which represent historic routeways;
- **Promote** whole fell grazing management where possible, erecting new fences on open fell, only where alternatives are not practicable;
- **Conserve** distinctive historic landscape features and archaeological sites, including prehistoric cairns and earthwork sites, moorland trackways, industrial and quarry remains;
- Where required, **encourage** responsible burning of heather moorland²⁷ or management through cutting;
- **Manage** grazing levels to preserve the quality of existing woodland and allow small-scale natural regeneration in valley heads and Cloughs²⁸.

Aesthetic and Perceptual Character

- **Protect** skylines and key views to and from the area from tall, vertical and large-scale developments that may erode the open and undeveloped character of the area;
- **Maintain** the sense of openness;

²⁶ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

²⁷ The Heather and Grass burning Code, Natural England, 2007; <http://www.moorlandassociation.org>

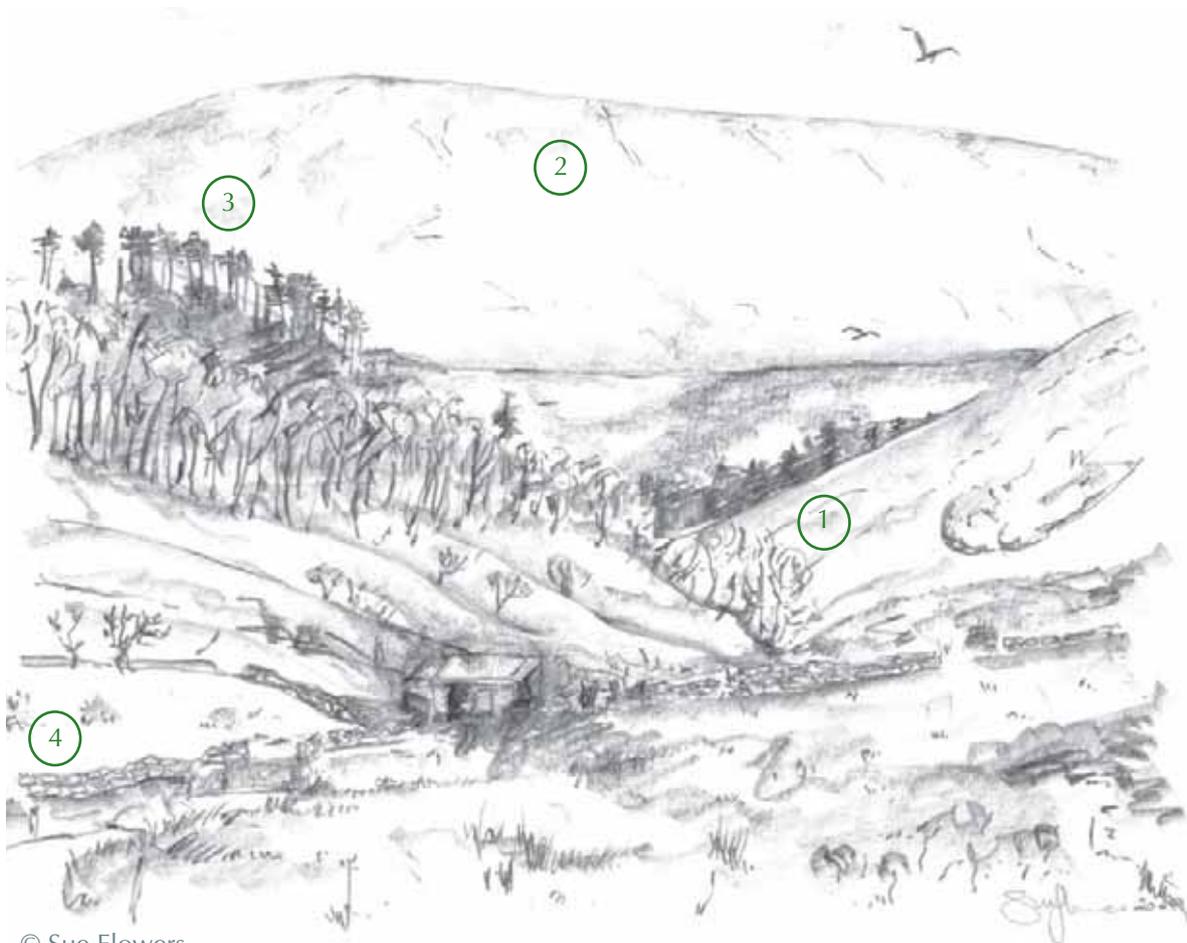
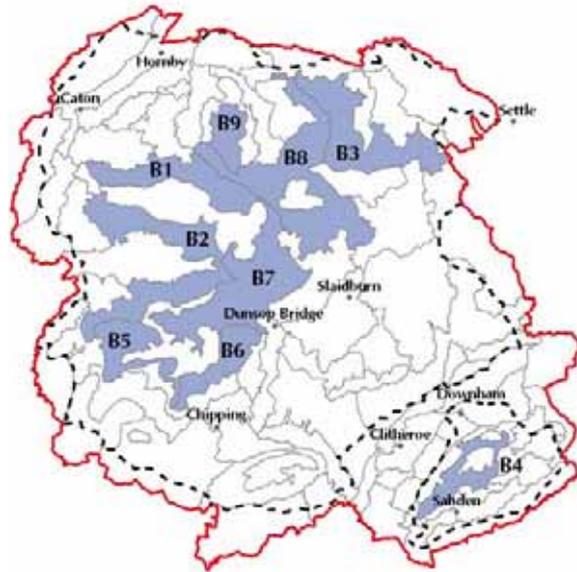
²⁸ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

- **Maintain** the strong sense of tranquillity and remoteness through careful planning of visitor access.

LANDSCAPE CHARACTER TYPE B: UNENCLOSED MOORLAND HILLS

Key Characteristics

- 1 Dramatic cloughs or valleys are incised into the hillsides and often contain fast-flowing streams.
- 2 Open and exposed character, with a strong sense of remoteness and tranquillity.
- 3 Woodland on the clough/valley sides.
- 4 Stone walls and fences are occasional features, but do not dominate landscape pattern.



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FOREST OF BOWLAND AONB
LANDSCAPE CHARACTER ASSESSMENT
Chris Blandford Associates

4.3 B: UNENCLOSED MOORLAND HILLS

CHARACTER ASSESSMENT

Location

- 4.3.1 The Unenclosed Moorland Hills Landscape Character Type is predominantly situated within the north-west and north-east of the Study Area, adjacent to the higher Moorland Plateaux Landscape Character Type (A). This type also occurs on the Pendle Hill outlier to the south. The outer or lower edges of the Unenclosed Moorland Hills are generally adjacent to Moorland Fringe (D) or Wooded Rural Valleys (I) Landscape Character Types.

Landscape Character Description

- 4.3.2 The rolling Moorland Hills cloak the edges of the Moorland Plateaux, and generally occur at lower elevations. The hills have distinctive rounded profiles, and they are characterised by a lack of dry stone walls – giving them a sense of remoteness and tranquillity, with little evidence of human activity. The songs of meadow pipits, skylarks and red grouse are common within these landscapes.
- 4.3.3 The hills are of gritstone origin, the layers of this harder stone being interspersed with softer shales, which in places has led to the formation of terraces and crags. The steep slopes are often incised by fast flowing streams which create cloughs, which are sometimes wooded if they are protected from grazing sheep. Blocks of conifer woodlands also dot the hillsides in some areas – providing stark clues as to the management of the land for forestry and latterly for shooting game. Otherwise the hills are cloaked with acid grassland, with a patchwork of heather, bilberry, blanket bog and bracken.
- 4.3.4 The Unenclosed Moorland Hills retain a strong sense of openness, with dark night skies and the calls of curlew and skylark can often be heard in the daytime. There are long open views down into the lowlands and valleys, with a few shooting huts, tracks, towers and gritstone outcrops providing the only landmarks in an otherwise smooth and uninterrupted landscape.

Key Environmental Features

Physical

- 4.3.5 The rolling Unenclosed Moorland Hills are generally at lower elevations than the higher Moorland Plateaux. Although grit crags and glacial erratics provide some texture to the smooth profiles, the steep escarpments create distinctive and dramatic landforms which are steeply incised and drained by fast flowing streams. The Moorland Hills are formed by the Millstone

Grit series. These rocks were laid down in alternating thick bands of coarse, cemented sand and gritstone separated by weaker shales. The gritstones form the fell tops, while the softer rocks form lower areas. The slopes are of even gradient and are covered by shallow podzolised soils. Peat generally covers higher summits (above 400m). The area tends to have a soft rounded topography, the slopes having been smoothed by ice and further softened by the boulder clay mantle of glacial deposition. The erosive action of water flowing off the main hill summits has cut deeply incised valleys, ravines or cloughs. These form a radial pattern of drainage from the higher ground.

- 4.3.6 Little Mearley Clough, on the steeply sloping western side of Pendle Hill (which falls partly within this Landscape Character Type) is designated as a SSSI for its considerable geological interest. It provides excellent exposure of rock layers originally laid down during the Namurian period of geological history about 320 million years ago. It has been proposed as the standard for this interval of geological time and is thus a site of National importance.

Ecological

- 4.3.7 The mosaics of upland habitats are of significant nature conservation value within the Unenclosed Moorland Hills Landscape Character Type. These form a rich mosaic of heather moorland, 'grass moor', wet flushes and springs, blanket bogs and semi-natural woodlands which support a wide range of characteristic plants and animals. Where this LCT occurs within the central upland core (Bowland Fells) extensive areas of the heather dominated blanket bog, have been sustained by management of grouse, which has created ideal conditions for upland wildlife such as merlin, hen harrier, curlew, peregrine and golden plover. This has been recognised by their designation as a SPA and SSSI. The largest breeding colony of lesser black backed gulls in Europe has become established on Mallowdale and Tarnbrook fells. The deep cloughs and high level oak woods of the moorland slopes provide additional wildlife interest, as do Millstone Grit crags where they are protected from burning and grazing.

Cultural and Historical

- 4.3.8 Mesolithic hunting camps probably existed here, although the ephemeral nature of the remains means that visible evidence is rare. Forest clearance by Neolithic and Bronze Age farmers contributed to the spread of heathland and probably mosses and blanket bog. This led to the decline in the natural woodlands which have not recovered since. Evidence of the Bronze Age is well distributed across the area. Despite early clearance it is possible that large tracts of the Moorland Hills remained under forest cover until it was felled during the Anglo-Saxon and Norse periods. Place name evidence suggests that Norse people settled in the spaces available in these areas; especially north of the Ribble names such as gill, fell, moss, thwaite and beck all indicating a strong Viking influence. Parts of the Moorland Hills were included within the Royal Hunting Forests of Bowland and Pendle in medieval times and were subject to Forest

Law. In places, vaccaries (large, open areas which were used to graze livestock and were created by feudal landowners to make economic returns on their 'waste's' beyond the boundaries of the Deer Parks) are also features of the Moorland Hills. The tenancies of the vaccaries were often held by the same families for many years and were later broken up into smaller holdings for rent. Vaccaries were primarily used in the 13th to 15th centuries. Wolves survived until the 17th century within the Forest of Bowland and this is reflected in place names such as Wolf Fell. There is also evidence of griststone quarrying activities at Clougha, Wolf Fell and Saddle Fell; and peat cutting on Parlick Fell, Wolf Fell, Pendle Hill and Goodber Common. Remains of 19th century millstone production near Quernmore can still be seen on the flanks of Clougha Pike. Whilst there has been little new development in the last 150 years, changes have occurred as a result of abandonment of farmsteads, desertion of the more marginal lands, reversion to rushy pasture and other changes in vegetation management. The suitability of the fells and popularity throughout the modern period of grouse shooting has ensured the continued management of heather moorland.

Development, Settlement and Buildings

- Small, isolated gritstone buildings (previously used for stock shelter), although rare, are focal points in the landscape and fields in their vicinity are enclosed by an associated enclosure of stone walls, however most of this landscape lies above the upper limit of enclosure;
- A few minor public roads cross the Unenclosed Moorland Hills, however these are generally unfenced;
- Access tracks for shooting and shooting huts and butts are common built features;
- Occasional shooting cabins (usually of gritstone construction) are also present.

Landscape Character Areas

4.3.9 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area B1: Mallowdale



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- Panoramic, open views westwards to the Furness Peninsula beyond Morecambe Bay;
- The eastern half of the area includes distinctive hill profiles (such as Haylot and Mallowdale), which contrasts with large expanse of open ground in the western half of the area, which slopes downwards to the north;
- Large areas of rocky outcrops are recognisable landscape features;
- Ward's Stone (within the Moorland Plateaux Landscape Character Type) forms the backdrop within views southwards;
- The open landscape creates a sense of wildness, remoteness and space, which is further strengthened by the enormity and dominance of sky in these large scale landscapes;
- Scotch Guide cairn and several other tall, man-made stone cairns provide recognisable landscape features. For example, the cairns on the western end at Clougha, are associated with large areas of stone piles which are left over from the stone quarrying/processing for quernstones; and those at the eastern end of Mallowdale Fell may have been created to help guide shepherd's home across a rocky, dangerous area;
- The distinctive calls of Golden Plover contribute to recognisable sense of place;
- Traditionally built shooting butts and a shooting cabin are also landscape features which provide visual interest and texture to this area;
- The high boundary wall along Haylot/High Stephen's Head is a recognisable feature within the landscape and may have been an important ownership boundary in the past;
- Several surfaced shooting tracks are visible linear features within the landscape;
- Strong sense of remoteness and tranquillity throughout the area.

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Landscape Character Area B2: Abbeystead



- Open views across Over Wyresdale and the M6 corridor towards Lancaster from the western edge of this area (Harrisend Fell);
- An absence of farmsteads or hamlets, however, traditionally built shooting butts are a visible built element;
- Ashton Memorial (within Lancaster) is also a key landmark within panoramic, open views westwards from Hare Appletree Fell, which encompass Undulating Lowland Farmland within the foreground, set against a backdrop of Morecambe Bay and Black Combe (within the Lake District National Park);
- Landmark Jubilee Tower (which is built from stone and square in shape) provides a viewing platform for panoramic views westwards towards Morecambe Bay and eastwards towards the Bowland Fells;
- A network of sykes and streams provide visual interest;
- Small patches of plantation woodland on Tarnbrook Fell and Lee Fell provide visual interest;
- Within the Tarnbrook area, enclosed land is visible on the fell side, with associated field barns, which are a landmark feature within views across the landscape;
- An extensive network of surfaced shooting tracks is visible across the whole area, in particular between Catshaw Fell and Blaze Moss.

Landscape Character Area B3: Burn Moor Fell



- Bowland Knotts, a series of jagged, gritstone outcrops provide instantly recognisable landscape features and contribute to local sense of place;
- Very strong sense of remoteness and tranquillity, with bird calls or the sound of the wind providing the only audible noises;
- Panoramic, open views from Bowland Knotts towards an amphitheatre of fells to the south;
- A rugged patchwork of cairns and jagged gritstone outcrops provide texture to the landscape on Austwick Common;
- Dramatic, open views northwards and eastwards towards the Yorkshire Dales from several locations within this area.
- The colour of the landscape changes with the seasons, from muted browns and greens in Spring and Summer, to vivid purple when the heather flowers in late Summer and white in the Winter months when the Moorland Hills are snow covered;
- The distinctive calls of birds including the Golden Plover, Gulls, Grouse and Curlew all contribute to recognisable sense of place;
- Sled tracks (related to past quarrying and peat cutting) are visible within the landscape.

Landscape Character Area B4: Pendle Hill



- The distinctive steep northern scarp and flat plateau top determine that this area is an instantly recognisable landmark within views from much of the surrounding landscape, contributing to local sense of place and providing orientation;
- Dramatic, panoramic, open views northwards across the Ribble Valley (and Clitheroe) towards the Yorkshire Dales and the central Bowland Hills (Moorland Plateaux and Unenclosed Moorland Hills Landscape Character Types);
- Panoramic open views across the industrial towns of the Calder Valley with the backdrop of the South Pennines to the south;
- Footpaths and sled tracks are landscape features within this area; in addition to old quarry workings on the northern face of the hill;
- The scars of Ashendean and Mearley Cloughs are also key landscape features within views towards this area.

Landscape Character Area B5: Bleasdale



- Fast-flowing water over boulders and rocks within the higher reaches of the Calder Valley introduces sound and movement to this landscape which has an otherwise strong sense of remoteness and tranquillity;
- There is a general absence of farmsteads or hamlets, however traditional shooting butts are visible built features;
- Open views northwards to the imposing form of Clougha Pike on the horizon, from Stake House Fell;
- Panoramic, open views westwards across Grizedale Lea reservoir (in the middleground) across the Fylde Plain towards Morecambe Bay;
- Calder arbour, with a building surrounded by Scots Pine and dense Rhodedendron is a landscape feature which contrasts with the muted colour and generally smooth texture of the surrounding moorland fells;
- Several small cloughs, incised into the moorland also contribute to the pattern of this landscape;
- Strong sense of openness, with dramatic, dominant ever-changing skies and far reaching skylines and horizons.

Landscape Character Area B6: Wolf Fell to Mellor Knoll



- Patches of coniferous woodland on Fair Oak Fell, ponds along Greenclough and peat hags at Totridge contribute to recognisable sense of place;
- This area includes non hill land and several farmsteads and small hamlets;
- 'Sled' tracks on Parlick, Wolf, Saddle and Burnslack Fells, which were linked to past quarrying and peat cutting activities are visible features within the landscape;
- The War Department (WD) boundary stones of Wolf Fell are a landmark feature, which contributes to recognisable sense of place;
- Blocks of mixed woodland in the Mellor Knoll/Harden area contribute texture to the landscape;
- Mellor Knoll, a distinctive hill at the eastern edge of this area, facilitates dramatic open views into the Hodder Valley and also provides a backdrop to views from within the valley;
- Strong sense of remoteness and tranquillity throughout most of the area;
- Strong sense of openness, with dramatic, dominant ever-changing skies and far reaching skylines and horizons;
- Visible sled tracks on Wolf Fell, which were associated with former peat cutting and quarrying are landscape features.

Landscape Character Area B7: Langdon



- To the north of Bleasdale, the ruins of Langden Castle (a gritstone building with a tin roof and ornate gothic windows) provides a landmark within views across the area;
- Langden Brook, which contains a patchwork of pebbles along its bed and meanders gently through the adjacent moorland hills (which are incised with small streams and cloughs) is also a recognisable landscape feature;
- This area includes several farmsteads and small hamlets;
- The Trough of Bowland, a pass connecting the valleys of the Marshaw Wyre and the Langden Brook, crosses this landscape character area, providing a dramatic route which facilitates open views across the surrounding Unenclosed Moorland Hills;
- The grey stone along the Trough Road is a recognisable landscape feature which demarcates the old boundary between Lancashire and Yorkshire;
- Buildings include the remains of Trough House, an abandoned stone farmstead and Whitendale Farm which is nestled at the bottom of the fells;
- Totridge provides a dramatic skyline backdrop within views southwards;
- The Whitendale and Brennand river valleys cut through this area of Moorland Hills. Lush, green pastures associated with the fast-flowing river corridors contrast with the more muted colours of the surrounding Brennand and Whitendale Fells; both valleys contain isolated traditional working farmsteads;
- Where the course of the Brennand and Whitendale rivers converge to form the upper reaches of the River Dunsop, engineered, water industry infrastructure such as water pumping stations, pipelines and associated buildings are visible human influence along the river corridor;
- Boundaries are generally demarcated by gritstone walls, with a change to occasional limestone walls to the north of Sykes Farm.

Landscape Character Area B8: Crossdale to Lythe



- Panoramic, open views northwards towards the dramatic skyline profile of the Yorkshire Dales from Whitray Fell contributes to recognisable sense of place;
- The northern half of this area is underlain by gritstone, whilst the southern half is predominantly underlain by sandstone;
- Occasional farmsteads are a feature, located at the bottom of the hills and the edge of the area;
- The route of the old Roman Road is also a key landscape feature, which provides visual contrast with the surrounding smooth, heather moorland;
- The drystone walls within the Lamb Hill/Croasdale areas consist of narrow limestone stones, which erode easily;
- Very strong sense of remoteness and tranquillity throughout most of this area;
- The Great Stone of Fourstones, a large glacial erratic, has steps along its side and provides dramatic, panoramic open views towards the Lakeland Fells to the northwest, across the Fylde Plain and Morecambe Bay to the west and the Bowland Fells to the east;
- Ingleborough and Pen Y Ghent (within the Yorkshire Dales) provide the backdrop to panoramic, open views north and eastwards from Tatham Fells;
- Strong sense of openness, with dramatic, dominant ever-changing skies and far reaching skylines and horizons;
- The colour of the landscape changes with the seasons, from muted browns and greens in Autumn, to vivid purple when the heather flowers in late Spring and white in June with the flowering of cotton grass. The landscape is often white again in the Winter months when the Moorland Hills are snow covered;
- The distinctive calls of birds including the Golden Plover, Peregrine, Hen Harrier, Meadow Pipit, Wheatear, Skylarks, Gulls, Grouse and Curlew all contribute to recognisable sense of place.

Landscape Character Area B9: Goodber Common



- Strong sense of openness throughout this area;
- This area encompasses a relatively large expanse of level ground;
- The dominant habitat is wet acid grassland, including some areas of (seasonally) very wet ground;
- Small pools, supporting acid flora, damselflies, dragonflies and large heath butterfly (one of only two sites in Lancashire) are recognisable landscape features;
- The distinctive stone sheepfold on Goodber Common, Thornton Castle cairn and Higher Thrusgill conifer plantation provide texture within an otherwise smooth landscape;
- Dramatic, panoramic views northwards towards the distinctive profile of Ingleborough (within the Yorkshire Dales) from Summergill and Goodber Fells;
- Strong sense of openness, with dramatic, dominant ever-changing skies and far reaching skylines and horizons;
- Distinctive pattern of traditional sheep farming on Goodber Common, which is linked directly to Roeburndale and Hindburndale.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.3.10 Observable changes in the past include:

- Erosion of the underlying geology by streams and brooks to create the distinctive deeply incised, narrow gullies on the smooth fells sides;
- Planting of coniferous woodland, which has introduced a sense of regularity within parts of this otherwise predominantly natural landscape;
- Subsequent clear-felling and replacement of conifers with broadleaf species (often as part of the United Utilities Sustainable Catchment Management Project (SCAMP));
- Footpath erosion as a result of recreational pressures on key routes;
- Introduction of built elements (shooting butts, cabins and tracks) which has changed the landscape pattern;
- Significant archaeological record, demonstrating several thousand years of use, which has influenced the landscape through mining, road building and other cultural and religious activities;
- Drainage of blanket bogs in some areas; and
- Increase in the number of roe deer, which causes a potential threat to woodland development.

Current Landscape Condition

4.3.11 The overall condition of the Unenclosed Moorland Hills Landscape Character Type is considered to be moderate. The condition of heath varies with land ownership. In some areas of poor condition, improvements can be seen where the moorland is managed under Environmental Stewardship. In places, stone grouse butts, cairns and stone buildings are in disrepair. The condition of the blanket bog is generally poor as a result of historic overgrazing and drainage, which has damaged the composition and structure of these habitats (causing a loss of heather to bilberry and cottongrass bog). Sphagnum moss is generally sparse due to the effects of past burning practices. This is, however, improving with lower stocking rates and grazing levels and re-wetting. There is evidence of some clear felling of coniferous woodland on the eastern bank of the River Dunsop (part of the SCAMP project). There is also evidence of fencing in the Langden and Brennand valleys.

Future Landscape Changes and Opportunities

4.3.12 In the short term (5 years) it is likely that there will be continued positive future changes in the form of improved stock management on the moorland and sensitive management of the heath

for grouse shooting. There is potential to expand levels and coverage of grip blocking through Environmental Stewardship. Negative changes are likely to include an increase in the spread of invasive species such as bracken and gorse.

4.3.13 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool for managing landscape change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within the Unenclosed Moorland Hills are outlined below:

- *Agricultural Change and Land Management* - The increase in the spread of invasive species such as bracken and gorse in areas where stocking numbers are reduced may lead to reduced biodiversity and changed key characteristics. The sustainable management of heath will help to contain excessive erosion and retain a key habitat. There may also be pressure for an increase in the number of shooting tracks and related structures, which could be visually intrusive if not designed sensitively. With a potential decline in upland hill farming, there is potential that existing stone structures such as sheepfolds and occasional walls will fall into disrepair. There is also potential for increased frequency of grip blocking through Environmental Stewardship schemes.
- *Climate Change* - Fluctuating temperatures, precipitation and general weather patterns will continue to affect this dynamic landscape, leading to potential increases in the incidences of moorland fire and excessive erosion, the possible spread of invasive species and changes in the species composition of habitats. It is also possible that climate change will lead to increased flash flooding and gully erosion in upland cloughs and sykes.
- *Development* - Large-scale renewable energy development would break up the uncluttered skylines and key views and erode the open and undeveloped character of the area. There is potential pressure from tourist-related development which may result in a related increase in traffic on narrow roads and tracks. Pressure for the expansion of settlements and the conversion of existing vernacular dwellings and farm buildings is also a potential future pressure on this landscape. Such development is often associated with ornamental trees and shrubs which have a suburbanising influence over this predominantly rural landscape.

Sensitivities and Capacity for Change

4.3.14 The Unenclosed Moorland Hills Landscape Character Type is considered to have very high visual sensitivity overall, as a result of the strong sense of openness and generally uninterrupted skylines, coupled with strong intervisibility with adjacent Landscape Character Types. Areas that appear to be hidden within one viewpoint are likely to be highly visible and exposed from

another. This Landscape Character Type also forms a striking backdrop to views from adjacent landscapes. This Type also has high ecological sensitivity and supports a diverse range of rare habitats and species (recognised by designation of much of the area as SAC and SSSI) and an intact and recognisable landscape pattern. In addition, there is a strong sense of remoteness and tranquillity throughout (only partially disturbed at times of shooting). Landscape Character Sensitivity is considered to be high. As a result, overall capacity to accommodate change, without compromising the key characteristics of this Landscape Character Type is considered to be very limited, apart from change which reinforces positive attributes, such as habitat enhancements.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.3.15 The overall strategy for this Landscape Character Type is to conserve and enhance the mosaic of upland habitats including heath and blanket bog, acid grassland, clough woodland, wet flushes and steep incised cloughs – all of which support a range of rare species. The exposed and undeveloped skylines should be conserved and the strong overall sense of remoteness and tranquillity should be maintained. Existing built structures (sheep folds, walls and barns) should be managed, but the general absence of built structures should be maintained.

4.3.16 Specific guidelines include:

Physical Character

- **Restore** areas of degraded blanket bog and peat erosion;
- **Fill in** moorland drainage grips to reverse the impacts of past drainage and re-establish active blanket bogs;
- **Restore** characteristic clough woodlands;
- **Avoid** large-scale tree planting within this landscape where trees are generally absent and there is a strong sense of openness;
- **Avoid** drainage of moorland blanket bog;
- **Encourage** avoidance of fencing in open, highly visible locations, except where its short-term benefits outweigh related landscape or wildlife loss;
- **Encourage** removal of redundant fencelines;
- **Maintain** and where appropriate **enhance** crags and gritstone rock outcrops as landscape features;
- **Promote** the use of gritstone and turf for surfacing, shelters and shooting butts in preference to other materials;

- Where required, **encourage** responsible burning of heather moorland²⁹ or management through cutting;

Ecological Character

- **Manage** the spread of invasive species;
- **Encourage** re-wetting of blanket bog and the sustainable management of heath to restore and repair areas of erosion and retain key habitats;
- **Encourage** grazing management that promotes more favourable condition of upland semi-natural vegetation;
- **Encourage** habitat linkage to increase robustness to climate change;
- **Promote** the restoration of dwarf shrub communities and bog-mosses (*Sphagna*);
- **Increase** the biodiversity of existing woodlands through the creation of rides and glades and through the retention of dead wood;
- **Restructure** conifer plantations to create softer outlines and a higher broadleaved content;
- **Encourage** natural regeneration and linkage of existing woodland sites;
- **Introduce** new native woodland broadleaf screen planting around commercial forests to soften their visual impact³⁰;
- **Restore** clough woodlands, in locations where flushes are not present;
- **Increase** the biodiversity of existing woodlands by the removal of non-native species to Bowland, stockproofing and measures to enhance natural regeneration of trees and woodland species;
- **Maintain** upland spring and flush habitats through appropriate management and **ensure** that they are not affected by tree planting projects;
- **Restore** habitat linkage by de-fragmentation measures and the enhancement of wildlife permeability.

Cultural and Historic Character

- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Consider** the wider setting of historic or archaeological sites in all land management and site development schemes;
- **Ensure** effective planning for controlling moorland fires;
- **Conserve** footpaths, bridleways or byways along with their associated features such as traditional stiles and gates, which represent historic routeways;
- **Promote** whole fell grazing management where possible, erecting new fences on open fell, only where alternatives are not practicable;

²⁹ The Heather and Grass burning Code, Natural England, 2007

³⁰ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

³² The Heather and Grass burning Code, Natural England, 2007

- **Conserve** distinctive historic landscape features and archaeological sites, including prehistoric cairns and earthwork sites, moorland trackways, industrial and quarry remains;
- Where required, **encourage** responsible burning of heather moorland³² or management through cutting;
- **Avoid** further construction of dwellings away from existing clusters of buildings, forming an isolated settlement pattern;
- **Repair** derelict stone buildings, using local vernacular materials (gritstone and limestone);
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where signage is necessary;
- **Repair** sheepfolds and drystone walls;
- **Restrict** the approval of communication masts;
- **Ensure** careful siting and design of visitor facilities, using local materials;

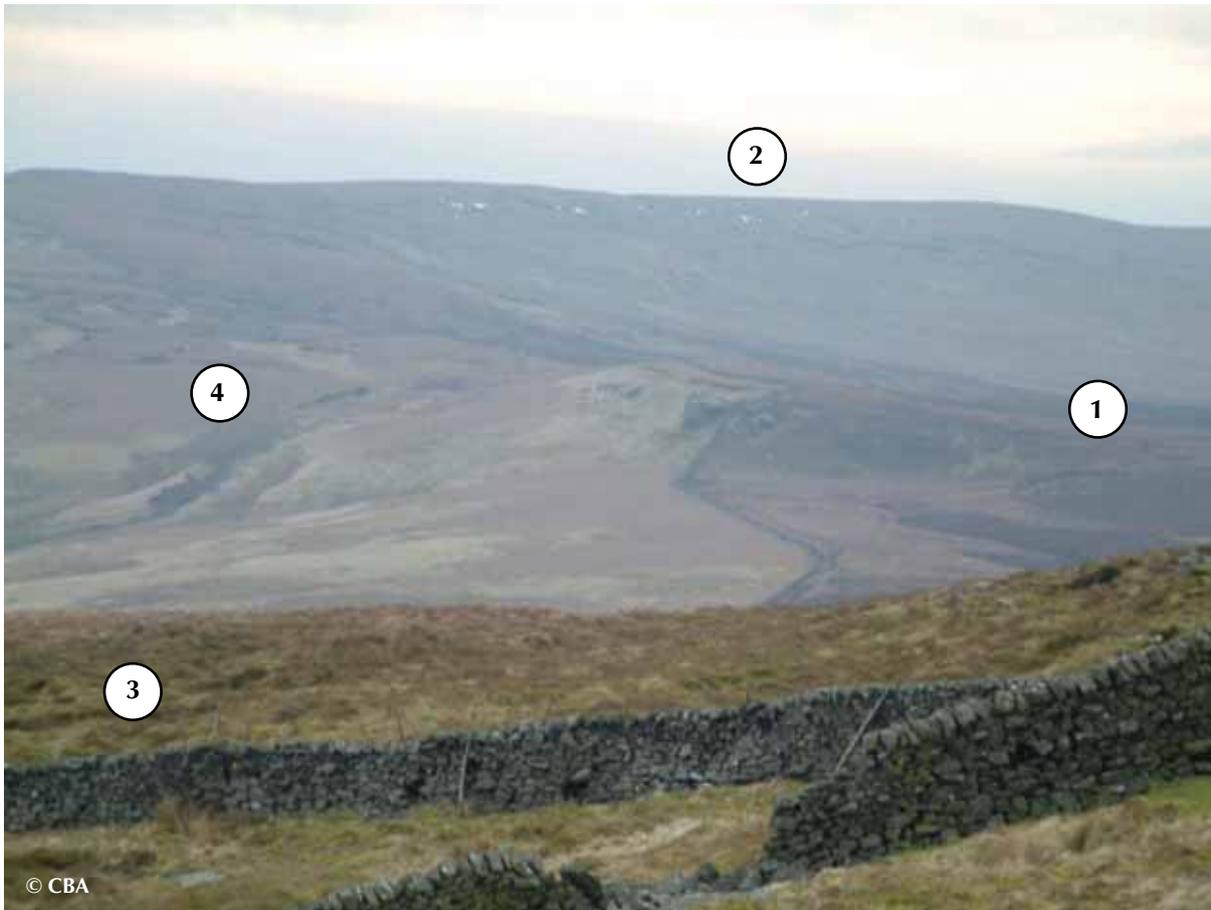
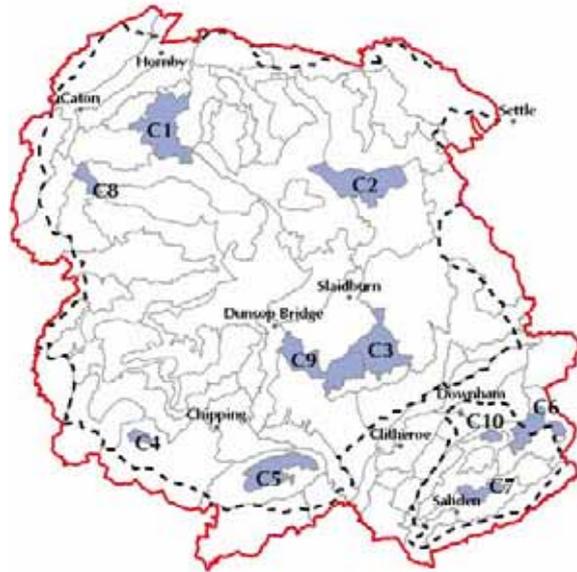
Aesthetic and Perceptual Character

- **Protect** skylines and key views to and from the area from tall, vertical and large-scale developments that may erode the open and undeveloped character of the area;
- **Maintain** the sense of openness;
- **Maintain** the strong sense of tranquillity and remoteness through careful planning of visitor access.

LANDSCAPE CHARACTER TYPE C: ENCLOSED MOORLAND HILLS

Key Characteristics

- 1 Open and exposed character.
- 2 Strong sense of elevation with vast, expansive skies and uninterrupted views.
- 3 Dry stone walls of roughly hewn blocks.
- 4 Tree cover is generally limited to remnant clough woodland.



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4.4 C: ENCLOSED MOORLAND HILLS

CHARACTER ASSESSMENT

Location

- 4.4.1 The Enclosed Moorland Hills Landscape Character Type occurs within the north and south of the Study Area and also on the Pendle Hill outlier. To south and east of Caton and also north of Slaidburn, this Landscape Character Type forms part of the central core of Moorland Hills at the centre of the AONB. Further to the south, the Enclosed Moorland Hills form outliers at Easington, Newton, Longridge and Beacon Fells. At the north-eastern edge of Pendle Hill, this LCT extends outside the AONB boundary to encompass the eastern edge of Twiston Fells and Rimington Moor.

Landscape Character Description

- 4.4.2 The Enclosed Moorland Hills encircle the Moorland Plateaux at lower elevations and, like the Unenclosed Moorland Hills, they are characterised by distinct hill profiles. Unlike the Unenclosed Moorland Hills there is more evidence here of human activity in the form of large enclosures – mostly delineated by gritstone walls, made of roughly cut blocks, with distinctive throughstones – and small, isolated stone hamlets and farmsteads. The enclosed fields are mostly large, so there is still a feeling of openness and remoteness and the dramatic, long distance views across wide valleys and surrounding lowlands are unimpeded.
- 4.4.3 The hills are incised by steep narrow cloughs created by fast flowing streams draining the fells and plateaux above. Heather and bilberry with acid grassland (white moors) scattered woodland, bracken and blanket bog create a mosaic of habitats rich in insect and bird life. Quarries, conifer blocks (some quite extensive as on Longridge and Beacon Fell), sheepfolds, shooting tracks and butts provide evidence of human activity in an otherwise wild and untouched landscape.
- 4.4.4 The light and weather patterns provide an ever changing backdrop and atmosphere for this landscape character type.

Key Environmental Features

Physical

- 4.4.5 The rolling Unenclosed Moorland Hills are generally at lower elevations than the higher Moorland Plateaux. Although grit crags and glacial erratics provide some texture to the smooth profiles, the steep escarpments create distinctive and dramatic landforms which are steeply

incised and drained by fast flowing streams. The Moorland Hills are formed by the Millstone Grit series. These rocks were laid down in alternating thick bands of coarse, cemented sand and gritstone separated by weaker shales. The gritstones form the fell tops, while the softer rocks form lower areas. The slopes are of even gradient and are covered by shallow podzolised soils. Peat generally covers higher summits (above 400m). The area tends to have a soft rounded topography, the slopes having been smoothed by ice and further softened by the boulder clay mantle of glacial deposition. The erosive action of water flowing off the main hill summits has cut deeply incised valleys, ravines or cloughs. These form a radial pattern of drainage from the higher ground. The underlying geology is visible within the stone walls that divide parts of this landscape. Quarrying is a feature of parts of this Landscape Character Type, as a result of its rich geological resources of millstone grit.

Ecological

- 4.4.6 The mosaics of upland habitats are of significant nature conservation value within the Unenclosed Moorland Hills Landscape Character Type. These form a rich mosaic of heather moorland, 'grass moor', wet flushes and springs, blanket bogs and semi-natural woodlands which support a wide range of characteristic plants and animals. Where this LCT occurs within the central upland core (Bowland Fells) extensive areas of the heather dominated blanket bog, have been sustained by management of grouse, which has created ideal conditions for upland wildlife such as merlin, hen harrier, curlew, peregrine and golden plover. This has been recognised by their designation as a SPA and SSSI. The deep cloughs and high level oak woods of the moorland slopes provide additional wildlife interest, as do Millstone Grit crags where they are protected from burning and grazing.

Cultural and Historical

- 4.4.7 Mesolithic hunting camps probably existed here, although the ephemeral nature of the remains means that visible evidence is rare. Forest clearance by Neolithic and Bronze Age farmers contributed to the spread of heathland and probably mosses and blanket bog. This led to the decline in the natural woodlands which have never since recovered. Evidence of the Bronze Age is well distributed across the area. Despite early clearance it is possible that large tracts of the Moorland Hills remained under forest cover until it was felled during the Anglo-Saxon and Norse periods. Place name evidence suggests that Norse people settled in the spaces available in these areas; especially north of the Ribble names such as gill, fell, moss, thwaite and beck all indicating a strong Viking influence. Parts of the Moorland Hills were included within the Royal Hunting Forests of Bowland and Pendle in medieval times and were subject to Forest Law. Wolves survived until the 17th century within the Forest of Bowland and this is reflected in place names such as Wolf Fell. Later, landscape change occurred as a result of the enclosure and improvement of moorland and woodland wastes to meadows and pasture from the middle of the 16th century; this pressure on land was created by population and economic

growth. The shapes of the fields indicate the type of enclosure; geometric patterns indicate systematic division or enclosure of the commons, usually of the 18th and 19th century. This process created a non nucleated settlement pattern of individual farmsteads which now forms the predominant farming unit on the Moorland Hills. Farm buildings, outbarns, sheep folds and boundary walls are constructed of stone and form most of the oldest buildings of the area. Whilst there has been little new development in the last 150 years, changes have occurred as a result of abandonment of farmsteads, desertion of the more marginal lands, reversion to rushy pasture and other changes in vegetation management. The suitability of the fells and popularity throughout the modern period of grouse shooting has ensured the continued management of heather moorland.

Development, Settlement and Buildings

- Small, isolated gritstone buildings (previously used for stock shelter), although rare are focal points in the landscape and fields in their vicinity are enclosed by an associated enclosure of stone walls; however most of this landscape lies above the upper limit of enclosure;
- A few minor public roads cross the Unenclosed Moorland Hills, however these are generally unfenced;
- Access tracks for shooting and shooting huts and butts are common built features;
- Occasional shooting cabins (usually of gritstone construction) are also present.

Landscape Character Areas

4.4.8 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area C1: Caton Moor



- Panoramic, open views northwards across the broad floodplain of the Lune Valley contribute to recognisable sense of place;
- Caton Moor windfarm is a dominant landscape feature which introduces a source of noise and movement to the landscape and is a visible landmark within views to the area from several surrounding Landscape Character Types and areas;
- Intricate pattern of stone walls cross the moorland;
- This area includes a large area of common (Whit Moor) which is grass moorland;
- Habitats include heather and grass moorland (on Caton and Claughton Moors);
- Dramatic, panoramic, open views north and westwards across the Fylde Plain and Morecambe Bay;
- The distinctive calls of curlew, lapwing, short-eared owls and peregrines contribute to recognisable sense of place;
- Sense of remoteness, despite the presence of the windfarm;
- Quarrying is a visible landscape feature within this area.

Landscape Character Area C2: Crutchenber



- The dramatic profile of Bowland Knotts provides a skyline backdrop to views northwards;
- Dramatic, open views southwards across the vast expanse of water within Stock's reservoir and the strong vertical form of Gisburn Forest;
- Panoramic, open views northwards towards the three peaks of the Yorkshire Dales;
- An intricate network of low stone walls which cross the fells and contribute to recognisable landscape pattern;
- The underlying limestone is evident as shake holes at Higher and Lower Clough.

Landscape Character Area C3: Easington



- Open views northwards from Easington Fell, towards the village of Newton, which is nestled against a backdrop of Burn Fell, Dunsop Fell and Beatrix Fell, with their smooth texture and rounded profiles;
- Examples of boundary and woodland creation and restoration are evident within parts of this landscape;
- An extensive network of unsurfaced tracks cross this landscape (some of which have been surfaced over the past ten years on Meanley Estate);
- Series of small stone cairns (including Old Ned and the Wife) are visible landscape features which introduce texture to the landscape;
- Wide, open views southwards across the low-lying valley of the River Ribble towards Pendle Hill, provide instantly recognisable sense of place;
- Patches of woodland (including Grindleton Fell plantation) contribute to a sense of enclosure within this otherwise open landscape.

Landscape Character Area C4: Beacon Fell



- Large areas of conifer plantations are landscape features (several of which have been gradually converted to mixed woodland and heath moorland);
- Small, distinctive gritstone outcrop which is dominated by the geometric vertical form of coniferous forestry, providing a landmark within views from surrounding Landscape Character Types and Areas;
- Dramatic, open views northwards towards Fell Foot and Parlick;
- Panoramic open views from the summit (at 266m AOD) on a clear day towards Morecambe Bay (Blackpool Tower), the Lake District and the Isle of Man to the west and across to Clitheroe, Pendle Hill and Preston to the south and east, providing a strongly recognisable sense of place;
- The outer edges of the fell comprise farmed pastures;
- The wooded fell provides a dramatic skyline backdrop within many views towards the area;
- The area encompasses a network of surfaced paths and tracks, which are associated with the visitor facilities.

Landscape Character Area C5: Longridge Fell



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- Isolated, long, prominent ridge of hard millstone grit which separates the valleys of the Ribble, to the south, from the Hodder to the north;
- Provides a distinctive skyline backdrop within views from surrounding areas of Undulating Lowland Farmland;
- Bog cotton and grass provide a distinctive white colour in Summer;
- Dense, coniferous plantation woodland cloaks the fell (which has been gradually converted into mixed woodland in places), contributes to its generally green colour, contrasting with the colours of the surrounding lowlands and more muted browns and greys of the central Bowland Fells;
- In places, the woodland is interspersed with patches of heath and grass moorland;
- Open views northwards across the Vale of Chipping towards a backdrop of Unenclosed Moorland Hills and Plateaux, including Wolf Fell, Mellor Knoll and Brown Berry Plain;
- Open views southwards across the wide floodplain of the River Ribble and south-westwards across Liverpool Bay towards Snowdon mountains;
- A low-key network of recreational footpaths and tracks cross this landscape, associated with occasional visitor facilities;
- The white trig point on Longridge Fell summit is a landscape feature which contributes to recognisable sense of place and orientation.

Landscape Character Area C6: Twiston



- Distinctive network of stone walls, which contribute to landscape pattern and divide areas of rough grazing into 'copy's';
- Isolated stone buildings and features punctuate the underlying 'white' moor;
- Strong sense of remoteness and tranquillity throughout;
- Dramatic, panoramic, open views northwards towards the peaks of Ingleborough and Pen Y Ghent within the Yorkshire Dales provide recognisable sense of place;
- Glimpse views to expanses of water within reservoirs close to Barley.

Landscape Character Area C7: Lingbobs and Stainscombe



- Open views towards the expanses of water within Churn Clough reservoir, which provides an instantly recognisable landscape feature;
- Fast flowing water within Ogden Clough introduces a source of noise and movement within this landscape, which has a strong sense of remoteness and tranquillity.

Landscape Character Area C8: Birk Bank



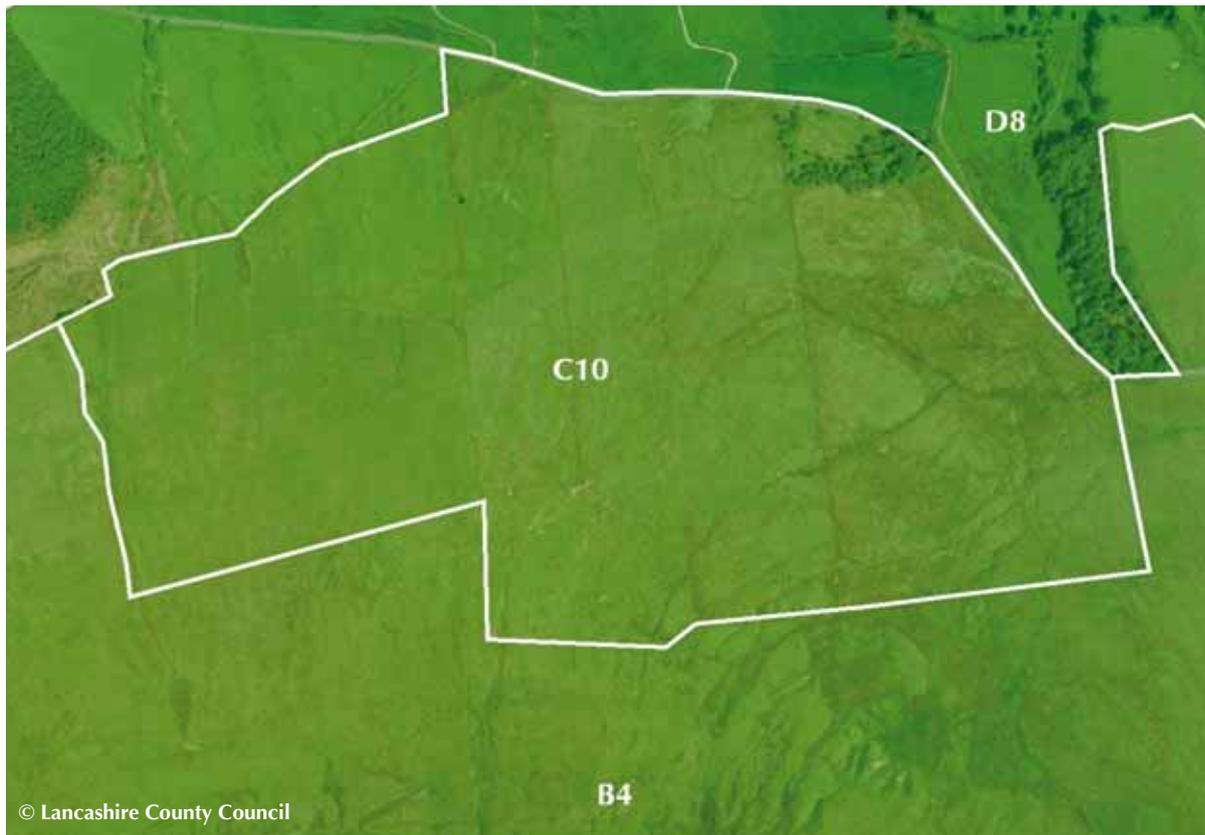
- A textured landscape, resulting from the gritstone outcrops and rocks which punctuate the smooth heather moorland;
- Birk Bank disused quarries are striking landscape features;
- The rugged profile of rocky outcrops on Clougha Pike provide a skyline backdrop to views from the area;
- Low, deciduous trees along Little Windy Clough are also recognisable landscape features;
- Quernmore church, which is nestled against a backdrop of pastoral fields, delineated by stone walls (within the adjacent Undulating Lowland Farmland Landscape Character Type) is a visible landmark within views westwards.

Landscape Character Area C9: Newton and Birkett



- The radio mast on Waddington Fell is a landmark within views to the area from adjacent Landscape Character Areas;
- Waddington Fell sandstone quarry is also a recognisable landscape feature;
- Dramatic, open views to the distinctive profile of Pendle Hill to the south provide recognisable sense of place;
- The stone shooting cabin on Browsholme Moor, with its corrugated iron roof, and Browsholme Tarn are features within views across this landscape;
- Relatively strong sense of remoteness and tranquillity throughout the area;
- Strong sense of openness, with long panoramas, coupled with wide horizons and skies;
- Open views southwards across the distinctive pattern of adjacent Undulating Lowland Farmland with Parkland and Wooded brooks towards the recognisable skyline backdrop of Pendle Hill;
- Patches of sandstone quarrying are also a feature of this area;
- There is evidence of mining in the Newton Fells area;
- There is also a long history of estate owned and managed land within this area, displaying a patchwork of moorland and woodland blocks (for example at Hodder Bank and on Birket and Newton Fells).

Landscape Character Area C10: Downham



- Panoramic open views northwards towards the Yorkshire Dales and also north-westwards towards the central Bowland Fells provide recognisable sense of place and orientation;
- Dramatic views across the patchwork of pasture fields surrounding the estate village of Downham to the north.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.4.9 Observable changes in the past include:

- A dynamic landscape constantly changing with evidence of past glacial activity and still being shaped by weathering;
- Lack of stone wall management and introduction of fencing in some areas, which may have lead to a change in landscape pattern and visual clutter;
- Evidence of use of this landscape for mining;
- Footpath erosion as a result of recreational pressures on key routes;
- Introduction of built elements (shooting butts, cabins and tracks) which has changed the landscape pattern;
- Drainage of blanket bogs in some areas;
- Increase in the number of Roe Deer, which causes a potential threat to woodland development.

Current Landscape Condition

4.4.10 The overall condition of the Enclosed Moorland Hills Landscape Character Type is considered to be moderate to good. The condition of heath varies with land ownership. In some areas of poor condition, improvements can be seen where the moorland is managed under Environmental Stewardship. In places, stone grouse butts, cairns and stone buildings are in disrepair. Stone walls are generally in good condition throughout most of the Landscape Character Type. The condition of the blanket bog, where present, is generally poor as a result of historic overgrazing, which has damaged the composition and structure of these habitats (causing a loss of heather to bilberry and cottongrass bog). Sphagnum moss is generally sparse due to the effects of past burning practices. This is, however, improving with lower stocking rates and grazing levels. An active quarry and communications mast are visual detractors.

Future Landscape Changes and Opportunities

4.4.11 In the short term (5 years) it is likely that there will be continued positive future changes in the form of improved stock management on the moorland and sensitive management of the heath for grouse shooting. Negative changes are likely to include an increase in the spread of invasive species such as bracken and gorse.

4.4.12 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool for managing landscape change and ensuring a positive future for the area. Potential

longer-term changes and key opportunities within the Enclosed Moorland Hills are outlined below:

- *Agricultural Change and Land Management* - The increase in the spread of invasive species such as bracken and gorse in areas where stocking numbers are reduced may lead to reduced biodiversity and changed key characteristics. The sustainable management of heath will help to contain excessive erosion and retain a key habitat. There may also be pressure for an increase in the number of shooting tracks and related structures, which could be visually intrusive if not designed sensitively. With a potential decline in upland hill farming, there is potential that existing stone structures such as sheepfolds and walls will fall into disrepair. There is also potential for increased frequency of grip blocking through Environmental Stewardship schemes.
- *Climate Change* - Fluctuating temperatures, precipitation and general weather patterns will continue to affect this dynamic landscape, leading to potential increases in the incidences of moorland fire and excessive erosion, the possible spread of invasive species and changes in the species composition of habitats. It is also possible that climate change will lead to increased flash flooding and gully erosion in upland cloughs and sykes.
- *Development* - Large-scale renewable energy development would break up the uncluttered skylines and key views and erode the open and undeveloped character of the area. There is potential pressure from tourist-related development which may result in a related increase in traffic on narrow roads and tracks and potential fencing of open roads and lanes. Pressure for the expansion of settlements and the conversion of existing vernacular dwellings and farm buildings is also a potential future pressure on this landscape. Such development is often associated with ornamental trees and shrubs which have a suburbanising influence over this predominantly rural landscape.

Sensitivities and Capacity for Change

- 4.4.13 The Unenclosed Moorland Hills Landscape Character Type is considered to have very high visual sensitivity overall, as a result of the strong sense of openness and generally uninterrupted skylines, coupled with strong intervisibility with adjacent Landscape Character Types. Areas that appear to be hidden within one viewpoint are likely to be highly visible and exposed from another. This Landscape Character Type also forms a striking backdrop to views from adjacent landscapes. There is high ecological sensitivity overall, resulting from the patchwork of habitats which often support rare species (recognised by designation of much of the area as a SAC and SSSI). This type is considered to have a recognisable and intact landscape. In addition, there is a strong sense of remoteness and tranquillity throughout (only partially disturbed at

times of shooting), resulting in high landscape character sensitivity overall. As a result, overall capacity to accommodate change, without compromising the key characteristics of this Landscape Character Type is considered to be very limited, apart from change which reinforces positive attributes, such as habitat enhancements.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.4.14 The overall strategy for this Landscape Character Type is to conserve and enhance the mosaic of upland habitats including heath, acid grassland, clough woodlands and grassland habitats which support a range of rare species. Conserve the exposed and undeveloped character of skylines and the overall strong sense of remoteness and tranquillity. The general absence of tall built structures should also be conserved, whilst locally distinctive features (as described in the Landscape Character Area descriptions) should be conserved and enhanced where possible.

4.4.15 Specific guidelines include:

Physical Character

- **Restore** areas of degraded blanket bog and peat erosion;
- **Fill in** moorland drainage grips to reverse the impacts of past drainage and re-establish active blanket bogs;
- **Avoid** large-scale tree planting within this landscape where trees are generally absent and there is a strong sense of openness;
- **Avoid** drainage of moorland blanket bog;
- **Encourage** avoidance of fencing in open, highly visible locations, except where its short-term benefits outweigh related landscape or wildlife loss;
- **Maintain** and where appropriate **enhance** crags and gritstone rock outcrops as landscape features;
- **Promote** the use of gritstone and turf for surfacing, shelters and shooting butts in preference to other materials;
- **Restore** characteristic clough woodlands.

Ecological Character

- **Manage** the spread of invasive species;
- **Enhance** the existing valuable mosaic of moorland habitats;
- **Encourage** the sustainable management of heath and blanket bog to contain excessive erosion and retain key habitats;
- **Encourage** grazing management that promotes more favourable condition of upland semi-natural vegetation;
- **Encourage** habitat linkage to increase robustness to climate change;

- **Promote** restoration and regeneration of heather and bilberry;
- **Seek** opportunities to restructure conifer plantations to create softer outlines and a higher broadleaved content;
- **Encourage** natural regeneration and linkage of existing woodland sites;
- **Introduce** new native woodland broadleaf woodland screen planting around commercial forests to soften their visual impact³³;
- **Increase** the biodiversity of existing woodlands through the creation of rides and glades and through the retention of dead wood³⁴.

Cultural and Historic Character

- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Consider** the wider setting of historic or archaeological sites in all land management and site development schemes;
- **Encourage** the sympathetic renovation of derelict moorland farm buildings, giving particular emphasis to the potential impacts of new tracks and services;
- **Ensure** effective planning for controlling moorland fires;
- **Conserve** footpaths, bridleways or byways along with their associated features such as traditional stiles and gates, which represent historic routeways;
- **Promote** whole fell grazing management where possible, erecting new fences on open fells only where alternatives are not practicable;
- **Conserve** distinctive historic landscape features and archaeological sites, including prehistoric cairns and earthwork sites, moorland trackways, industrial and quarry remains;
- Where required, **encourage** responsible burning of heather moorland³⁵ or management through cutting.
- **Repair** derelict stone buildings, using local vernacular materials (gritstone and limestone);
- **Conserve** and **repair** the network of drystone walls using local gritstone or limestone;
- **Encourage** the sympathetic renovation of derelict moorland farm buildings;
- **Ensure** careful design and siting of visitor facilities and access routes, using local materials;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where signage is necessary.

Aesthetic and Perceptual Character

- **Protect** skylines and key views to and from the area from tall, vertical and large-scale developments that may erode the open and undeveloped character of the area;
- **Maintain** the sense of openness;

³³ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

³⁴ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

³⁵ The Heather and Grass burning Code, Natural England, 2007

- **Maintain** the strong sense of tranquillity and remoteness through careful planning of visitor access.

LANDSCAPE CHARACTER TYPE D: MOORLAND FRINGE

Key Characteristics

- 1 Traditional stone field barns are a recognisable landscape feature.
- 2 Dry stone walls of rough hewn blocks create strong patterns within the landscape and reflect the underlying geology.
- 3 Sheep grazing is the predominant land use, interspersed in places with a patchwork of traditionally managed meadows, wet rushy pasture, in-byes and acid grassland.



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4.5 D: MOORLAND FRINGE

CHARACTER ASSESSMENT

Location

- 4.5.1 The Moorland Fringe Landscape Character Type occurs in several locations throughout the Study Area and on the Pendle Hill outlier. This Landscape Character Type usually forms the setting for either the Unenclosed Moorland Hills (B) or Enclosed Moorland Hills (C) Landscape Character Types.

Landscape Character Description

- 4.5.2 The transitional rolling enclosed landscape of the Moorland Fringe skirts the edges of the Moorland Hills, usually at an elevation of more than 200m, and links the upland to the lowland landscape. There is an increasing impact of human activity here, with more dry stone walls, improved pastures, scattered farmsteads and stone out-barns.
- 4.5.3 The Moorland Fringe is still largely gritstone, although there are small but significant areas of limestone in the Hodder Valley. The rolling landscape provides 'in-bye' pasture for sheep and some cattle, and their movements mark the seasons of the year. Traditional meadows provide rich habitats, and the patches of heather moorland, occasional windswept trees and small woodlands offer variety in the texture of these lower hills. Damp pastures are colonised by wading birds in the spring and early summer, when the calls and sights of curlew and lapwing dominate the scene. Hares are also relatively common in these areas.
- 4.5.4 Small landscape features such as sheepfolds, tramways and tracks, quarries, mines, field barns and stiles provide local distinctiveness and signs of a more industrial past within a still expansive and atmospheric landscape. Farmsteads are isolated, often strung along a track following a contour of the hill, and drystone walls still form the majority of field boundaries, with distinctive through and coping stones creating strong patterns in the landscape, and reflecting the underlying geology. The distinctive calls of wading birds including lapwing, curlew, snipe and redshank contribute to recognisable sense of place. There are still dramatic open views afforded from these flanks of the fells – towards the villages and valleys of the lowlands, and often featuring reservoirs and parkland in the foreground.

Key Environmental Features

Physical

- 4.5.5 The fringes of moorland areas are transitional enclosed landscapes between the inhospitable moorland fells and the more intensively farmed land of the lowlands. The Moorland Fringes are underlain by a combination of rocks of the Millstone Grit Series and limestone. The solid geology is overlain by soils whose thickness varies according to elevation and topography; the gentler, more sheltered slopes and broad terraces above the valleys have a thicker covering of soils than the moorland summits. This Landscape Character Type occupies the high ground fringing the main moorland blocks, typically at an altitude of between 215 and 250 m above sea level, sometimes extending to 300m or above. Little Mearley Clough, on the steeply sloping western side of Pendle Hill (which falls partly within this Landscape Character Type) is designated as a SSSI for its considerable geological interest. It provides excellent exposure of rock layers originally laid down during the Namurian period of geological history about 320 million years ago. It has been proposed as the standard for this interval of geological time and is thus a site of National importance.

Ecological

- 4.5.6 The land within this Landscape Character Type which remains as unimproved agricultural grassland is extremely valuable for nature conservation and, with the moorlands, forms an intimate part of the rich mosaic of upland habitats within the AONB. Manchester Treble-bar, and a rare spider, *Clubiona norvegica*, have both been recorded on Caton Moor. Of the drier calcareous meadows, the few which are traditionally managed to produce a summer hay crop, support a range of characteristic plants including lady's mantle, sneezewort and adder's tongue. Myttons Meadows (approximately 1km to the north-west of Slaidburn) are designated as a SSSI because they represent an example of traditionally managed, species-rich meadow in Lancashire. Where parts of the in-bye land are still undrained, moisture loving plants such as marsh marigold, yellow iris, ragged robin and marsh thistle thrive. Traditionally managed meadows also provide feeding grounds valuable for twite, while the wet rushy pastures support nationally important populations of birds such as curlew, redshank, lapwing and snipe. Upland rushy pastures were formerly hay meadows which provided a valuable habitat for breeding waders. Acidic grasslands are also important for the survival of several upland bird species. The lower slopes of the moorland fringes show a gradual transition to the verdant grasslands of the Undulating Lowland Farmlands. Bright green 'improved' pasture fields are a feature of the landscape. Within this landscape, flushes, fens, streams and roadside verges also provide key ecological habitats.

Cultural and Historical

- 4.5.7 The hillside areas, which are set above the densely wooded valleys and below the exposed summits of the open moors, have a long history of land use and settlement. The comparatively small size of some land holdings results from the system of land inheritance whereby land was divided equally between sons. On good farmland this has created a landscape of scattered farmhouses in relatively close proximity. A large number of farmhouses are distinctive 'laithes houses' which were part house, part stall/hay loft. In places, vaccaries (large, open areas which were used to graze livestock and were created by feudal landowners to make economic returns on their 'waste's' beyond the boundaries of the Deer Parks) are also features of the Moorland Hills. The tenancies of the vaccaries were often held by the same families for many years and were later broken up into smaller holdings for rent. Vaccaries were primarily used in the 13th to 15th centuries. The pace of enclosure grew during the 16th and 17th centuries and continued as a result of the Parliamentary Enclosure Acts of the 18th and 19th centuries. Whilst some may have an ancient origin, possibly dating back to the prehistoric period, the network grew from industrial pressures and the need to transport finished goods and raw materials between urban centres. The packhorse ways associated with the transport of salt, lime and wool, form particularly distinctive features of the landscape. Recent land use has focused upon sheep grazing; most farms have rights for summer grazing on the open moorland which forms an integral part of the hill farming system. The land has traditionally been used as in-bye land for winter grazing and to make hay in the summer to feed livestock through the winter months.
- 4.5.8 The lower gentler slopes comprise older enclosures distinguished by their small size and irregular shape. On the higher slopes and steeper areas the later Parliamentary Enclosures are represented by large regular rectangular fields enclosed by robust walls. In the late 20th century, big bale silage replaced hay making and many of the upland fields were improved by drainage and reseeded to enhance productivity. Changes in farming practices ensure that damp pastures and hay meadows are now rare. With the decline in upland farming, more marginal farms have been abandoned and the fields taken over by rushes. Increasingly, farmers are seeking to diversify to supplement falling incomes. Diversification (in the 18th and 19th centuries) is evident in occasional weavers' cottages which incorporated a weaving workshop. There is good preservation of archaeological sites in these marginal locations as a result of the non intensive agricultural practices adopted.

Development, Settlement and Buildings

- Isolated stone farmsteads which are usually constructed from gritstone (the local vernacular material);
- A network of narrow, winding roads, often at the foot of slopes;
- General absence of hamlets or villages;
- Other built elements within this landscape include stone field barns and walls.

Landscape Character Areas

4.5.9 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area D1: Caton Moor



- Open views southwards towards the wind farm on Caton Moor Enclosed Moorland Hills, which is a landmark;
- Extensive, open, panoramic views northwards across the wide floodplain of the River Lune. Views are, however, interrupted in places by patches of woodland within adjacent areas of Undulating Lowland Farmland;
- The distinctive aerial ropeway and associated metal pole structures is a distinctive feature within this area, which contributes to an instantly recognisable sense of place. The ropeway is still used to transport shale to Claughton brickworks associated with the nearby Claughton Moor quarries;
- Visible steps in the landscape where moorland has been quarried for clay to make bricks (at Claughton Moor quarries).

Landscape Character Area D2: Tatham



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- Open views eastwards towards the Great Stone of Fourstone within Croasdale to Lythe Landscape Character Area;
- Traditional stone field barns are landmark features within views across this area;
- A network of minor roads cross the area, running in an east-west direction, providing access to this area and introducing a source of noise and movement;
- Plantation woodland near Bank End brings regularity to the landscape and introduces a recognisable landscape feature within views;
- A network of gritstone walls contributes to recognisable landscape pattern;
- The sheep folds (neat circular stone wall enclosures) at the edge of Lythe Fell, by Green Syke contribute to distinctive landscape pattern;
- Visual contrast within views between the pattern and sense of enclosure of the Moorland Fringe and more open landscapes of the adjacent Unenclosed Moorland Hills.

Landscape Character Area D3: Kettlebeck



- Open views north-eastwards towards the distinctive rolling topography of the adjacent drumlin landscapes;
- Open views northwards towards Ingleborough and other peaks within the Craven Dales;
- Relatively strong sense of openness;
- Windswept trees are a key feature of certain locations within this area;
- Keasden and Clapham commons are key landscape features, with their associated sense of openness, unfenced roads and distinctive pattern of farmsteads.

Landscape Character Area D4: Hare Appletree



- Small belts of linear woodland contribute to an intermittent sense of enclosure, however there is also a relatively strong sense of openness within much of the landscape;
- Jubilee Tower is landmark feature on the horizon within views eastwards;
- From higher points within this area, such as Quernmore Brow, panoramic, open views westwards across lower undulating farmland towards Morecambe Bay and Black Combe (within the Lake District) can be gained;
- Low stone walls, hedgerows and single deciduous trees contribute to landscape pattern;
- The traditional field barn on Quernmore Brow is also a key landscape feature;
- Large skies and wide panoramas are typical of this area;
- Evidence of traditional vaccaries.

Landscape Character Area D5: Beatrix to Collyholme



- The rocky outcrop of Knot or Sugar Loaf disused quarry is a distinctive landscape feature within this character area;
- Belts and patches of deciduous and coniferous woodland provide an intermittent sense of enclosure within this area;
- Dramatic open views into the Lower Hodder Valley from the western edges of the area contribute to recognisable sense of place;
- Pockets of mature single deciduous trees, such as those close to Beatrix Farm, contribute to landscape pattern;
- The dilapidated field barn at Back of Hill is also a landscape feature;
- The landscape is incised by a network of cloughs and sykes which add variety and texture to the landscape;
- Sled tracks (relating to past quarrying and peat cutting activities) are a key historic landscape feature on Dunsop and Burn Fells, which are still visible today, set against the smooth moorland backdrop;
- Beatrix hamlet (an ancient settlement, which is older than Dunsop Bridge), is a feature of the lower end of the valley;
- Hedgerows are a feature of the landscape in places (for example at Burn House).

Landscape Character Area D6: Nicky Nook



- Panoramic open views westwards across the Fylde Plain towards Morecambe Bay and eastwards towards the dramatic rising backdrop of Bowland Fells (Harrisend Fell) to the east;
- Jubilee Cairn (a circular stone tower built to commemorate Queen Victoria's Golden Jubilee) and the tarn on Nicky Nook are landmarks within views across the area, which contribute to recognisable sense of place and orientation;
- The expanses of water within Grizedale Lea and Barnacre reservoirs, which have an engineered character, provide visual contrast to the surrounding patchwork of roughly grazed fields;
- This area has a long history of estate management, which is reflected in the colour of landscape features, such as gates, and other land management techniques;
- Pheasant shooting also has a significant influence on the management of the area;
- The landscape is delineated by a network of hedgerows and drystone walls;
- The distinctive calls of snipe, curlew, oystercatcher, lapwing, redshank and the movement of flocks of starlings contribute to recognisable sense of place.

Landscape Character Area D7: Moorcock



- Relatively strong sense of enclosure provided by patches of woodland;
- Open views northwards to Waddington Fell and southwards towards Pendle Hill (across Clitheroe urban area), with Pendle Hill as a backdrop.

Landscape Character Area D8: Pendleton



- Open views northwards across the Ribble Valley, with its patchwork of deciduous trees and hedgerows;
- This area provides the setting to Pendle Hill (Unenclosed and Enclosed Moorland Hills) and is the foreground landscape seen within many views to the area from surrounding landscapes to the north;
- Minor road corridors tend to be lined with stone walls and hedgerows;
- Spring line' farmsteads are also a key feature of this area.

Landscape Character Area D9: Wheathead



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- Patchwork of pastoral fields delineated with stone walls;
- Traffic on Black Moss Road and Wheathead Lane introduce a source of noise and movement, however the overall sense of tranquillity and remoteness is strong;
- Dramatic views southwards towards the expanses of water within Lower Ogden and Lower Black Moss reservoirs, against a backdrop of patches of coniferous woodland.

Landscape Character Area D10: Bleasdale



- This area has a long history of estate management (encompassing the Bleasdale and Claughton estates), which is visible within several landscape features, for example, the colour of gates and signs;
- Distant sense of enclosure within this landscape, which is provided by the backdrop of surrounding Moorland Hills to the north;
- Patches of mixed and coniferous woodland provide an intermittent sense of enclosure;
- Single deciduous trees and a network of stone walls and hedgerows at field boundaries contribute to recognisable landscape pattern;
- A network of surfaced and unsurfaced tracks cross the Bleasdale Estate;
- On the Bleasdale Estate, beech hedgerows along roadsides and surface tracks are recognisable landscape features;
- The drystone walls within this area comprise rough blocks of varying shapes and sizes, which usually have two or three courses of through stones, and are generally higher than within other Landscape Character Areas;
- Isolated traditional stone farmsteads are dotted throughout the landscape and are often associated with mature deciduous trees;
- A series of stream corridors and stone bridges, such as the Packhorse bridge crossing the River Brock, are key landscape features;
- Activity associated with pheasant, partridge and duck shoots has an influence on this landscape;

- Bleasdale circle, surrounded by mature trees, is also a landmark feature within views across the landscape;
- The Bleasdale 'bowl', formed by the hills around the headwater of the River Brock, Fairsnape, Oakencloough Fell and Beacon Fell, and centred on the village of Bleasdale, with its traditional stone church is a key landscape feature within this area;
- The rising mass of Beacon Fell dominates the horizon in views southwards across the area;
- Road corridors are generally lined with walls and/or hedgerows.

Landscape Character Area D11: Longridge



- This area provides the northern setting for Longridge Fell and is therefore the foreground within many views southwards from character areas to the north;
- The small, linear hamlet of Walker Fold at the southern boundary of this area encompasses a row of gritstone cottages, several of which have grey-painted window and door frames;
- Views northwards to Longridge Fell are dominated by the dense cover of coniferous woodland.

Landscape Character Area D12: Upper Sabden Valley



© David Oyston

- The village of Newchurch in Pendle, with its rows of white cottages is a feature within views across this area; as is the small settlement of Spen Brook with its mill tower, nested against the rising moorland hill backdrop with patches of coniferous woodland;
- The traditional field barn at Sabden Fold is a key landscape feature;
- The landscape is delineated by a network of drystone walls and electricity poles are also a feature in places;
- Views southwards and eastwards across the lush, improved pastures of the Calder Valley, with a network of hedgerows and post and wire fences on the lower slopes towards urban areas of Barrowford and Colne to the southeast are characteristic of this area;
- A highly textural landscape; gorse, rushes, wind blown trees and upland stone walls all contribute to the character of this area;
- Ancient farmsteads (for example, the remains of the vaccary at Sabden Fold) and old houses are a feature of this area;
- The wide floodplain of Sabden Brook contains distinctive patchwork of pasture meadows.

Landscape Character Area D13: Park House



- Patchwork of grazed fields which are delineated by drystone walls, hedgerows and occasional post and wire fences;
- Mature deciduous trees line Park House Lane road corridor;
- Framed views into Roeburndale Valley to the west and Hindburndale Valley to the north;
- A distinctive pattern of farms within the area, which generally start at the river bottoms of the Roeburndale (Landscape Character Area I2) or Hindburndale (Landscape Character Area I3) Wooded Rural Valleys and finish with the common rights on Goodber Common (Landscape Character Area B9);
- There is evidence of bell pit mining within the landscape;
- Most of the land within this area is difficult to farm, resulting in a patchwork of semi-improved pastures, meadows and rushy pastures;
- The rising mass of Goodber Common provides a dramatic, smooth backdrop to views southwards and contributes to recognisable sense of place.

Landscape Character Area D14: Abbeystead



- From the northern half of the area, open views into the intimate valley corridor of the Marshaw Wyre contribute to recognisable sense of place within this Landscape Character Area;
- To the south, a strong sense of enclosure is provided by dramatic rising masses of Catshaw and Hawthornthwaite Fells;
- There is a relatively strong sense of remoteness and tranquillity within this landscape;
- Landscape pattern comprises a patchwork of large-scale, regular pastoral fields which are delineated with a combination of hedgerows and drystone walls.

Landscape Character Area D15: Wolf - Burnslack



- From the south of this area, open views across Leagram Hall, with its associated parkland landscape contributes to recognisable sense of place;
- The landscape is crossed by several north-south running brook (or stream) corridors, which run from the higher Moorland Hills to the north into the lower Undulating Farmland to the south;
- In the western half of the area, plantations associated with Wolfen Hall provide a sense of enclosure;
- There is a relatively strong sense of tranquillity throughout this landscape, within which, road corridors are generally absent;
- Wolf, Saddle and Burnslack Fells provide a strong sense of enclosure to the north, and provide a dramatic moorland backdrop to views northwards.

Landscape Character Area D16: Middop



- Within views westwards from this area, the rising mass of Pendle Hill is a dominant landscape feature, which provides instantly recognisable sense of place and orientation;
- Looking eastwards, there is a relatively strong sense of enclosure as a result of the White Moor hills, which outside the eastern boundary of the Study Area;
- The landscape is predominantly cloaked by a patchwork of marginal pasture fields. In the north of the area, these fields provide the transition between the higher Moorland Hills to the south and the more open, lower drumlin fields to the north;
- In the north of the area, from Middop Hill, open views across lower undulating farmland and drumlin landscapes to the north contribute to recognisable sense of place;
- Occasional isolated farmsteads are dotted within this landscape, which is otherwise devoid of settlements.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.5.10 Observable changes in the past include:

- Improved pasture surrounded by stone walls where intensive farming has spread onto higher ground;
- Outside of protected nature conservation areas ecological interest has been depleted through agricultural improvements;
- Evidence of historic settlement in the form of stone terraced cottages and laithe houses;
- Increase in traffic levels, particularly the number of delivery wagons and buses.

Current Landscape Condition

4.5.11 The overall condition of the Moorland Fringe Landscape Character Type is considered to be moderate. Stone walls are generally well maintained, although there is evidence of lack of management in places, which has led to the introduction of barbed wire fences to act as stock proofing where walls have deteriorated. There is also evidence of erosion of roadside verges along the minor road corridors and suburbanisation of traditional farmsteads. Although much of the land within the Moorland Fringe is agriculturally improved, patches of rare ecological habitat remain (for example, species-rich meadows and patches of acid grassland).

Future Landscape Changes and Opportunities

4.5.12 In the short-term it is likely that there will be continued positive changes in the form of on-going management of SSSI's. Negative changes may include reduced budgets of national agencies and organisations to actively conserve protected areas and continued decline of valuable habitats and features within the wider landscape. There is also pressure for the conversion of distinctive vernacular buildings to residential use and a loss of the small scale field pattern of scrub and pasture due to farm abandonment or amalgamation of farm units.

4.5.13 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* - Stream corridors are vulnerable to pollution and run-off associated with the adjacent predominantly pastoral fields. Stone walls on higher ground are vulnerable to any moves to more extensive farming of livestock. These key landscape features could be lost through neglect or removed to enable the

amalgamation of adjacent fields. Increased financial pressures and reduced availability of higher level agri-environment payments leading to field boundaries, sheepfolds, limekilns, walls and hedges and traditional farm buildings suffering from lack of management.

- *Climate Change* - In this area, climate changes are likely to be less marked and provide for a more gradual change in for example, species composition or habitat characteristics.
- *Development*- Increasing traffic associated with tourism and recreation could put pressure on the road system. This could lead to inappropriate highway improvements and signage, or large scale schemes that permanently alter the character of the landscape. Large -scale renewable energy developments on the skyline and in key views could erode the open and generally undeveloped character of this Landscape Character Type. Loss of vernacular building styles and use of inappropriate building materials may also result in a loss of local landscape characteristics.

Sensitivities and Capacity for Change

- 4.5.14 Overall, this Landscape Character Type is considered to have moderate ecological sensitivity. Although ecological habitats have been depleted in places by agricultural improvement, valuable ecological habitats include traditionally managed meadows and acid grassland which support a diverse range of bird species. Cultural and historic sensitivity is high as a result of the numerous scattered, isolated, traditional historic farmsteads, the presence of packhorse ways and parish boundary markers, which are still visible within the present landscape. As a result, landscape character sensitivity is considered to be high. There is strong intervisibility with adjacent Landscape Character Types, giving high visual sensitivity. Other sensitivities within the landscape include the distinctive pattern of stone walls which exhibit traditional construction styles and wall copings, stunted hawthorns and small, semi-natural clough woodlands, which are landscape features. As a result, this Type is considered to have high landscape character sensitivity. Overall, the Moorland Fringe Landscape Character Type has limited to moderate capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

- 4.5.15 The overall strategy for the Moorland Fringe Landscape Character Type is to conserve the remote, multi textured character of upland habitats including acid grassland, herb rich meadows and rush dominated pasture; and the existing recognisable pattern of drystone walls, hedgerows and settlements, and to enhance these features where they are depleted. There is also a need to conserve open views across adjacent Landscape Character Types.

4.5.16 Specific guidelines include:

Physical Character

- **Actively manage** the changing landscape in order to ensure that key landscape features and attributes are not lost through climate change or other significant agents of landscape change;
- **Seek** sustainable management options for areas of abandoned farmland to ensure that neglect does not lead to adverse change in landscape or ecological terms.

Ecological Character

- **Improve** the structure and condition of existing woodland resource through active management³⁶;
- **Ensure** that new woodland planting is delivering Biodiversity Action Plan objectives and is sympathetic to local topography³⁷;
- **Manage** grazing to facilitate natural regeneration of woodland³⁸;
- **Improve** water quality within the surrounding upland catchments to protect and conserve aquatic habitats;
- **Conserve** existing species-rich meadows, acid grassland and damp pastures for wading birds;
- **Encourage** the management of permanent pasture to maximise its ecological value by avoidance of ploughing, re-seeding, artificial fertiliser, drainage and other potentially damaging farm operations as well as encouraging appropriate stocking levels and land use cycle;
- **Encourage** the reversion of improved grassland within the higher enclosure to an acid grassland/heathland cover, with the long term aim of extending the moorland landscape downslope;
- **Where** possible, remove invasive, non-native species;
- **Conserve** the pattern of sparse tree cover, stunted hawthorns and trees associated with farmsteads;
- **Restore** and **re-create** herb-rich grassland.

Cultural and Historic Character

- **Conserve** and **enhance** existing buildings and farmsteads by repair and maintenance using local gritstone and limestone as appropriate, as well as removal of rubbish and derelict machinery;
- **Conserve** the pattern of drystone walls and distinctive construction styles;

³⁶Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

³⁷Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

³⁸ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

- **Encourage** maintenance of gritstone or limestone walls and associated banks and ditches with gritstone or limestone in areas where it is the predominant underlying rock type;
- **Conserve** distinctive historic features such as parish boundary feature, earthworks, packhorse tracks and sheepfolds to maintain a rich cultural landscape;
- **Protect** traditional farm buildings, limekilns, sheepfolds and archaeological features which are key features of the landscape;
- **Encourage** a built form which respects the simple architecture of farmsteads and cottages and reflects the characteristic settlement pattern of small, isolated clusters of dwellings and individual farmsteads;
- **Target** agri-environment schemes to conserve and enhance valuable landscape features, including traditional farm buildings, limekilns, sheepfolds, clough woodlands and field boundaries, including hedgerows;
- **Maintain** the strong landscape pattern through active management and enhancement of stone walls, hedgerows and other boundary features;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;
- **Conserve** traditional roadside features, including boundary markers (stone/metal) and signposts;
- **Seek** design solutions to road safety issues which retain the character of the enclosed narrow lanes, walls and verges;
- **Conserve** and maintain the historic network of footpaths and packhorse trails;
- **Promote** informal recreation through appropriate signage and management.

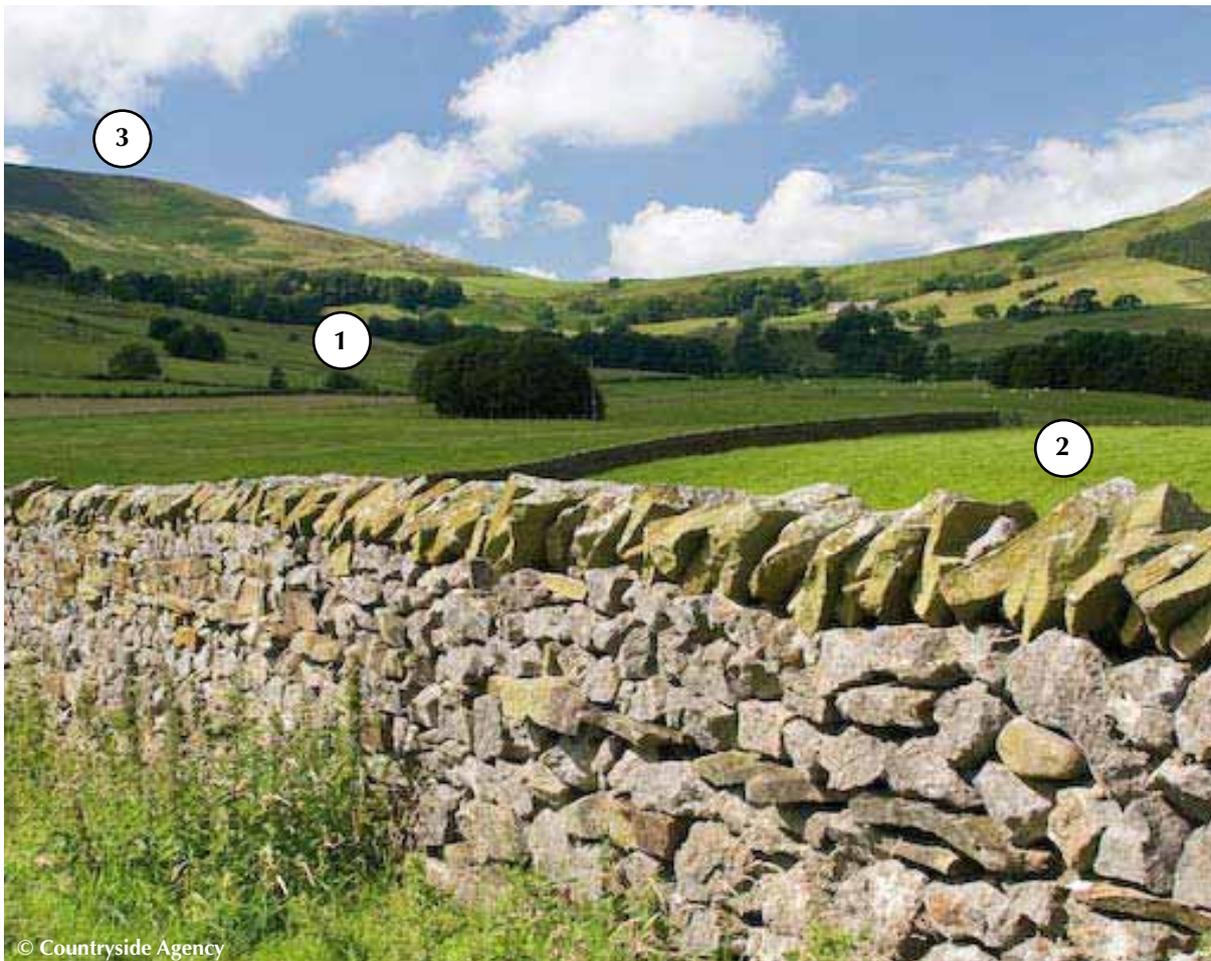
Aesthetic and Perceptual Character

- **Encourage** the implementation of traditional signposts and resist excessive signage and lighting along road corridors where safe to do so;
- **Protect** uncluttered skylines and key views to and from the area from tall, vertical and large-scale developments that may erode the character of the area.

LANDSCAPE CHARACTER TYPE E: UNDULATING LOWLAND FARMLAND

Key Characteristics

- 1 Many mixed farm woodlands, copses and hedgerow trees.
- 2 Intricate tapestry of grazed fields.
- 3 A patchwork of wood and pasture when viewed from the fells.



4.6 E: UNDULATING LOWLAND FARMLAND

CHARACTER ASSESSMENT

Location

- 4.6.1 There are eight occurrences of the Undulating Lowland Farmland within the Study Area. Landscape Character Areas within this Type occur at the northern, western, southwestern and eastern edges of the Study Area; and in all cases, this Landscape Character Type extends outside the boundary of the AONB. To the south of Quernmore, this LCT is adjacent to the Farmed Ridges (N), Moorland Fringe (D) and Wooded Rural Valleys (I) Landscape Character Types, whilst to the southwest of Chipping, the type borders the western edge of a swathe of Undulating Farmland with Parkland (Landscape Character Type G). To the south of High Bentham, this Type abuts the northern edges of Moorland Fringe (D), Unenclosed Moorland Hills (B) and Wooded Rural Valleys (I) Landscape Character Types, whilst to the east and west, the landscape is enclosed by the Drumlin Field (K) Landscape Character Type. In the southeast of the Study Area, this Landscape Character Type borders the Undulating Lowland Farmland with Settlement and Industry (H), Undulating Lowland Farmland with Wooded Brooks (F), Moorland Fringe (D) and Drumlin Field (K) Landscape Character Types.

Landscape Character Description

- 4.6.2 Undulating Lowland Farmland covers much of the lower parts of the Study Area. It is also the underlying layer to 3 other linked Landscape Character Types – Undulating Lowland Farmland with wooded brooks, Undulating Lowland Farmland with parkland and Undulating Lowland Farmland with Settlement and Industry. In this case (E) the Landscape Character Type is predominantly farmland.
- 4.6.3 This lowland landscape, largely under 150m, has its underlying geology masked by heavy boulder clays deposited by glacial activity. Viewed from the fells this enclosed landscape comprises a rich patchwork of pastures, mixed farm woodlands, copses, hedgerows and scattered picturesque stone villages. Wading birds, hares and roe deer can all be seen here. The small villages consist of stone houses and cottages and the churches provide landmarks in the landscape. Isolated farmsteads are often marked with single mature trees. Quarries and mines can also be found. Winding lanes are lined with hedgerows and herb rich verges, and hedges with mature trees clearly delineate the pastures and meadows in summer and autumn time. Dry stone walls are only seen as boundaries in the areas where boulder clay is absent. This is an intimate and scenic landscape, where there is a relatively strong sense of tranquillity in many places.

Key Environmental Features

Physical

- 4.6.4 Generally below 150m, the Undulating Lowland Farmland forms a transitional zone between the low lying plains of soft glacial deposits and the high fells of Bowland, formed from Millstone Grit. This Landscape Character Type, whether composed of limestone, grit, shale or sandstone, is of gentle topography when compared to the fells and hills. Glacial action has accentuated the differences by further tempering the relief of the low-lying areas by the deposition of glacial drift. Deep drift is conspicuous where hedges predominate over stone walls, as quarrying is only possible where the drift is sufficiently thin. Many of the woodlands which survive on the steep slopes of the deep cloughs and valley sides are of ancient origin and represent a rich natural resource. They include alder and ash woods on the base-rich soils of the valley floors grading through to lowland oakwoods and upland oak woods on the upper valley sides.

Ecological

- 4.6.5 Within the Lowland Farmland Landscape Character Type, hedges, hedgerow trees, roadside verges and small stream corridors provide important ecological habitats within an otherwise intensively farmed landscape. Pockets of habitat within this Landscape Character Type are designated as local wildlife sites for their ecological interest.

Cultural and Historical

- 4.6.6 The landscape proved more favourable to early settlers than the nearby uplands. By the Roman period it is probable that much of this Landscape Character Type was already settled fairly densely and the fort established at Ribchester (outside the southern boundary of the AONB) is known to have had some civilian government functions. Whilst Roman remains (besides roads) outside the immediate area of the forts are poorly represented in the record, the presence of Roman Kilns at Quernmore show that they exploited the natural resources of the area. Medieval population pressures, which saw the utilisation of small areas of the mosslands elsewhere in Lancashire also led to the continuation of small woodland clearances along the Ribble and the Lune. This created a small scale intimate landscape of scattered farms linked by winding roads with irregular fields and patches of surviving woodland on stream and field edges, a landscape which has remained intact to this day. The majority of enclosure dates from the medieval period and has created a landscape of small fields which are mostly hedged although stone walls are evident where geology lies close to the surface. A field pattern of ridge and furrow is still visible in several places.
- 4.6.7 During the 17th century lime was used for land improvement in these lowland fringe areas and many small farm kilns remain in the landscape, along with the larger industrial kilns and

quarries of the 19th and 20th century. The quarrying of Millstone Grit also proved to be important in this Landscape Character Type. Where suitable stone was available, querns and millstones could be quarried and manufactured to meet the needs of the population. Lead and Silver were extracted in Rimington from the 17th century and mined and manufactured in places such as at Quernmore to meet the demands of the rapidly industrialising county.

Development, Settlement and Buildings

- Pattern of small, nucleated hamlets and villages, including Whitechapel and Quernmore, which contain an assortment of traditional gritstone vernacular houses and cottages.
- The churches in both villages provide landmarks within views from surrounding Undulating Lowland Farmland landscapes.

Landscape Character Areas

4.6.8 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area E1: Whitechapel



- A patchwork of gently undulating pastoral fields which are delineated with a network of stone walls and hedgerows;
- Traditional gritstone buildings within the small hamlet of Whitechapel;
- Cheese press stone is feature of the landscape at Whitechapel, which contributes to recognisable sense of place;
- Network of hedgerows and stone walls provide a sense of intermittent enclosure along the extensive network of narrow lanes;
- Single deciduous trees are landscape features, often associated with isolated farmsteads;
- Barns Fold reservoir is a key landscape feature with several views across the area;
- Dramatic, open views northwards towards the central Bowland Fells, which form the skyline backdrop;
- The rising mass of Beacon Fell, with its dense coverage of coniferous woodland provides the immediate backdrop within several views northwards.

Landscape Character Area E2: Quernmore



- Dramatic, open views to Clougha Pike and Birk Bank Quarries which form the skyline horizon within views eastwards;
- Caton Moor windfarm is a striking landscape feature on the horizon of views to the east;
- Distinctive pattern of low drystone walls (several of which contain smooth boulders) cross the patchwork of pastoral fields;
- Quernmore church tower is a landmark within views across this landscape;
- A patchwork of pastoral fields, interspersed with patches of coniferous and mixed woodland and occasional single deciduous field trees;
- Landscape is crossed by a network of minor roads which are often lined with stone walls, and occasional hedgerows (which include a mix of beech, hawthorn and holly);
- Beech hedgerows are also a striking feature in places;
- Telecommunications masts and pylons are visible features on the ridge at the western edge of the AONB, to the west of Quernmore
- Views westwards along the corridor of the M6, which introduces a source of noise and movement;
- The buildings of Lancaster University are also visible within views westwards from this landscape.

Landscape Character Area E3: Forest of Mewith



- Framed views westwards into the Hindburndale Valley;
- Dramatic, open views southwards towards the rising mass of Moorland Hills at the centre of the Forest of Bowland;
- Patchwork of rolling pastoral fields, delineated by a network of stone walls;
- Settlement pattern of scattered, relatively isolated farmsteads (several of which have been redeveloped as residences);
- The landscape is dissected by a series of stream (beck) corridors and is crossed by a network of narrow rural roads;
- Single, mature deciduous trees are a feature of the landscape, often associated with farmsteads;
- Panoramic, open views northwards towards the peaks of the Yorkshire Dales.

Landscape Character Area E4: Rimington



- The rising mass of Pendle Hill provides a strong sense of enclosure and recognisable sense of place within views southwards from this area of undulating, predominantly pastoral farmland;
- Looking northwards across the area there is a greater sense of openness, resulting from views into the gently meandering corridor of the River Ribble to the north;
- Landscape pattern comprises a patchwork of relatively small, regular and irregular fields, which are divided by a network of hedgerows and drystone walls;
- Mature deciduous trees, both within fields and hedgerow boundaries create texture within the landscape and are striking landscape features;
- The landscape is crossed by a network of narrow rural lanes, which provide access to the small, traditional linear hamlets of Rimington and Newby, in addition to occasional scattered farmsteads.

Landscape Character Area E5: Bleasdale



- Linear belts of mixed woodland provide a varied sense of enclosure and contribute texture to this patchwork of gently undulating pastoral fields;
- A series of brook (or stream) corridors also cross the landscape and field boundaries comprise a combination of hedgerows, fences and occasional stone walls;
- Within views northwards, Bleasdale Moors provide a dramatic backdrop, of which, the relatively smooth profile contrasts with the more textured landscape of rolling farmland within this area;
- To the south, there is a stronger sense of openness with views into the northern end of the Brock Valley and towards Beacon Fell Country Park providing recognisable sense of place;
- Settlement pattern encompasses isolated, scattered farmsteads and other landmark buildings such as Bleasdale church and tower;
- There is a relatively strong sense of tranquillity throughout much of this area due to the general absence of road corridors crossing the landscape.

Landscape Character Area E6: Pendleton



- This Landscape Character Area is situated outside the boundary of the AONB;
- This area encompasses a distinctive pattern of narrow, linear pastoral fields, the pattern of which extends from the adjacent moorland fringe at the eastern edge of Pendle Hill;
- These fields are lined with a network of hedgerows which often contain hedgerow trees. These corridors of vegetation create texture and visual interest within the landscape;
- To the east, the instantly recognisable profile of Pendle Hill contributes to recognisable sense of place;
- The small, linear village of Pendleton, with its rows of traditional stone-built terraces provides the main settlement within this landscape;
- Several minor rural roads run east-west across the landscape, connecting Pendle Hill and other settlements to the south and east, with the town of Clitheroe to the northwest;
- Sense of tranquillity within this area is greatly disturbed by its proximity to the A59 main road corridor to the northwest and Pendleton Road to the southeast;
- Views of the urban edge of Clitheroe are also characteristic of views northwards across this landscape.

Landscape Character Area E7: Worston



- In views north-westwards from this area, the urban edge of Clitheroe is a recognisable feature, set against the rising backdrop of Moorland Hills towards the centre of the AONB;
- Sense of tranquillity within this area is greatly disturbed by its proximity to the A59 main road corridor to the northwest and Pendleton Road to the southeast;
- The patchwork of regularly shaped pastoral fields are lined with a network of hedgerows, which often contain hedgerow trees;
- Within views south-eastwards from the area, the dramatic profile of Pendle Hill contributes to recognisable sense of place and orientation;
- The small, traditional linear village of Worston, in addition to one isolated farmstead, is the only settlement within the area.

Landscape Character Area E8: Dudland and Gisburn



- Situated immediately to the south of the Ribble Valley corridor, this area contains a series of meandering narrow stream corridors (becks and sykes), which feed the main river;
- In places these are lined with belts of mature deciduous woodland, which highlight the corridors as features within the surrounding patchwork of pastoral fields;
- Views into and across the Ribble Valley from the northern part of this area contribute to recognisable sense of place, whilst Pendle Hill, to the south, provides a distant sense of enclosure;
- Field boundaries are predominantly lined with hedgerows, which often contain hedgerow trees and provide an intermittent sense of enclosure;
- At the eastern end of the area, the medium-sized linear village of Gisburn, situated at the junction of the A682, A62 and A59 main road corridors, contains an assortment of traditional stone and white-painted buildings;
- Within the remainder of this area, settlement pattern is dispersed;
- Sense of tranquillity is greatly disturbed within this area due to the presence of the main A59 road corridor which crosses the landscape;
- Buildings (i.e. Castle cement works and chimney) associated with the industrial quarries between Chatburn and Clitheroe are dominant within views westwards from the western edge of the area.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.6.9 Observable changes in the past include:

- A decline in mature hedgerow trees as a result of age or loss due to agricultural intensification;
- Expansion of villages or modernisation of farmsteads utilising non-local building materials (e.g. red brick) which are intrusive to local vernacular character;
- Amalgamation and diversification of dairy farms;
- Intensification of agricultural management, involving chemical fertiliser and herbicide applications, which has affected herb-rich meadows.

Current Landscape Condition

4.6.10 The overall condition of the Undulating Lowland Farmland Landscape Character Type is considered to be good. Most landscape features are generally well managed. Patches of unmanaged woodland are, however, visible and there is also evidence of neglected stone walls and loss of hedgerows which have been replaced by fences.

Future Landscape Changes and Opportunities

4.6.11 An overall consistency in the use of vernacular building materials indicates a local desire to retain the traditional character of the area.

4.6.12 Negative changes may include the amalgamation of farms, leading to a change in the character of the landscape, with new access tracks and the creation of larger fields leading to a loss of traditional stone wall and hedgerow field boundaries. Amalgamation of farms may also result in farmhouses and associated buildings being converted to new uses and key landscape features being lost through neglect or removal to enable the amalgamation of adjacent fields. The increased farm size may lead to the demand for new agricultural buildings, affecting character and views. Increased financial pressures and reduced availability of higher level agri-environment payments, may lead to field boundaries, walls and hedges suffering from a lack of management.

4.6.13 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The amalgamation of farms and increased drive for efficient farm businesses or farms being sold as farmers and their families leave the industry; all have a direct impact on how the land is managed. As the key characteristics of the area are significantly influenced by agricultural practices, change in the industry could lead to an erosion of landscape quality.
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops.
- *Development* – Diversification of farm businesses leading to introduction of new buildings and the conversion of farm buildings for residential and other uses could gradually change the nature of the working landscape and its associated attributes. The erosion and loss of vernacular building styles through introduction of cheaper alternatives will reduce the distinctive characteristics of this area. Encroachment of large scale development such as wind farms, masts and pylons into the area would also have a significant effect on landscape character. It is likely that there will also be increased pressure from residential and tourist related developments, affecting the character and quality of the landscape.

Sensitivities and Capacity for Change

- 4.6.14 The ecological sensitivity of this Landscape Character Type is represented by a combination of hedges, hedgerow trees and small stream corridors. Sensitive cultural and historic features include the intact network of stone walls, stone bridges and historic villages. In addition, the landscape displays a mature structure of hedgerows and hedgerow trees, culminating in moderate landscape character sensitivity. Overall, visual sensitivity is considered to be moderate. In places, woodland and hedgerows limit views, whilst there is strong intervisibility with the Unenclosed and Enclosed Moorland Hills and Moorland Plateaux Landscape Character Types.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

- 4.6.15 The overall strategy for the Undulating Lowland Farmland Landscape Character Type is to manage the impact of changes in land and building use, conserve or restore neglected landscape features and encourage the retention and restoration of historic and vernacular building materials and details and the careful design of new buildings. There is also a need to conserve the network of dry stone walls, hedgerows and hedgerow trees which contribute to a diverse landscape pattern. The network of lanes, together with the rich roadside verges should

be maintained and enhanced. Open views towards the Unenclosed and Enclosed Moorland Hills, and the Moorland Plateaux Landscape Character Types should be conserved.

4.6.16 Specific guidelines include:

Physical Character

- **Conserve** and **enhance** woodland, hedges and stone walls.

Ecological Character

- **Link** existing woodlands and hedgerows to create a continuous woodland network to reverse habitat fragmentation³⁹;
- **Create** new hedgerows and regenerate existing hedges to maintain and enhance key landscape linkages⁴⁰;
- **Encourage** farmers to adopt less intensive farming practices so that the vitality of existing woodlands is not compromised and to facilitate natural regeneration in and around woodland habitats⁴¹;
- **Conserve** ancient semi-natural woodlands;
- **Conserve** the lowland herb-rich haymeadows and unimproved neutral grasslands;
- **Conserve** species-rich grass verges and increase species diversity by management where appropriate;
- **Ensure** the long-term viability of parkland trees and landscapes by restructuring, using species of local provenance wherever possible⁴²;
- **Encourage** conservation of existing key landscape features and habitats;
- **Encourage** habitat linkage to increase robustness to climate change;
- **Ensure** that verges are managed to maximise floristic biodiversity value.

Cultural and Historic Character

- **Encourage** conservation of significant historic features and buildings;
- **Avoid** road widening, improvement works, cable and pipeline laying which would affect species-rich grass verges;
- **Avoid** road improvements that would affect the setting or structure of stone bridges or walls;
- **Encourage** sympathetic new uses for disused farm buildings to ensure that they remain a viable and contributory feature within this landscape; and;
- **Encourage** the use of local building materials, in particular gritstone and limestone;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;

³⁹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁴⁰ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁴¹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

⁴² Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

- **Conserve** traditional boundary features, such as stone/metal boundary markers, signage and wells;
- **Maintain** stone walls, which are often located on the outskirts of villages, respecting local differences in style and construction;
- **Conserve** local features such as small farm lime kilns which signify the past use of limestone as a soil conditioner;
- **Restore** white railings, walls and hedgerows.

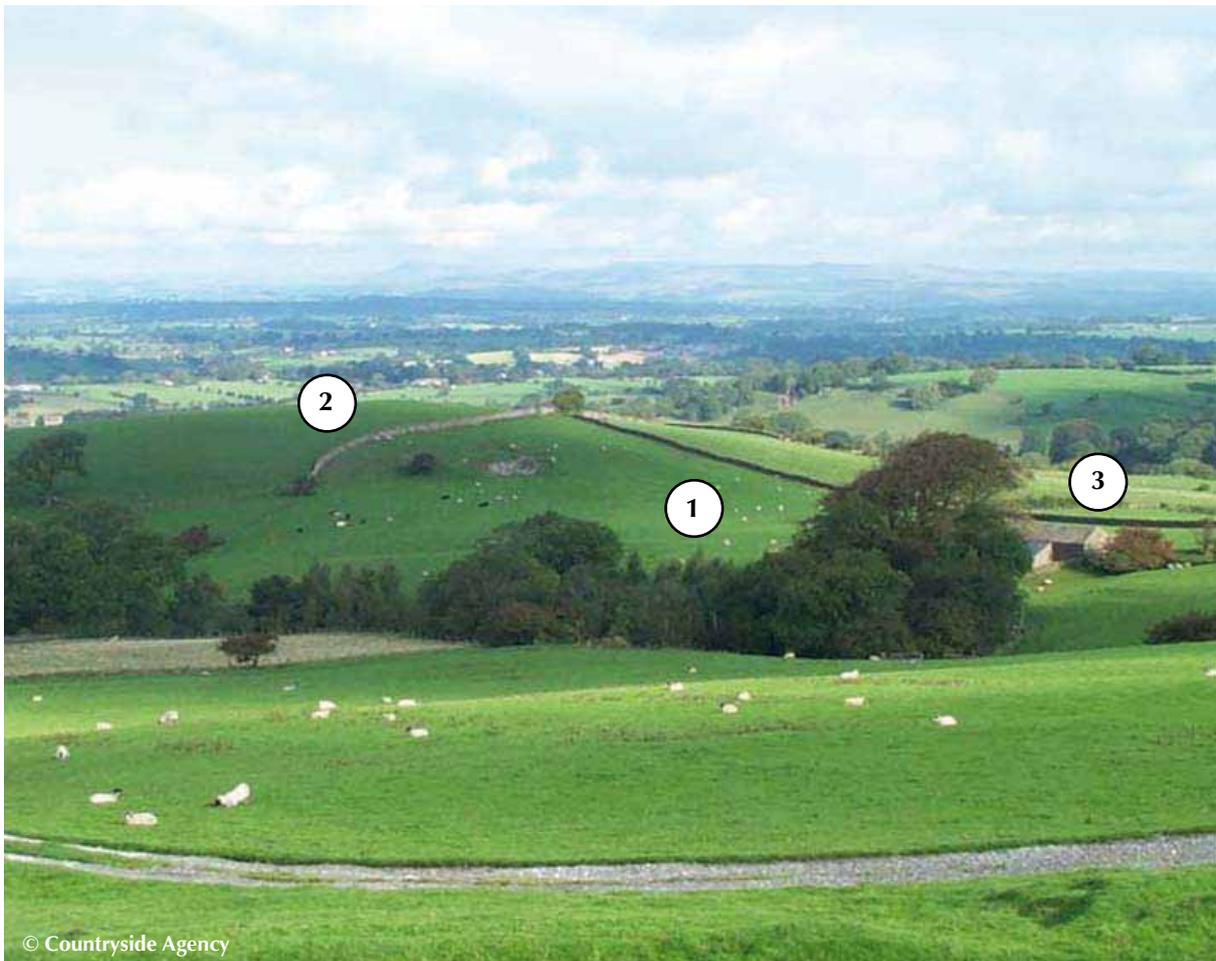
Aesthetic and Perceptual Character

- **Conserve** open views towards the surrounding higher Moorland Plateaux and Unenclosed and Enclosed Moorland Hills Landscape Character Types;
- **Conserve** the distinctive settings to rural settlements;
- **Ensure** that any potential new development on the edges of villages reflects the characteristic clustered form; development should be sited to retain views to landscape features and landmarks, such as church towers on the approaches to villages.

LANDSCAPE CHARACTER TYPE F: UNDULATING LOWLAND FARMLAND WITH WOODED BROOKS

Key Characteristics

- 1 A patchwork of pasture fields which are deeply incised by wooded troughs and gorges.
- 2 A network of hedgerows and stone walls delineate field boundaries.
- 3 Several scattered cottages and clustered villages.



4.7 F: UNDULATING LOWLAND FARMLAND WITH WOODED BROOKS

CHARACTER ASSESSMENT

Location

- 4.7.1 The Undulating Lowland Farmland with Wooded Brooks Landscape Character Type occurs in four different locations at the periphery of the Study Area. There is also one occurrence on the Pendle Hill outlier. This Landscape Character Type is generally located adjacent to other lowland LCT's, rather than the higher Moorland Plateaux, Unenclosed and Enclosed Moorland Hills.

Landscape Character Description

- 4.7.2 Undulating Lowland Farmland with Wooded Brooks is a lowland landscape generally below 150m, encompassing a patchwork of pastoral fields incised by wooded brooks and river gorges, which provide a sense of enclosure, sheltered habitats and distinctive landscape patterns.
- 4.7.3 Sinuous broadleaved woods, following the courses of hidden brooks, are often filled with wild garlic and bluebells in the springtime: the colour, texture and smells of which create a strong sense of place. A network of minor lanes criss-cross the landscape, with stone hump backed bridges a key feature within the wooded valleys where the roads cross the brooks. The small fields are enclosed by hedges and trees, and herb rich verges line many of the lanes in this area. The valleys provide a strong contrast with the small enclosed fields, and they often house historic industrial sites which were located in order to harness water power generated by the swift flowing brooks.
- 4.7.4 The clough woodlands are often of ancient origin, they have survived due to their steepness and inaccessibility and are often important wildlife habitats, housing roe deer and badgers. The birdsong and tranquillity of these woods are distinctive features.

Key Environmental Features

Physical

- 4.7.5 Similarly to the Undulating Lowland Farmland Landscape Character Type (E), this LCT generally occurs below 150m and forms a transitional zone between the low lying plains of soft glacial deposits and the high fells of Bowland, formed from Millstone Grit. This Landscape Character Type, whether composed of limestone, grit, shale or sandstone, is of gentle topography when compared to the fells and hills. Glacial action has accentuated the differences by further tempering the relief of the low-lying areas by the deposition of glacial

drift. Deep drift is conspicuous where hedges predominate over stone walls, as quarrying is only possible where the drift is sufficiently thin.

Ecological

- 4.7.6** Many of the woodlands which survive on the steep slopes of the deep cloughs and valley sides are of ancient origin and represent a rich ecological resource. They include alder and ash woods on the base-rich soils of the valley floors grading through to lowland oakwoods and upland oak woods on the upper valley sides. In addition, remnant species-rich grassland is often also a feature of the steep slopes. Flushes, fens and marshy grassland are also present within this landscape. To the north of Bolton-by-Bowland, New Ing Meadow has been designated as a SSSI. It forms one of the few remaining herb-rich hay meadows which were once typical of this part of Lancashire (and have been almost completely destroyed as a result of agricultural intensification).

Cultural and Historical

- 4.7.7** The landscape proved more favourable to early settlers than the nearby uplands. By the Roman period it is probable that much of this Landscape Character Type was already settled fairly densely and the fort established at Ribchester (outside the southern boundary of the AONB) is known to have had some civilian government functions. Medieval population pressures, which saw the utilisation of small areas of the mosslands elsewhere in Lancashire also led to the continuation of small woodland clearances along the Ribble and the Lune. This created a small scale intimate landscape of scattered farms linked by winding roads with irregular fields and patches of surviving woodland on stream and field edges, a landscape which has remained intact to this day. The majority of enclosure dates from the medieval period and has created a landscape of small fields which are mostly hedged although stone walls are evident where geology lies close to the surface. In the middle of the 18th century, rapid changes in the large-scale application of technology resulted in a move towards an industrialised society. This was represented within the landscape by the development of cotton weaving mills at Calder Vale, Caton and Sabden. Lappet Mill at Calder Vale was built in 1835 and is powered by the River Calder.

Development, Settlement and Buildings

- Pattern of small, linear villages such as Calder Vale and larger, nucleated villages, such as Caton;
- Calder Vale is a model industrial village that was created by the Jackson family to improve the industrial potential of nearby Oakenclough. They built two cotton mills and terraced housing for the workers. One of these, Lappet Mill, built in 1835, is still a working cotton mill;

- Calder Vale predominantly consists of gritstone terraced cottages (displaying a combination of white, brown and green painted window and door frames) which overlook the river corridor, with Lappet Mill on the opposite riverbank.
- Caton contains a mixture of traditional, predominantly gritstone cottages, which are centred around the church and Black Bull pub; and more modern houses;
- Scattered, isolated farmsteads, which display typical gritstone vernacular building materials and styles are also a feature of this Landscape Character Type.

Landscape Character Areas

4.7.8 Landscape Character Areas within this Landscape Character Type include:



- Two distinctive wooded river corridors, following the courses of the Rivers Calder and Brock, which are lined with mature, mixed, deciduous woodland (parts of which are ancient, semi-natural);
- This woodland has a striking pattern when viewed from the surrounding pastoral farmland – highlighting the linearity of the brook corridors;
- In Spring, carpets of bluebells within the various woodlands (including Calder Vale woods) provide a carpet of blue striking colour;
- Coppiced woodland and strips or blocks of damp birch woodland are also a feature in places;
- In-field trees, including oak, alder and occasional ash, provide recognisable landscape features;
- Coniferous woodland on the rising mass of Beacon Fell dominates the skyline of views eastwards;
- Sound of fast-flowing water within the River Calder, which is lined with mature deciduous woodland;
- A series of narrow lanes (such as Snape Rake Lane) often pass through the woodland and are often lined with short, trimmed hedgerows or wide verges with trees, such as alder and birch, in addition to varied flora;
- These lanes have a strongly rural character, with few road markings and little signage, other than named lanes;
- Hedgerows generally contain a mixture of oak, alder and hawthorn.

Landscape Character Area F2: Bolton by Bowland to Waddington



© Tarja Wilson

- Gently sloping limestone topography is incised with a pattern of wooded cloughs which descend the slopes and flow into the valley of the River Ribble to the south;
- The villages of Waddington, Grindleton, Holdon and Bolton –by- Bowland are situated at the foot of the wooded cloughs or brooks;
- The brook corridors (including Drakenhouse Brook, West Lough Brook, Skirden Brook and Holden Brook) are lined with mature deciduous trees and woodland which provides a sense of enclosure and breaks up the surrounding predominantly pastoral farmland;
- Between Waddington and Grindleton, the wooded brooks flow from northwest to southeast;
- This woodland is key feature within views across the area;
- Framed views southwards across the broad valley of the River Ribble;
- The Copy Nook hotel (distinctive vernacular building) at the junction of two minor roads which converge at Holden is a recognisable landscape feature which contributes to sense of place and orientation;
- Waddington and Grindleton are two relatively large, linear villages, which display terraces of traditional stone buildings lining the road corridors;
- Stone bridges which cross the River Ribble are landscape features;
- At Grindleton, bluebells introduce strong colour when in season;
- A network of narrow lanes cross the landscape, often lined with hedgerows, stone walls and white railings;

- The Sawley and Gisburn B roads run east-west across this area, connecting the villages and introducing a source of noise and movement into the landscape;
- Lanes in the Forest Becks and Bolton-by-Bowland area are often lined on one or both sides with trees, shrubs, varied flora and mixed hedgerows with hedgerow trees;
- Lanes in the Holden and Copy Nook area are often lined with drystone walls (which contain rounded, smooth boulders) and white railings;
- Patches of woodland provide a sense of enclosure and single deciduous trees at the edges of the road corridors and within fields are also a feature;
- The smell of wild garlic within the numerous woodlands is recognisable in the Spring.

Landscape Character Area F3: New Row



- This small area extends outside the southern edge of the AONB and encompasses several patches of mature mixed woodland, which contribute to an intermittent sense of enclosure within views across the landscape;
- Matured deciduous woodland lining the corridor of Duddel Brook is also a feature of this landscape, which contributes to recognisable sense of place within views;
- The sound of fast-flowing water within the brooks contributes to recognisable sense of place.

Landscape Character Area F4: Caton



- The large, nucleated village of Caton exhibits a combination of traditional stone buildings and more modern materials;
- Linear belts of deciduous woodland punctuate this landscape and contribute to an intermittent sense of enclosure within views;
- The aerial ropeways associated with Claughton Moor quarries are a key recognisable feature within the landscape, which contribute to recognisable local sense of place;
- Panoramic, open and framed views northwards across the wide floodplain of the River Lune;
- To the south, the dramatic rising profile of the central Unclosed and Enclosed Moorland Hills and Moorland Plateaux Landscape Character Types form the skyline backdrop to views;
- Field boundaries are delineated by a combination of stone walls and hedgerows, which provides a relatively stark contrast with the adjacent Moorland Fringe and Moorland Hills;
- Minor road corridors are often lined with mature hedgerows which limit open views across the landscape.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.7.9 Observable changes in the past include:

- A decline in mature hedgerow trees as a result of age or loss due to agricultural intensification;
- Expansion of villages or modernisation of farmsteads utilising non-local building materials (e.g. red brick) which are intrusive to local vernacular character;
- Amalgamation and diversification of dairy farms;
- Intensification of agricultural management, involving chemical fertiliser and herbicide applications, which has affected herb-rich meadows;
- Loss of, and decline in field boundaries, through agricultural intensification and lack of management, resulting in replacement with stock fencing, and boundary removal to create larger fields;
- A loss of grassland, which has since been reversed.

Current Landscape Condition

4.7.10 The overall condition of the Undulating Lowland Farmland with Wooded Brooks Landscape Character Type is considered to be moderate to good. Most landscape features are generally well managed. Patches of unmanaged woodland are, however, visible and there is also evidence of neglected stone walls (for example at Sabden Fold) and loss of hedgerows which have been replaced by fences.

Future Landscape Changes and Opportunities

4.7.11 An overall consistency in the use of vernacular building materials indicates a local desire to retain the traditional character of the area; however, there has recently been a trend towards the addition of conspicuous modern farm buildings, slurry tanks and silage bays.

4.7.12 Negative changes may include the amalgamation of farms, leading to a change in the character of the landscape, with new access tracks and the creation of larger fields leading to a loss of traditional stone wall and hedgerow field boundaries. Amalgamation of farms may also result in farmhouses and associated buildings being converted to new uses and key landscape features being lost through neglect or removal to enable the amalgamation of adjacent fields. Conversion of historic buildings may also be an issue. The increased farm size may lead to the demand for new agricultural buildings, affecting character and views. Increased financial pressures and reduced availability of higher level agri-environment payments, may lead to field boundaries, walls and hedges suffering from a lack of management.

4.7.13 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The amalgamation of farms and increased drive for efficient farm businesses or farms being sold as farmers and their families leave the industry; all have a direct impact on how the land is managed. As the key characteristics of the area are significantly influenced by agricultural practices, change in the industry could lead to an erosion of landscape quality. Changes in land ownership or agricultural management may also lead to a decline in the management of brook side woodlands, which are a key feature of the landscape pattern of this Type.
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops. Woodland could also be lost with a change in temperatures and average rainfall levels.
- *Development* – Diversification of farm businesses leading to introduction of new buildings and the conversion of farm buildings for residential and other uses could gradually change the nature of the working landscape and its associated attributes. The erosion and loss of vernacular building styles through introduction of cheaper alternatives will reduce the distinctive characteristics of this area. Encroachment of large scale development such as wind farms, masts and pylons into the area would also have a significant effect on landscape character. It is likely that there will also be increased pressure from residential and tourist related developments, affecting the character and quality of the landscape.

Sensitivities and Capacity for Change

4.7.14 The ecological sensitivity of this Landscape Character Type is represented by the combination of hedges, hedgerow trees, diverse brook corridors and the mature woodland which lines these water courses. There is also a rich industrial archaeological record associated with millstone production and an intact network of stone walls, stone bridges and historic villages. In addition, the landscape displays a mature structure of hedgerows and hedgerow trees. This Type is considered to have moderate landscape character sensitivity. Overall, visual sensitivity is considered to be moderate. In places, woodland and hedgerows limit views, whilst there is strong intervisibility with the Unenclosed and Enclosed Moorland Hills and Moorland Plateaux Landscape Character Types.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.7.15 The overall strategy for the Undulating Lowland Farmland with Wooded Brooks Landscape Character Type is to conserve and enhance the mature deciduous woodland and single trees that line brook corridors and contribute to the distinctive landscape pattern. Herb rich river and brook banks and scattered herb rich meadows and pastures should also be conserved and enhanced. The retention and restoration of historic and vernacular building materials and details, and the careful design of new buildings should also be encouraged. Where landscape features have been neglected, opportunities should be sought for restoration. There is also a need for conservation of the network of stone walls, roadside verges, hedgerows and hedgerow trees. Open views towards the unenclosed and enclosed moorland hills and moorland plateaux Landscape Character Types, and views framed across the Lune and Ribble, should also be conserved.

4.7.16 Specific guidelines include:

Physical Character

- **Conserve** and **enhance** woodland, hedges and stone walls.

Ecological Character

- **Link** existing woodlands and hedgerows to create a continuous woodland network to reverse habitat fragmentation⁴³;
- **Conserve** and **enhance** herb-rich river banks;
- **Create** new hedgerows and regenerate existing hedges to maintain and enhance key landscape linkages⁴⁴;
- **Encourage** farmers to adopt less intensive farming practices so that the vitality of existing woodlands is not compromised and to facilitate natural regeneration in and around woodland habitats⁴⁵;
- **Encourage** conservation of existing key landscape features and habitats;
- **Encourage** habitat linkage to increase robustness to climate change.
- **Increase** the proportion of river corridor woodland through natural regeneration and new woodland planting⁴⁶;
- **Increase** the percentage of lowland oak and mixed woodlands;
- **Conserve** the water quality of streams and becks and **limit** run off or pollution from adjacent pastoral farmland;
- **Conserve** ancient semi-natural woodlands;

⁴³ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁴⁴ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁴⁵ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁴⁶ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

- **Conserve** species-rich grass verges and increase species diversity by management where appropriate;
- **Ensure** that UK BAP habitats are appropriately managed.

Cultural and Historic Character

- **Encourage** conservation of significant historic features and buildings;
- **Encourage** sympathetic new uses for disused farm buildings to ensure that they remain a viable and contributory feature within this landscape; and;
- **Encourage** the use of local building materials, in particular gritstone and limestone;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;
- **Maintain** stone walls, which are often located on the outskirts of villages, respecting local differences in style and construction;
- **Conserve** local features such as small farm lime kilns which signify the past use of limestone as a soil conditioner;
- **Conserve** the distinctive settings to rural settlements;
- **Ensure** that any potential new development on the edges of villages reflects the characteristic clustered form; development should be sited to retain views to landscape features and landmarks, such as church towers on the approaches to villages.
- **Conserve** traditional boundary features such stone/metal boundary markers and wells.

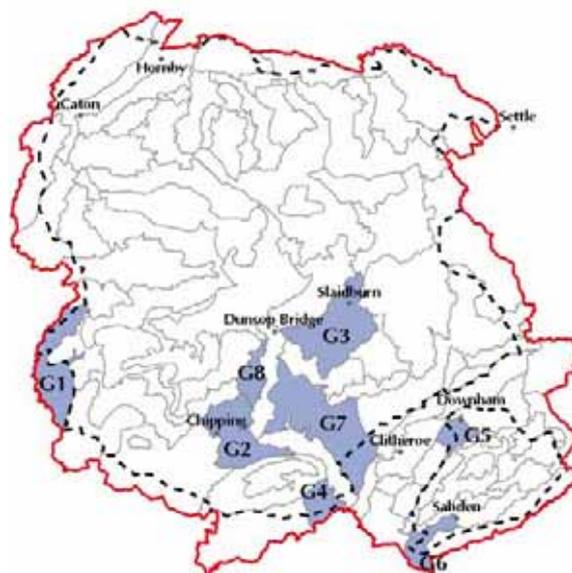
Aesthetic and Perceptual Character

- **Conserve** open views towards the surrounding higher Moorland Plateaux and Unenclosed and Enclosed Moorland Hills Landscape Character Types;
- **Conserve** open and framed views across and into the corridors of the River Ribble and Lune;
- **Maintain** the distinctive pattern of hedgerows and stone walls at field boundaries;
- **Restore** white railings.

LANDSCAPE CHARACTER TYPE G: UNDULATING LOWLAND FARMLAND WITH PARKLAND

Key Characteristics

- 1 Mature parkland trees and other ornamental designed landscape features contribute to the 'designed' estate character.
- 2 Gently undulating topography.
- 3 Remnant boundaries of former parkland are also visible features.



© Sue Flowers

4.8 G: UNDULATING LOWLAND FARMLAND WITH PARKLAND

CHARACTER ASSESSMENT

Location

- 4.8.1 The Undulating Lowland Farmland with Parkland Landscape Character Type is predominantly situated within the southern half of the Study Area, to the south of Dunsop Bridge and Slaidburn and east of Chipping. This Landscape Character Type also occurs at the western edge of the Study Area (to the north of Scorton) and also on the Pendle Hill outlier, at Downham and Sabden. This LCT borders a range of adjacent LCT, including Undulating Lowland Farmland with Wooded Brooks (F), Wooded Rural Valleys (I) and Moorland Fringe (D).

Landscape Character Description

- 4.8.2 Undulating Lowland Farmland with Parkland generally occurs below 150m and comprises pasture, which is interspersed with country houses and associated designed landscapes, particularly parkland. These parkland areas tend to consist of avenues of trees, specimen trees, veteran trees, clumps of woodland, beech hedgerows, formal ornamental planting and some hard landscape features such as pathways and drives, bridges, white metal railings, follies and ha has. There isn't always a house linked to the parkland, however there may be ancillary buildings such as kennels, cottages, barns and reservoirs. These are largely 18th and 19th century designed landscapes, built for estate owners to enjoy when visiting the area for game hunting and shooting. Evidence suggests that much of the parkland probably originated from earlier managed landscapes such as deer parks, and former settlements.
- 4.8.3 Undulating Lowland Farmland with Parkland also contains scattered isolated farmsteads and small historic villages, some of which are linked to the estate or park, and hence have buildings of similar age and design. The lowland farmland is enclosed with a mixture of stone walls (reflecting local geology) and hedgerows; clumps of woodland and single mature trees also dot this pastoral and picturesque landscape.

Key Environmental Features

Physical

- 4.8.4 Similarly to the Undulating Lowland Farmland Landscape Character Type (E), this LCT generally occurs below 150m and forms a transitional zone between the low lying plains of soft glacial deposits and the high fells of Bowland, formed from Millstone Grit. This Landscape Character Type, whether composed of limestone, grit, shale or sandstone, is of gentle

topography when compared to the fells and hills. Glacial action has accentuated the differences by further tempering the relief of the low-lying areas by the deposition of glacial drift. Deep drift is conspicuous where hedges predominate over stone walls, as quarrying is only possible where the drift is sufficiently thin. Clitheroe Reef Knolls, which are partly situated within this Landscape Character Type, have been designated as a SSSI because they represent the classic site for the study of knoll-reefs in the Asbian Carboniferous Limestone of England.

Ecological

- 4.8.5 Within the Lowland Farmland with Parkland Landscape Character Type, hedges, hedgerow trees, flushes, fens, marshy grassland and small stream corridors provide important ecological habitats. In addition, Bell Sykes Meadow, to the north-east of Slaidburn is designated as a SSSI for its unimproved, enclosed, herb-rich grassland (which has been largely destroyed within Lancashire due to agricultural intensification).

Cultural and Historical

- 4.8.6 The landscape proved more favourable to early settlers than the nearby uplands. By the Roman period it is probable that much of this Landscape Character Type was already settled fairly densely and the fort established at Ribchester (outside the southern boundary of the AONB) is known to have had some civilian government functions. Whilst Roman remains (besides roads) outside the immediate area of the forts are poorly represented in the record, there is limited archaeological evidence of exploitation of the natural resources of the area. The majority of enclosure dates from the medieval period and has created a landscape of small fields which are mostly hedged although stone walls are evident where geology lies close to the surface.
- 4.8.7 Country houses are a feature of the area and are often surrounded by parklands and well managed estates. They are evidence of the developing industrial enterprise and increasing wealth between the 16th and 19th centuries. Architecturally distinctive yeoman and gentry houses are also characteristic of this type and date from the 17th century onwards. The country houses are often attractive buildings of historic interest, surrounded by formal parkland and well-managed estate land, which often has a high proportion of woodland, well-managed hedgerows and boundary walls or fences. Associated parkland often has with well-spaced open-grown trees of oak, sycamore, ash and lime. Not all parks and estates, however, contain large country houses.

Development, Settlement and Buildings

- This Landscape Character Type contains a mixture of scattered, isolated farmsteads, which display typical gritstone vernacular building materials and styles; and estate villages (such as Downham and Slaidburn) which contain buildings of a similar ages and design;
- Several large, ornate Country Houses are located within this Landscape Character Type, often associated with designed parkland landscapes, including, Cow Ark, Browsholme Hall, Stonyhurst College and Winckley Hall;
- Stonyhurst College is a dramatic and imposing landmark building (built in the Jesuit-style) and has a long driveway lined by avenues of trees with associated long formal ponds. The Stonyhurst estate is bounded by the River Hodder, the village of Hurst Green and Longridge Estate;
- Slaidburn is also an historic village and has buildings which date back to the 13th century;
- Within Downham, stone built cottages nestle around the church and are associated with mature deciduous vegetation;
- The small village of Hurst Green displays a combination of traditional gritstone and white painted terraced houses.

Landscape Character Areas

4.8.8 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area G1: Wyresdale



- Much of this area has a significant history of estate management, which is reflected in the landscape in the form of park woodlands and in field trees;
- Several of the hedgerows within this area comprised a mixture of beech and hawthorn;
- The Country House, associated lake and patches of mature deciduous woodland at Wyresdale Park are landscape features within the surrounding predominantly pastoral landscape;
- The profile of Nicky Nook provides the backdrop to views southwards and provides a setting for the lake at Wyresdale;
- The corridor of the M6 motorway introduces a source of noise and movement at the western edge of the area;
- Minor road corridors are often lined with deciduous trees;
- A network of tracks cross this area.

Landscape Character Area G2: Little Bowland



- Evidence of old deer park features at Leagram including, the park boundary (bank and ditch), sinuous belts of deciduous woodland, park gates and stiles;
- Park woodlands are shaped with drystone walls or fenced boundaries;
- The Duchy of Lancaster own parts of this area, which is reflected in the management of the landscape and the colours of gates and signs;
- Leagram Hall is a key landscape feature;
- Cheese press stones are visible features, occasionally situated along road corridors;
- Old lime kilns are also features of this landscape;
- A network of drystone walls delineate fields in the northern half, whilst mixed hedgerows with hedgerow trees are a feature of the southern half of the area;
- The gently undulating landscape is crossed by a series of narrow rural road corridors which are lined with a combination of stone walls, hedgerows and white railings;
- The small, nucleated village of Chipping encompasses a combination of traditional gritstone cottages and terraced houses;
- Dramatic, open views northwards towards the central Bowland fells, which provide a distant sense of enclosure;
- Mixed, ancient, semi-natural woodland, following watercourses, run northwest to southeast across the landscape;

- A history of utilisation of this area for water powered industry is visible at several sites within the landscape;
- In-field trees, including oak, alder and ash and landscape features;
- Limekilns and evidence of historic limestone quarrying is visible in the southern and eastern parts of the area;
- Activity associated with pheasant, partridge and duck shoots has an influence on this landscape.

Landscape Character Area G3: Upper Hodder



- Patches of mature deciduous trees line the corridor of the River Hodder, which meanders through this area and often has shallow, grassy banks;
- There is a long history of estate management throughout much of the area (including the Knowlmere and King Wilkinson Estates; and the recent development of the Meanley Estate at Easington);
- Patches of mixed woodland with sinuous edges contribute to a mature landscape structure, which provides an intermittent sense of enclosure within this landscape;
- Sense of enclosure provided by Browsholme Moor and Easington Fells to the south and a combination of the shale and limestone uplands and the grit moorland of the Bowland Fells;
- Single deciduous trees are landscape features along the corridor of the River Hodder;
- White stone walls, bridges and limestone built villages such as Slaidburn (often displaying white window frames and doors) situated in the valley bottom alongside the River Hodder and Newton, all contribute to recognisable sense of place;
- Park woodlands are a striking landscape feature, which exhibit oval shapes and are enclosed by drystone walls or fenced boundaries;
- The underlying limestone geology has an influence on the landscape in buildings and drystone wall materials;
- Limekilns, limestone quarries and stone field barns are recognisable landscape features;
- Remnant hedgerows delineate some field boundaries, several containing hedgerow trees (including ash, alder and hawthorn);
- Distinctive grassy limestone knolls which often have woodland or tree cover on the hilltops at Little Dunmow and Great Dunmow (known as reef knolls) are features within views across this landscape.

Landscape Character Area G4: Hurst Green



- The avenue of trees associated with Stonyhurst College is a key landscape feature of this area and channels views across the landscape (see Appendix H);
- Stonyhurst College is a key landmark within views across the parkland;
- Woodland clumps, often surrounded by intact stone walls also contribute to recognisable sense of place;
- Stonyhurst Park was once a larger area of ornamental parkland, but now houses a golf course which introduces a man-made character into the surrounding landscape;
- The dramatic rising mass of Longridge Fell contribute to recognisable sense of place;
- Framed views southwards across the wide valley corridor of the River Ribble.

Landscape Character Area G5: Downham



© Graham Cooper

- Dramatic, open views southwards towards moorland on Pendle Hill;
- Open views northwards across the wide valley of the River Ribble;
- Patches of deciduous woodland and single mature deciduous field trees contribute to an intermittent sense of enclosure within views across this landscape;
- Patchwork of pasture fields lined with stone walls and mixed hedgerows and interspersed with mature deciduous hedgerow trees;
- Relatively tall, estate style, predominantly limestone, walls are also a feature, lining some of the minor road corridors; in other places, mixed hedgerows line road corridors.
- Traditional stone field barns are a feature in places (for example at the side of Twiston Lane);
- Lime kilns and quarries are also visible landscape features;
- Parkland features include estate walls and frequent copses on limestone reef knolls between Downham and Twiston;
- The linear estate village of Downham, with its strongly recognisable sense of place, resulting from the combination of stone buildings, bridges and church is a key feature within several views across this area.

Landscape Character Area G6: Sabden



- The relatively wide corridor of Sabden Brook which is lined by patches of mature woodland is a landscape feature;
- Sabden village, nestled at the foot of Pendle Hill, encompasses a combination of traditional buildings and more modern buildings;
- Views northwards are dominated by the dramatic backdrop of Pendle Hill with its distinctive profile;
- A network of hedgerows line field boundaries and drystone walls;
- Mature single deciduous trees are also a feature of this landscape which contribute to landscape pattern;
- B roads and minor road corridors which cross the area lined with a combination of stone walls and hedgerows;
- There is evidence of the industrial heritage of this area, including mills and terraces;
- Red painted gates are a key feature of farms on the Huntroyd Estate at Sabden.

Landscape Character Area G7: Browsholme



- Dramatic, open views northwards towards the central Bowland fells, which provide a distant sense of enclosure;
- The Duchy of Lancaster own part of this area, which is reflected in the management of the landscape and the colours of gates and signs;
- Park woodlands are shaped with drystone walls or fenced boundaries;
- Limestone, drystone walls are a feature of the northern half, whilst mixed hedgerows with hedgerow trees are a feature of the southern half of the area;
- Duchy metal field gates are recognisable landscape features;
- Browsholme Hall is a key landscape feature;
- On the Browsholme Estate, beech hedgerows and beech within woodlands contribute to recognisable sense of place;
- Relatively large blocks of coniferous and mixed woodland contribute to a varied sense of enclosure within this area;
- Mixed, ancient semi-natural woodland and strips/blocks of damp birch woodland, contribute to a mixed sense of enclosure;
- In-field trees, including oak, alder and ash are landscape features;
- Activity associated with pheasant, partridge and duck shoots has an influence on this landscape;

- The small hamlet of Cow Ark, the estate-owned small hamlet of Bashall Eves and a series of scattered, isolated farmsteads contribute to settlement pattern;
- A network of relatively narrow rural lanes, lined with stone walls, hedgerows and occasional white railings, crosses this landscape. Between Bashall Eves and north Waddington, narrow, sunken lanes are lined with mixed hedgerows (including holly) and trees.

Landscape Character Area G8: Dinkling Green - New Laund



© Tarja Wilson

- This area encompasses a distinctive pattern of grassy hills which punctuate the surrounding undulating farmland landscape and are underlain by limestone;
- Some of the slopes of the hills are cloaked in mature deciduous trees, contributing texture and variety to the landscape, in contrast with adjacent character areas;
- The pronounced limestone 'reef knolls' are visible landmarks within several views from adjacent landscape character areas;
- To the north and west, Totridge and Fair Oak fells provide a sense of enclosure, whilst the intimate corridor of the Upper Hodder valley provides the eastern edge;
- Gritstone field quarries are also a feature in the north-west of the area;
- There is a strong sense of remoteness and tranquillity throughout most of the area, despite the presence of a narrow rural road corridor which links the Hodder Valley to Leagram to the south.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.8.9 Observable changes in the past include:

- Conversion of deer parks to pastoral farmland;
- Loss of and decline in the number of associated parkland features;
- A decline in mature hedgerow trees as a result of age or loss due to agricultural intensification;
- Expansion of villages or modernisation of farmsteads utilising non-local building materials (e.g. red brick) which are intrusive to local vernacular character;
- Amalgamation and diversification of dairy farms;
- Intensification of agricultural management, involving chemical fertiliser and herbicide applications, which has affected herb-rich meadows.

Current Landscape Condition

4.8.10 The overall condition of the Undulating Farmland with Parkland Landscape Character Type is considered to be moderate. The condition of stone walls and hedgerows at field boundaries is considered to be generally good, however there is evidence of disrepair and gappy, overgrown and neglected hedges and overgrown tree/shrub lines in places, varying with land ownership. Parkland features are generally well maintained where they form part of areas of formal parkland, however there is evidence of loss or disrepair of parkland features, such as boundary walls, where the former parkland features form part of the wider landscape of undulating pastoral farmland. Some areas of parkland are also in fragmented ownership.

Future Landscape Changes and Opportunities

4.8.11 An overall consistency in the use of vernacular building materials within the estate and other villages within this Landscape Character Type indicates a local desire to retain the traditional character of the area.

4.8.12 Negative changes may include the amalgamation of farms, leading to a change in the character of the landscape, with new access tracks and the creation of larger fields leading to a loss of traditional stone wall and hedgerow field boundaries. This may lead to a loss of traditional former parkland boundary features (such as banks and ditches with either hedges or walls on top). Amalgamation of farms may also result in farmhouses and associated buildings being converted to new uses and key landscape features being lost through neglect or removal to enable the amalgamation of adjacent fields. Conversion of historic buildings may also be an

issue. The increased farm size may lead to the demand for new agricultural buildings, affecting character and views. Increased financial pressures and reduced availability of higher level agri-environment payments, may lead to field boundaries, walls and hedges suffering from a lack of management.

4.8.13 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The amalgamation of farms and increased drive for efficient farm businesses or farms being sold as farmers and their families leave the industry; all have a direct impact on how the land is managed. As the key characteristics of the area are significantly influenced by agricultural practices, change in the industry could lead to an erosion of landscape quality. Changes in land ownership or agricultural management may also lead to fragmentation of ownership of areas of parkland, which could jeopardise the coherent future management of parkland features.
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops. Climate change may have a variety of potential impacts on the designed landscape (a key feature within this Landscape Character Type) and retaining the historical integrity of some landscapes may be difficult to achieve over the long term. Mature parkland trees could also be lost with a change in temperatures and average rainfall levels.
- *Development* – Diversification of farm businesses leading to introduction of new buildings and the conversion of farm buildings for residential and other uses could gradually change the nature of the working landscape and its associated attributes. The erosion and loss of vernacular building styles within estate villages or country house estates, through introduction of cheaper alternatives will reduce the distinctive characteristics of this area. Encroachment of large scale development such as wind farms, masts and pylons into the area would also have a significant effect on landscape character. It is likely that there will also be increased pressure from residential and tourist related developments, affecting the character and quality of the landscape.

Sensitivities and Capacity for Change

4.8.14 The ecological sensitivity of this Landscape Character Type is represented by the combination of hedges, hedgerow trees, mature woodland and stream corridors. There is strong historic and cultural sensitivity resulting from the numerous built and natural parkland features and country houses. In addition, the landscape displays a mature structure of hedgerows and hedgerow trees. Overall, landscape character and visual sensitivity is considered to be moderate. In places, woodland and hedgerows limit views, whilst there is strong intervisibility with the Unenclosed and Enclosed Moorland Hills, Valley Floodplain and Moorland Plateaux Landscape Character Types.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.8.15 The overall strategy for the Undulating Lowland Farmland with Parkland Landscape Character Type is to conserve and enhance existing and former built and natural parkland features; and the network of stone walls and hedgerows. Patches of mature deciduous woodland and single parkland trees within fields and lining river and brook corridors should also be conserved. Where landscape features have been neglected (including former boundary features such as beech and holly trees and original park gates), opportunities should be sought for restoration. The parkland settings, e.g. the relationship between settlement and the rest of the landscape should be maintained. There is also a need for conservation of the lane features such as stone walls, roadside verges, hedgerows and hedgerow trees. Open views towards the Unenclosed and Enclosed Moorland Hills, Moorland Plateaux and Valley Flood plains Landscape Character Types should be conserved.

4.8.16 Specific guidelines include:

Physical Character

- **Conserve** and **enhance** woodland, hedges and stone walls.

Ecological Character

- **Link** existing woodlands and hedgerows to create a continuous woodland network to reverse habitat fragmentation⁴⁸;
- **Create** new hedgerows and regenerate existing hedges to maintain and enhance key landscape linkages⁴⁹;
- **Encourage** farmers to adopt less intensive farming practices so that the vitality of existing woodlands is not compromised and to facilitate natural regeneration in and around woodland habitats⁵⁰;

⁴⁸ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁴⁹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

- **Ensure** the long-term viability of parkland trees and landscapes by restructuring, using species of local provenance wherever possible⁵¹;
- **Encourage** conservation of existing key landscape features and habitats;
- **Encourage** habitat linkage to increase robustness to climate change;
- **Conserve** the water quality of streams and becks and **limit** run off or pollution from adjacent pastoral farmland;
- **Target** agri-environment scheme support for management of parkland landscapes;
- **Ensure** that UK Biodiversity Action Plan habitats are appropriately managed.

Cultural and Historic Character

- **Protect** unlisted buildings and structures related to ornamental land;
- **Encourage** public access, appreciation and understanding of ornamental landscapes and their component features;
- **Avoid** loss of integrity by division into multiple ownership, or through inappropriate changes of use;
- **Encourage** management regimes that foster joint-working whilst protecting the key ornamental attributes, such as parkland trees through Tree Preservation Orders or parkland structures through listing or scheduling, where ornamental landscapes are in multiple ownership;
- **Conserve** relict archaeological remains;
- **Enhance** former parkland features, whether functional (deer leaps, icehouses, lodges), semi-natural (woodland shelterbelts, planted avenues, specimen trees, lakes) or ornamental (follies, eye-catchers), particularly where they add group value by association within one another;
- **Conserve** significant historic features and buildings;
- **Encourage** sympathetic new uses for disused farm buildings to ensure that they remain a viable and contributory feature within this landscape; and;
- **Encourage** the use of local building materials, in particular gritstone and limestone;
- **Encourage** owners of designed landscapes, which are not eligible for agri-environment schemes to restore and maintain the integrity of the planting for the future, especially planning for the replacement of specimen trees, and to consider the effects of climate change in so doing;
- **Continue** the management of parkland, including planting of parkland trees;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;
- **Conserve** other roadside features such as stone/metal boundary stones and wells;
- **Restore** walls, hedgerows and white railings.

⁵⁰ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

⁵¹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

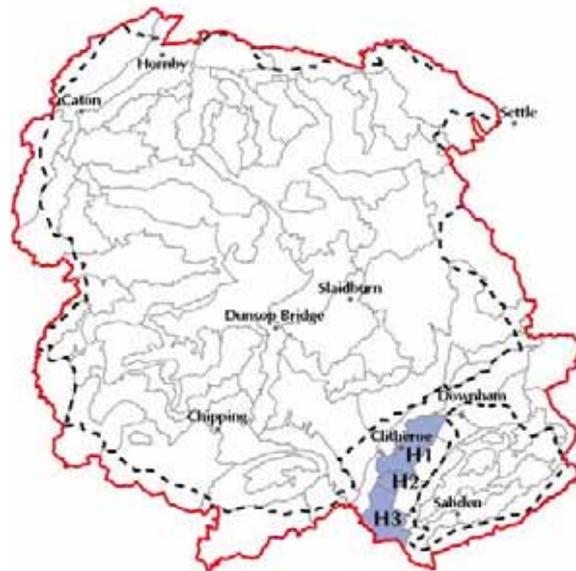
Aesthetic and Perceptual Character

- **Conserve** open views towards the surrounding higher Moorland Plateaux and Unenclosed and Enclosed Moorland Hills Landscape Character Types;
- **Conserve** open and framed views across and into the corridors of the River Ribble;
- **Maintain** the distinctive pattern of hedgerows and stone walls at field boundaries.

LANDSCAPE CHARACTER TYPE H: UNDULATING LOWLAND FARMLAND WITH SETTLEMENT AND INDUSTRY

Key Characteristics

- 1 Gently undulating farmland, divided by a network of drystone walls and hedgerows.
- 2 Towns and some heavy industrial sites which are associated with main transport corridors.
- 3 Backdrop of Moorland Hills provides a sense of enclosure and contributes to recognisable sense of place within views.



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4.9 H: UNDULATING LOWLAND FARMLAND WITH SETTLEMENT AND INDUSTRY

CHARACTER ASSESSMENT

Location

- 4.9.1 The Undulating Lowland Farmland with Settlement and Industry Landscape Character Type occurs in three locations in the southern part of the Study Area. This Landscape Character Type is generally located adjacent to other lowland LCT's, and is bordered along its northern edge by the Valley Floodplain Landscape Character Type.

Landscape Character Description

- 4.9.2 Undulating Lowland Farmland with Settlement and Industry Landscape Character Type generally occurs below 150m within the Study Area (outside the boundaries of the AONB). It encompasses a patchwork of pastoral fields that are punctuated by main transport corridors and relatively large urban areas (including Clitheroe and Whalley). This landscape is generally viewed against either the backdrop of Moorland Hills (looking northwards) or Pendle Hill (looking southwards).
- 4.9.3 The pastoral fields are enclosed by an intricate network of hedgerows, which often contain hedgerow trees and provide texture to the landscape; and post and wire fences. These fields surround the towns of Clitheroe and Whalley, providing the setting for a combination of Victorian and later buildings within the built up areas. A number of major road corridors and a main railway line also dissect this Landscape Character Type, disturbing the overall sense of tranquillity and remoteness.
- 4.9.4 Pockets of industry including farmac works, cement works and industrial estates also punctuate the surrounding pastoral landscape. The scale and form of these buildings provides a strong visual contrast with the buildings and settlement patterns of adjacent Landscape Character Types.

Key Environmental Features

Physical

- 4.9.5 Similarly to the Undulating Lowland Farmland Landscape Character Type (E), this LCT generally occurs below 150m and is underlain by a combination of soft glacial tills which separate the higher fells of Bowland to the north (formed from Millstone Grit) from Pendle Hill to the south. At Clitheroe, these are quarried for rock and used in cement manufacture. Where these deposits are located close to the surface, they are visible within the landscape in the form

of small, isolated hills or reef knolls, such as at Worston at the western edge of Pendle Hill. In its lowland position adjacent to the relatively wide meandering course of the River Ribble, this Landscape Character Type has flat to gently undulating topography. Within this landscape, Coplow, Salthill and Bellmanpark quarries have been designated as SSSI for their geological interest.

Ecological

- 4.9.6 Within the Lowland Farmland with Settlement and Industry Landscape Character Type the key ecological habitats include small stream corridors, hedges and hedgerow trees. Intensive farming practices, interspersed with industrial and urban land uses, however, limit the nature conservation value of this area.

Cultural and Historical

- 4.9.7 The landscape proved much more favourable to early settlers than the nearby uplands to the north and south, probably due to its position adjacent to the corridor of the main River Ribble. By the Roman period it is probable that much of this Landscape Character Type was already settled fairly densely and the fort established at Ribchester (outside the southern boundary of the AONB) is known to have had some civilian government functions. The origins of urban settlement in this landscape date to the 12th Century, when the market town of Clitheroe received its first charter in 1114. Similarly, settlement is known to have existed in Whalley to the south, in 1296, when an Abbey was founded. Clitheroe is dominated by a partially ruined Norman castle (situated on a limestone crag above the town). Despite modern expansion, the town retains much of its historic character, encompassing a winding main street which is lined in places by white fronted Georgian houses. The majority of enclosure within this type dates from the medieval period and has created a landscape of small fields which are mostly hedged although stone walls are evident where geology lies close to the surface. In the middle of the 18th century, rapid changes in the large-scale application of technology resulted in a move towards an industrialised society. To the east and of Clitheroe and west of Chatburn, limestone quarries, (associated with rich surface geological deposits) became prosperous and are still in operation today, providing local employment and introducing industrial features into the landscape.

Development, Settlement and Buildings

- Settlement pattern is dominated by the large towns of Clitheroe (containing a mixture of historic and more modern houses, shops, hospitals and schools) and Whalley to the south;
- Houses within these towns are often terraced and display a range of local building materials including limestone and gritstone;
- To the north of the area the large village of Chatburn, once a mill village associated with the cotton industry, contains rows of terraced stone cottages;

- Outside these towns and villages, settlement pattern consists of occasional, scattered, isolated farmsteads;
- Clitheroe Castle is a key landmark buildings within views across this landscape;
- The imposing Hall at Standen (erected in the 15th century and rebuilt in 1757) is also a key built feature within the landscape;
- Modern industrial buildings and chimneys associated with cement workings and tarmac works introduce a dominant human element within this landscape and are visible within most views across the Landscape Character Type.

Landscape Character Areas

4.9.8 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area H1: Clitheroe and Chatburn



- Landscape pattern within this Landscape Character Area is dominated by the large town of Clitheroe, which is situated at the convergence of major road and railway corridors;
- These corridors introduce a source of noise and visual intrusion and disturb the overall sense of tranquillity;
- Clitheroe contains an assortment of housing (much of which is terraced and built from local stone) and commercial buildings;
- The tower of Clitheroe Castle (situated on a limestone outcrop above the town) is a landmark within views towards this area;
- At the eastern edge of the area, the small village of Chatburn, with its rows of terraced cottages, further contributes to settlement pattern;
- Large-scale quarries and associated works (including tall vertical chimneys) to the east of Clitheroe and west of Chatburn are a dominant human influence within views to this landscape from surrounding Landscape Character Types and Areas;
- Views northwards, across the corridor of the River Ribble are dominated by the rising mass of the central Moorland Hills and Plateau, whilst Pendle Hill contributes to recognisable sense of place within views southwards;
- At the edges of the urban development, patchworks of predominantly pastoral fields are delineated by, in places remnant, hedgerows, with frequent hedgerow trees.

Landscape Character Area H2: Higher and Lower Standen



- This relatively small landscape character area encompasses a intact patchwork of predominantly pastoral fields, which are interspersed with small patches of mixed woodland;
- This woodland, alongside hedgerows at field boundaries contributes to an intermittent sense of enclosure throughout the area;
- Overall sense of tranquillity is disturbed as a result of traffic on the A671 and A59 main road corridors;
- To the west, dramatic open views across the Ribble Valley contribute to recognisable sense of place, whilst to the east, views to Pendle Hill provide orientation;
- From the northern edge of the area, the urban edge of Clitheroe is clearly visible within views northwards.

Landscape Character Area H3: Barrow and Whalley



- Overall sense of tranquillity within this area is disturbed by the main road and railway corridors that cross the landscape;
- At the southern edge of the area, the town of Whalley (within its pattern of stone terraced houses) exerts a human influence over the landscape;
- In addition to this, the golf course to the north of Whalley, introduces a further human element;
- The small linear village of Barrow further contributes to settlement pattern;
- To the west, open views across the gently meandering course of the River Ribble contribute to recognisable sense of place, whilst the rising mass of Pendle Hill to the east provides orientation;
- To the west of Whalley, the viaduct is a key landscape feature, whilst to the east of the town, the relatively large expanse of woodland within Spring Wood provides a sense of enclosure;
- Outside the settlements, a gently undulating patchwork of pastoral fields is lined with hedgerows, which provide a sense of enclosure.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.9.9 Observable changes in the past include:

- An expansion of historic settlements, both during the Industrial Revolution, when stone industrial buildings and terraced houses were introduced and Post-War, including infill and edge developments, which have tended to suburbanise the surrounding farmland;
- The introduction of main road corridors (often dual carriageways) and railway line, which has resulted in loss of tranquillity and associated sense of remoteness;
- Upgrading and standardisation of minor rural roads to allow for the volume of traffic associated with the settlements and industry, which has resulted in a loss of species-rich roadside verges and the introduction of signage and lighting;
- Quarrying of the landscape has resulted in spoil heaps and areas of reclaimed land (parts of which now support unique ecological habitats);
- A decline in mature hedgerow trees as a result of age or loss due to agricultural intensification;
- Expansion of villages or modernisation of farmsteads utilising non-local building materials (e.g. red brick) which are intrusive to local vernacular character;
- Amalgamation and diversification of dairy farms;
- Intensification of agricultural management, involving chemical fertiliser and herbicide applications, which has affected herb-rich meadows;

Current Landscape Condition

4.9.10 The overall condition of the Undulating Lowland Farmland with Settlement and Industry Landscape Character Type is considered to be moderate. Most landscape features are generally well managed. Patches of unmanaged hedgerows are, however, visible and there is also evidence of over-mature hedgerow trees.

Future Landscape Changes and Opportunities

4.9.11 In the short-term, negative changes within this Landscape Character Type are likely to include further pressure for the expansion of urban areas (including lighting, access roads and footpaths) which would have a suburbanising influence on the surrounding predominantly rural landscape. There is also likely to be pressure for development of industrial uses, including out of town business parks and leisure developments. Linked to this, there is likely to be pressure to widen main road corridors and standardise minor rural road corridors.

Increased financial pressures and reduced availability of higher level agri-environment payments, may lead to field boundaries, walls and hedges suffering from a lack of management.

4.9.12 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* –Changes in land ownership or agricultural management may also lead to a decline in the management of hedgerows and hedgerow trees.
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops. This Landscape Character Type is situated adjacent to the corridor of the River Ribble and therefore, could be affected by a risk of increased flooding if temperatures rise.
- *Development* – There is likely to be pressure for expansion of the main towns of Clitheroe and Whalley, as the demand for housing increases. Associated with this, the widening of main road corridors would have an impact on landscape character within this area. The dereliction of former industrial sites as these cease operation could lead to a loss of heritage features; however, there is also an opportunity to create new landscape by their restoration. The erosion and loss of vernacular building styles through introduction of cheaper alternatives will reduce the distinctive characteristics of this area. It is also likely that there will be increased pressure from tourist related developments, as a result of the proximity of this landscape to the edges of the AONB, affecting the character and quality.

Sensitivities and Capacity for Change

4.9.13 The ecological sensitivity of this Landscape Character Type is represented by the combination of hedges, hedgerow trees and diverse narrow stream corridors. There is also a rich built heritage within the main towns and villages. In addition, the landscape displays a mature structure of hedgerows and hedgerow trees. Overall, landscape character and visual sensitivity is considered to be moderate. In places, hedgerows limit views, whilst there is strong intervisibility with the Unenclosed and Enclosed Moorland Hills, which provide a backdrop to most views from this lower landscape. Industrial chimneys and other industrial buildings at the

edges of Clitheroe are also visible within most views to this Landscape Character Type from adjacent Landscape Character Types and Areas within the AONB.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.9.14 The overall strategy for the Undulating Lowland Farmland with Settlement and Industry Landscape Character Type is to conserve and enhance the network of mature hedgerows and hedgerow trees that contribute to the distinctive landscape pattern. The retention and restoration of historic and vernacular building materials and details, and the careful design of new buildings should also be encouraged. Where landscape features have been neglected, opportunities should be sought for restoration. There is also a need to ensure that potential new development at the edges of urban areas, utilises local vernacular limestone and gritstone and includes a robust planting structure of native tree and shrub species, particularly at the edges. Opportunities also exist to screen existing urban edges using native trees and shrubs. Open views towards the Unenclosed and Enclosed moorland hills Landscape Character Types, and framed views across the River Ribble should also be conserved.

4.9.15 Specific guidelines include:

Physical Character

- **Conserve** and **enhance** hedges and hedgerow trees.

Ecological Character

- **Conserve** and **enhance** herb-rich stream banks;
- **Create** new hedgerows and regenerate existing hedges to maintain and enhance key landscape linkages⁵²;
- **Encourage** farmers to adopt less intensive farming practices so that the vitality of existing woodlands is not compromised and to facilitate natural regeneration in and around woodland habitats⁵³;
- **Encourage** conservation of existing key landscape features and habitats;
- **Encourage** habitat linkage to increase robustness to climate change.
- **Conserve** the water quality of streams and becks and **limit** run off or pollution from adjacent pastoral farmland;
- **Ensure** that UK Biodiversity Action Plan habitats are appropriately managed;
- **Restore** semi-natural habitats;
- **Discourage** intensive agricultural practices, such as drainage and fertilisation, in areas with species-rich grasslands, hay and wet meadows;

⁵² Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁵³ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

- **Seek** opportunities to restore abandoned quarries, ensuring that their nature conservation interest is retained.

Cultural and Historic Character

- **Encourage** conservation of significant historic features and buildings of industrial and other heritage;
- **Ensure** that any potential new urban development includes a robust planting of native tree and shrub planting at the edges;
- **Encourage** sympathetic new uses for disused farm buildings to ensure that they remain a viable and contributory feature within this landscape; and;
- **Encourage** the use of local building materials, in particular gritstone and limestone;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;
- **Ensure** new development does not extend onto prominent hillsides;
- **Maintain** consistency of building materials, details and design;
- **Conserve** the pattern and distinctive settings to settlements;
- **Give** careful consideration to the siting and design of car parks and visitor facilities, which should be well screened by trees and woodlands.

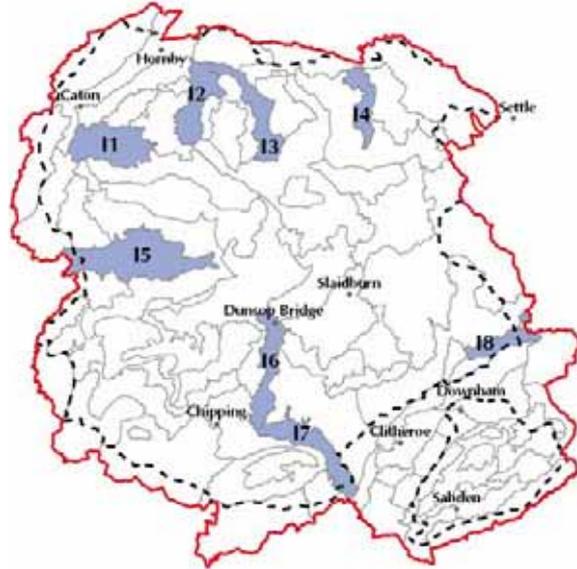
Aesthetic and Perceptual Character

- **Conserve** open views towards the surrounding higher Moorland Plateaux and Unenclosed and Enclosed Moorland Hills Landscape Character Types;
- **Conserve** open and framed views across and into the corridor of the River Ribble;
- **Maintain** the distinctive pattern of hedgerows at field boundaries.

LANDSCAPE CHARACTER TYPE I: WOODED RURAL VALLEYS

Key Characteristics

- 1 Undulating lanes dip into and out of the valleys.
- 2 Deeply incised, wooded cloughs create a strong pattern.
- 3 Local areas of landslip on the steep valley sides create a distinctive hummocky local topography.
- 4 Strong sense of enclosure.



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I: WOODED RURAL VALLEYS

CHARACTER ASSESSMENT

Location

- 4.9.16 The Wooded Rural Valleys Landscape Character Type occurs in eight different locations throughout the Study Area. In the north of the AONB, the edges of this LCT are generally bordered by a combination of Unenclosed (B) and Enclosed Moorland Hills (C) or Moorland Fringe (D) Landscape Character Types. To the south, however, the Wooded Rural Valleys cut through Undulating Lowland Farmland (E) or Undulating Farmland with parkland (G) Landscape Character Types.

Landscape Character Description

- 4.9.17 These deeply incised wooded valleys link upland and lowland Bowland, creating a strong pattern of linear landscapes, which radiate out from the central fells. Formed by the action of fast flowing water the valleys cut through a mixture of gritstone, shales and silt. The steep valley sides are cloaked in woodland, the only space for farming being confined to the slopes above the trees, or in the damp valley bottoms where you will find small herb rich pastures and meadows. Waterfalls, gorges, mill lodges and historic mill sites are strung along the course of the brooks and rivers, but the woods are largely uninhabited. Settlements (small hamlets and isolated farms) are generally above the tree line, or at a confluence of rivers such as at Wray or Dunsop Bridge; and undulating lanes dip into and out of the valleys, crossing the watercourses with narrow packhorse bridges or fords.
- 4.9.18 The valleys have a strong sense of enclosure and remoteness, which creates a contrast with the surrounding Unenclosed and Enclosed Moorland Hills and Moorland Fringe.

Key Environmental Features

Physical

- 4.9.19 The Wooded Rural Valleys cut through hard Millstone Grit and radiate out from the central upland core of the Bowland landscape. Some of the valley sides expose sections of the layers of the underlying geology which includes sandstone, shale and silt. The deeply incised, narrow valleys were formed by fast flowing streams and glacial meltwaters. Local areas of landslip are common on the steep valley sides and create a distinctive hummocky local topography. As the streams cut through sequential layers of Millstone Grit they have created a landform of stepped terraces on the harder geology and steep drops where the softer shales have been eroded away. Part of the Hodder River Valley (Hodder River Section) has been designated as a SSSI for its exposures of Lower Carboniferous rocks. As well as being the type

locality for these beds and the fossil which gives them their name, it is the type locality for a number of other fossil taxa. The rich invertebrate fauna includes trilobites, bivalves, brachiopods, bryozoans, echinoids and cephalopods.

Ecological

4.9.20 The valleys contain substantial areas of ancient woodland which survive as remnants of larger woods cleared for agriculture or habitation. These range from the base rich ash woodlands or alder/willow fringing the streams, to upland oak woodland along elevated parts of the valley sides. Remnant areas of wet meadow along the valley floor are also of considerable interest. This is a shady, humid environment in which ferns, mosses and other specialised plants thrive. These valleys support characteristic riparian birds such as grey wagtail, dipper and common sandpiper. Within the Wooded Rural Valleys Landscape Character Type, there are several sites which have been designated as SSSI to reflect their ecological importance.

4.9.21 Artle Dale, a wooded gorge of Artle Beck (to the east of Lancaster) is of importance, as one of the two or three best valleys in Lancashire, for its bryophyte (moss and liverwort) communities, with over 160 species having been recorded. Of particular interest are excellent examples of base-enriched cliff, streamside gorge and Atlantic woodland communities, the latter rare in Lancashire, all of which include species which are scarce in the county. In addition, Far Holme Meadow, in the valley of the River Hindburn has been designated for its herb-rich neutral grassland, in which over 80 species of plants have been recorded. Keasden Moor is of special interest for its rare marsh gentian (*Gentiana pneumonanthe*) which is a nationally rare species. Marsh gentian is typically associated with relatively open areas of wet heathland dominated by heather *Calluna vulgaris* and bog moss *Sphagnum* spp. Patches of this habitat occur here on gently sloping moorland amongst a mosaic of acidic and marshy grassland. Tarnbrook Meadows, at the head of the valley of Tarnbrook Wyre, is the only known example in the county of a series of adjacent species-rich meadow grasslands.

Cultural and Historical

4.9.22 There is less obvious evidence of human activity in the Wooded Rural Valleys as farms are generally located above the level of the main wooded areas, however the woods are interspersed with rough pasture and narrow riverside meadows. The stone bridges, which often represent ancient crossing points are an interesting feature of the valleys. The presence of charcoal hearths suggest a past history of woodland management. The swift streams provided water power for early industrial activity and occasional historic mill sites remain on the valley floors, include traces of mill ponds, races, sluices and weirs. The remaining mill buildings are good examples of the local vernacular and have often been converted into private residences. Herb-rich flower meadows have fast disappeared since the last war from these valleys due to intensive farming practices. Only a few now remain.

Development, Settlement and Buildings

- A predominant settlement pattern of scattered, isolated farmsteads, which are often constructed from local stone;
- The deserted church at Littledale is a key landscape feature;
- Traditional stone field barns are a feature of the landscape in places;
- Occasional nucleated villages situated in close proximity to river corridors (for example, Wray) exhibit predominantly traditional stone building styles and details within terraced cottages and houses;
- Stone mills and bridges are a testament to the historic use of the rivers for harnessing power; these areas were also managed to supply charcoal and wood for the bobbin mills.

Landscape Character Areas

4.9.23 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area I1: Littledale



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- Meandering, narrow corridor of Artle Beck, containing fast-flowing water which tumbles over rocks and boulders on the river bed;
- Very broad and steep sided river valley with associated large blocks of ancient, semi-natural woodland and managed broadleaved woodland;
- There is a long history of estate management for a large part of this area, including Gresgarth, Littledale Hall and Abbeystead;
- Strong sense of enclosure provided by linear belts of mature deciduous and mixed woodland, almost continuously lining both sides of the beck;
- Small pockets of carr woodland are also a feature;
- Series of relatively narrow, traditional stone bridges cross the river corridor;
- Panoramic, open views northwards towards Morecambe Bay and Black Combe (Lake District) from the higher points along the southern slopes of the river valley;
- In close proximity to Artle Beck, views are channelled along the river corridor;
- Open views from the northern valley slopes towards Caton Moor to the north, with the windfarm a visible feature on the horizon;
- Narrow road corridors and field boundaries are lined with a combination of stone walls and hedgerows;

- Landscape pattern of small to medium sized, regular pastoral fields, often delineated by drystone walls;
- Taller, gritstone walls are a features of the Gresgarth Estate (at Hawkeshead Farm and Intack House);
- A network of walled tracks cross the western half of this area;
- Park woodlands are generally oval in shape and enclosed by drystone walls or fenced boundaries;
- Gresgarth Hall (whilst in current ownership) has been developed as a formal parkland landscape, including gardens, new beech hedgerows, metal railings, entrance gates and newly planted formal trees;
- Beech hedgerows are a feature in places;
- Field barns, such as Skelbow Barn to the east of Littledale are also key landmarks within views across the landscape from the valley sides.

Landscape Character Area 12: Roeburndale



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- Steep-sided river valley, with ancient semi-natural woodland along the river and stream banks and associated species-rich damp/wet meadows and pastures;
- Strong sense of enclosure within the valley provided by the Unenclosed Moorland Hills of Goodber Common to the east and the Enclosed Moorland Hills at the eastern end of Caton Moor;
- An associated strong sense of remoteness and tranquillity;
- This area forms an integral part of the distinctive traditional farming pattern of the area. The fields on the eastern side of the valley start at the river and spread through Moorland Fringe landscape and onto Goodber Common. Those on the west side of the valley start at the river and spread through to Whit Moor Common and onto Haylot Fell in a similar way;
- The course of the River Roeburn is lined with dense belts of deciduous woodland, which demarcate its path within views from surrounding higher landscapes;
- Water within the river, trickles over large, smooth boulders and smaller pebbles along the river bed, which contributes to a diverse pattern along the river corridor and introduces a source of noise and movement;
- Within views southwards along the valley from the narrow road which follows the western bank of the river corridor, Mallowdale Fell provides enclosure and is visible as the skyline backdrop, contributing to recognisable sense of place;
- The Roman Road crossing Salter Fell is a key visible feature within views to Mallowdale Fell from the southern end of the valley;

- A relatively small-scale patchwork of pastoral fields line the valley floor, delineated by an intact network of low stone walls; mosaics of grassland and hay meadows are also a feature;
- Mixed hedgerows with hedgerow trees also delineate field boundaries and mixed, ancient semi-natural woodland is also a feature;
- Field barns contribute to recognisable sense of place;
- Two minor, dead-end roads lead into the valley and there is no access (other than by foot) from the southern end of the valley, further contributing to the overall sense of isolation and remoteness within this area;
- Mature, single deciduous trees along road corridors (which are often lined with stone walls) are also a feature of this landscape;
- The small, nucleated village of Wray, at the northern end of the valley, encompasses rows of traditional stone terraced houses;
- Where the narrow road corridors cross the river stone packhorse bridges are a key landscape feature;
- This area has a history of iron smelting, stone quarrying (with extensive quarries at Backsbottom Farm) and coppice activity in woodlands (for example in Hindburndale);
- Patches of ancient woodland, waterfalls, weirs and fords are all features of the landscape;
- Adjacent to the River Roeburn, where the un-gated road crosses the river, between Haylot and Lower Salter, a distinctive area of open land, surrounded by steep broadleaved woodland, provides a habitat for oystercatchers and woodpeckers;
- The banks of the fast flowing rivers contain evidence of former water powered mill sites.

Landscape Character Area I3: Hindburndale



- The Hindburn valley is steep sided, with a series of associated stream side valleys forking into the main valley;
- A strong sense of remoteness, isolation and tranquillity within the valley corridor, resulting from lack of access (other than by foot) to the valley from the south and the enclosing ring of Moorland Hills;
- Two minor roads follow the course of the river, lined with thick stone walls and mature deciduous trees in places;
- Sinuous belts of mature deciduous ancient, semi-natural woodland lines the river and stream corridors, providing a strong sense of enclosure, with associated species-rich, small damp/wet meadows and pastures;
- This area forms an integral part of a distinctive traditional farming pattern, which is linked to Goodber Common (Landscape Character Area B9);
- Traditional stone field barns, such as that at Over Houses are a feature of the landscape;
- Framed views northwards towards the peaks of the Yorkshire Dales (including Ingleborough);
- The small-scale field pattern (including in-bye land and a patchwork of small, irregular fields) is delineated by a series of low stone walls and mixed hedgerows with hedgerow trees;
- Mosaics of grassland and hay meadows are also a feature;
- Where the narrow, often winding road corridors cross the river stone packhorse bridges are a key landscape feature;
- Patches of ancient woodland, waterfalls, weirs and fords are all features of the landscape;
- The banks of the fast flowing rivers contain evidence of former water powered mill sites;
- Settlement pattern includes Lowgill hamlet, several farmsteads and an associated network of narrow lanes;
- This area has a history of iron smelting; and coppice activity in woodlands.

Landscape Character Area I4: Keasden



- The narrow corridor of Keasden Beck is lined with linear belts of predominantly deciduous woodland;
- A strong sense of remoteness, isolation and tranquillity within the river corridor, due to the absence of roads or footpaths;
- Hollin Lane, a narrow lane which crosses the northern end of the valley, is lined with limestone walls;
- From the northern end of the valley, open views northwards towards the peak of Ingleborough within the Yorkshire Dales, contribute to recognisable sense of place;
- Burn Moor Fell encloses the valley to the west and provides a dramatic skyline backdrop to views westwards. Here, there is a strong contrast between the smooth texture of the Moorland Hills and the more textured landscape of the valley with its mosaic of woodland and pastoral fields.

Landscape Character Area 15: Over Wyresdale



- A very broad wooded valley, where woodland is a dominant feature of the landscape. The original native broadleaved woodland is now largely mixed and extends well beyond the main river valley;
- The east-west flowing corridor of the River Wyre, is lined by sinuous belts of deciduous woodland which provide a strong sense of enclosure;
- This area has a long history of estate management, including parts of the Abbeystead and Duchy of Lancaster estates;
- Pockets of estate and designed landscapes are dotted along the river corridor (for example at Abbeystead shooting lodge);
- The area includes Abbeystead (estate-owned) and Dolphinholme villages, the traditional remote hamlet of Tarnbrook and several farmsteads and a associated network of lanes;
- The river has a braided pattern at Marshaw Wyre, where the flat, relatively wide floodplain is speckled with individual deciduous and coniferous trees and patches of linear mixed woodland. The water here is fast flowing as it cascades down weirs and across boulders in the river bed;
- Beech trees are also a feature of this area in places;
- Stone field barns are also occasional features along the valley corridor;
- To the south of the valley, Hawthornthwaite Fell provides a sense of enclosure and forms the backdrop to views;
- Varying different styles of bridges (including wooden and stone materials) cross the river corridor;
- The area includes pockets of in-bye and Moorland Fringe farmland;
- A network of gritstone, drystone walls delineate fields and road corridors, built from rough hewn blocks, often with two rows of through stones;
- A network of beech, holly and hawthorn hedgerows often line road corridors (many of which have been recently restored);

- Large, open fields encompass a mixture of improved and less improved rushy pastures;
- This landscape provides sites for nesting waders (for example at Lainsley Slack and Catshaw);
- At Marshaw /Tower Lodge, along the River Wyre corridor, an open canopy of Scot's pine, oak and beech trees surround an informal picnic area; and similarly at Carn Brow, an informal picnic area is situated on an open road next to the stream;
- Abbeystead Reservoir is a feature within several views across this area of landscape;
- To the south of Ortner, less traditional materials are visible in the form of modern metal gates and pipelines associated with the water extraction industry;
- A series of open lakes (resulting from gravel extraction) has produced a unique mosaic of open water and woodland which, contrasts with the surrounding predominantly natural environment.

Landscape Character Area I6: Upper Hodder



- This area encompasses a unique, but steep wooded valley with extensive cover of mixed woodland;
- The meandering course of the upper reaches of the River Hodder is lined by belts of sinuous mixed woodland, with wet pastures adjacent to the river;
- The area is estate owned (Duchy of Lancaster) and has a long history of estate management for pheasant shooting;
- Duchy of Lancaster metal field gates are landscape features;
- A narrow, rural road follows the course of the river, which has steeply incised valley sides;
- The river corridor meanders through surrounding parkland landscape;
- The historic Inn at Whitewell is a key feature within the landscape which contributes to recognisable sense of place, overlooking the valley bottom;
- Mature, single deciduous trees are a feature of the valley bottom;
- Framed views northwards towards the central core of Moorland Hills and Moorland Plateaux;
- The stepping stones across the river at Whitewell are a distinctive and recognisable landscape feature;
- The distinctive stone arches of Burholme Bridge, crossing the River Hodder are a key landmark feature within views across this landscape;
- The small village of Dunsop Bridge, consisting of a few houses (built for forestry and water board employees) and a few farm buildings is nestled amongst the fells at the northern end of the river valley (and is largely owned by the Duchy of Lancaster);

- Farms and houses within this area are mostly owned by United Utilities or the Duchy of Lancaster Estate;
- A well-used road runs along the upper western slope of the valley;
- Water extraction 'furniture' is visible within the landscape in certain locations;
- Farmed land is confined to the edges of the river valley, above the level of the wooded valley sides; pastures are sheep grazed and divided by gritstone walls.

Landscape Character Area I7: Lower Hodder



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- The meandering corridor of the lower reaches of the River Hodder are contained by the surrounding limestone knolls;
- The area encompasses a very broad river valley and includes estate-owned and managed farmland and plantations (for example on Bashall and Stonyhurst estates);
- Sinuous belts of predominantly deciduous woodland line the river corridor;
- Farmed land is confined to the edges of the river valley, above the level of the wooded valley sides; pastures are sheep grazed and divided by gritstone walls and hedgerows;
- Single mature deciduous trees are also features, lining road corridors and within fields;
- Strong sense of enclosure within the valley corridor as a result of the adjacent woodland and mature deciduous trees that line the river corridor;
- Distinctive double arch stone bridge at Doeford is a landmark within views along the river corridor;
- The Wild Boar park is also a recognisable landscape feature;
- Framed views southwards towards the conifer-clad Longridge Fell contribute to recognisable sense of place;
- This area has a mature landscape structure of deciduous single trees and patches of woodland which form a mosaic pattern alongside the pastoral fields.

Landscape Character Area I8: Ribble



- This part of the upper section of the River Ribble is lined by continuous belts of deciduous and mixed woodland;
- A patchwork of pastoral fields lined with hedgerows and containing mature single deciduous trees;
- Road corridors are often lined with high hedgerows, containing mature deciduous trees;
- Framed views southwards to the dramatic profile of Pendle Hill contribute to recognisable sense of place.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Change

4.9.24 Observable changes in the past include:

- Increasing influence of linear elements such as roads, introducing sinuous lines in the landscape;
- Improvement of pasture to create fields that are intensively grazed and subsequent loss of species diversity and change in colour and texture of the landscape;
- Pollution of the water courses from agricultural run off from adjacent pastoral fields;
- Deterioration in the management of riverside woodlands;
- Introduction of alien or non-native species;
- Reduction in the number of salmon within the River Hodder as a result of water extraction.

Current Landscape Condition

4.9.25 The overall condition of the Wooded Rural Valleys Landscape Character Type is considered to be moderate. There are pockets of rich biodiversity in the patchwork of woodlands and stream corridors, however, some elements are in declining condition, including dilapidated field barns, gappy hedgerows and stone walls. Evidence of a gradual loss of traditional management is also apparent in places.

Future Landscape Changes and Opportunities

4.9.26 In the short-term (5 years) it is likely that there will be positive changes in the form of management of woodland and hedgerows along the river corridors. Negative changes may include the conversion of historic buildings such as field barns. An increase in farm sizes may lead to a demand for new agricultural buildings, affecting character and views. There is also potential pressure for the development of pheasant shooting in valleys where this activity was not previously undertaken (e.g. Roeburndale). Increased financial pressures and reduced availability of higher level agri-environment payments, may lead to field boundaries, walls and hedges suffering from a lack of management. Works associated with new water pipelines may also result in alterations to the landscape.

4.9.27 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The amalgamation of farms and increased drive for efficient farm businesses or farms being sold as farmers and their families leave the industry; all have a direct impact on how the land is managed. As the key characteristics of the area are significantly influenced by agricultural practices, change in the industry could lead to an encroachment on the woodland lining the river corridors. Changes in land ownership or agricultural management may also lead to fragmentation of ownership of areas of woodland. There is also pressure for use of this landscape for pheasant shooting (for example, within the Roeburndale area).
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops. It is also possible that climate change will lead to an increase in flash flooding and erosion of the river corridors that run through this landscape.
- *Development* – Diversification of farm businesses leading to introduction of new buildings and the conversion of farm buildings for residential and other uses could gradually change the nature of the working landscape and its associated attributes. The erosion and loss of vernacular building styles within the small villages, through introduction of cheaper alternatives will reduce the distinctive characteristics of this area. It is likely that there will also be increased pressure from residential and tourist related developments, affecting the character and quality of the landscape. There is also potential pressure from the widening of existing road corridors, or upgrading with additional signage and lighting.

Sensitivities and Capacity for Change

4.9.28 The Wooded Rural Valleys Landscape Character Type is considered to have moderate visual sensitivity as a result of the variable sense of enclosure and moderate intervisibility with adjacent Landscape Character Types. In places, open views can be gained across the landscape, whilst in others, views are limited by woodland cover and topography. A diverse patchwork of woodland (some of which is ancient) and river corridor habitats contributes to overall high ecological sensitivity. In addition to this, the generally well maintained hedgerows and dry stone walls, stone bridges and remnants of historic mills contribute to overall high cultural and landscape character sensitivity. As a result of the above factors, this Landscape Character type is considered to have limited capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.9.29 The overall strategy for this Landscape Character Type should be to conserve and enhance the distinct pattern of riverside woodlands, stone walls and hedgerows. The secluded and tranquil character of the area and the mosaic of juxtaposed habitats which make up important wildlife corridors should be maintained. There is a need to repair and enhance landscape features where they are in decline. The rich network of lanes and habitats between the lane walls should be conserved and enhanced.

4.9.30 Specific guidelines include:

Physical Character

- **Conserve** distinctive topographic features.

Ecological Character

- **Contribute** to catchment management and flood control by planting new woodlands to act as hydrological buffers to streams, whilst enhancing the existing resource⁵⁴;
- **Conserve** and **manage** all existing woodlands;
- **Buffer** ancient woodland through new planting and natural regeneration⁵⁵;
- **Remove** non-native species gradually and replace with native broadleaves through new planting and natural regeneration⁵⁶;
- **Reverse** woodland neglect by bringing all woodlands into active management⁵⁷;
- **Balance** new woodland creation with the interests of non-woodland habitats and species⁵⁸;
- **Conserve** and **expand** semi-natural habitats along and adjacent to riverbanks;
- **Control** and **remove** invasive non-native species.

Cultural and Historic Character

- **Encourage** the development and use of traditional skills through training and promotion of appropriate local materials that reinforce the distinct qualities of the landscape. For example, repairs to stone walls should reflect the local traditional construction;
- **Encourage** replacement planting of mature in-field and boundary trees;
- **Conserve** distinct landscape features that are vulnerable to developments such as highway improvements;
- **Conserve** and **restore** traditional buildings and settlements;
- **Protect** key views to and from the area from tall and vertical large-scale developments that may erode the open and undeveloped character of the area.

⁵⁴ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁵⁵ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

⁵⁶ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

⁵⁷ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

⁵⁸ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

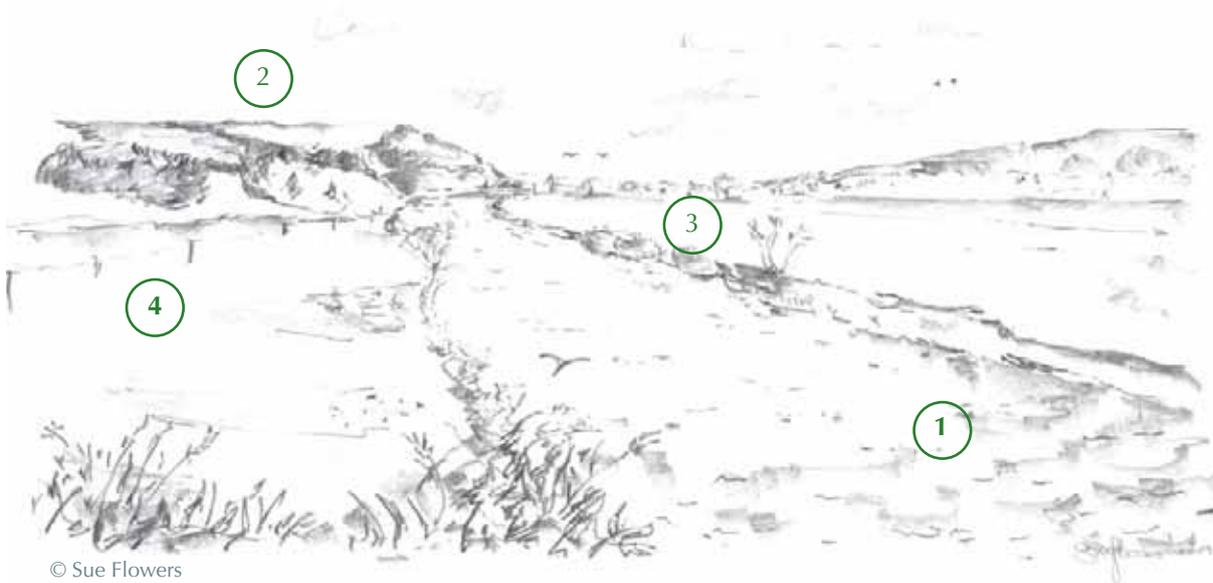
Aesthetic and Perceptual Character

- **Conserve** channelled views along river corridors and framed views to adjacent Landscape Character Types;
- **Conserve** the strong sense of remoteness and tranquillity within most of the valleys.

LANDSCAPE CHARACTER TYPE J: VALLEY FLOODPLAIN

Key Characteristics

- 1 Open, broad, flat floodplains, subject to periodic flooding which provides fertile grazing land.
- 2 Steep, wooded bluffs and terraces enclose the floodplain.
- 3 Mature spreading floodplain trees are distinctive elements.
- 4 Large fields, divided by post and wire fencing, hedgerows or stone walls.



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4.10 J: VALLEY FLOODPLAIN

CHARACTER ASSESSMENT

Location

- 4.10.1 The Valley Floodplain Landscape Character Type occurs twice within the Study Area, firstly to the north of Caton (at the northern edge of the AONB) and secondly, to the south of Grindleton and Bolton-by-Bowland at the southern edge of the AONB. To the north, the Valley Floodplain encompasses the course of the River Lune and is bordered by Drumlin Field (K) and Undulating Lowland Farmland with Wooded Brooks (F) Landscape Character Types. To the south, the Valley Floodplain forms part of the course of the River Ribble and is bordered by Undulating Farmland with Wooded Brooks (Landscape Character Type F). The corridors of both river valleys continue outside the boundaries of the AONB.

Landscape Character Description

- 4.10.2 The two main rivers into which all the Bowland brooks and rivers drain are the Ribble to the south and the Lune to the north. As these main rivers originate high in the Pennines of Yorkshire they are already of substantial size by the time they reach Bowland, and they have become wide, slow, lazy rivers, meandering across open, broad and flat floodplains.
- 4.10.3 The valley floors are smothered with glacial till and river gravels which bury the rocks beneath. The rivers are often prone to flood – leaving eroded banks, debris and standing water. The rich alluvial drift deposits support fertile grazing land for cattle and sheep. Old flood defences and occasional ox bow lakes, remnant river channels and weirs provide visual interest and offer up evidence of past activity of both man and the river itself.
- 4.10.4 Enclosed by steep, wooded bluffs and terraces the valley floodplains (which have long been settled) contain a rich mosaic of standing water, lowland bogs, floodplain hay meadows and pastures. Numerous archaeological sites, castles, ancient settlements, bridges and routeways show that humans have long valued and used the valleys as important communication routes and for farming and trade. The lush green fields are usually large and divided by post and wire fencing, hedgerows or walls. Large mature spreading floodplain trees are distinctive elements in the fields and hedgerows. Settlements and impressive stone bridges mark ancient bridging points of the rivers.

Key Environmental Features

Physical

- 4.10.5 The rivers of the Valley Floodplains have cut down through the underlying rocks, but the valley floors are smothered with glacial till and river gravels which bury the rocks beneath. Alluvium deposits have enriched the valley floors, creating good soils for agriculture. Within the valleys, protected hollows and undulations have preserved accumulations of peat. The Lune and Ribble Rivers originate on the high land of the Yorkshire Dales. Their floodplains meander gently across wide green pastures, in places the river crosses a flat valley floor bordered by distinct bluffs, but elsewhere the floodplain rises gently to the undulating landscape beyond. Classic floodplain features, such as oxbow lakes and abandoned channels, are important landscape features and wildlife habitats and indicate the shifting position the river has adopted.

Ecological

- 4.10.6 The river channels provide important linear freshwater and wetland habitats which support diverse aquatic plants and invertebrates, as well as birds and fish. However agricultural intensification, drainage, flood defence work and urban/industrial development ensures that nature conservation interest is concentrated in remnant areas of neutral grassland, wet meadows, domed mosses, areas of standing water and marshland. Small areas of woodland on the valley sides, former oxbows and hedges and isolated trees fringing the river channels also provide important resources for nature conservation. Areas of river shingle and shallow wet margins are important for breeding birds and other wildlife, whilst eroding banks are an essential nesting habitat for kingfisher and sand martin. Burton Wood (partly within this Landscape Character Type), on the steep, south-facing side of the Lune valley, contains good examples of several of the northern deciduous woodland types, which are characteristic of the Lune valley and its tributaries. The main stand type is upland sessile oak woodland with an uneven aged canopy.

Cultural and Historical

- 4.10.7 Valley Floodplains have provided important routeways and communication routes since the earliest times, offering relatively easy routes through the surrounding hills and marshes. Roman forts at Ribchester and Over Burrow (both outside the AONB) overlooking the Ribble and Lune and their associated Roman roads indicate the importance of controlling these key routes through the hills. After the invasion, the Normans, built motte and bailey castles to control important centres or routeways. Many formed part of a chain to defend a vulnerable frontier zone, for example on the Lune, at least nine such castles were constructed. Sawley Abbey, on the banks of the River Ribble was also founded in 1148. It operated as a Cistercian Abbey until 1586 when the monks became embroiled in the Pilgrimage of Grace (an attempt by lay landowners, primarily in the north of England, to reinstate monks to their abbeys in defiance of

Henry VIII's suppression order). The wide valleys continue to provide an important communication route for main roads, rail lines and canals. In general terms, the valley floodplains are devoid of settlement. Parliamentary enclosure is evident in the regular pattern of field boundaries. Many fields are now devoted to improved pasture, supporting the famous cheese making industry. The majority of these are hedged, but in the upland floodplain of the River Ribble, the high occurrence of river rolled boulders ensured there was enough material to construct stone walls. In places modifications of the river profile are evident in bank retention walls and low bunds, which possibly date to more intensive grazing and to increasing planting of forage crops on the floodplains after enclosure.

Development, Settlement and Buildings

- The Castle Stead near Hornby is the best example of a Norman motte and bailey castle in Lancashire and at the rear of the existing Hornby Castle is a fine example of a pele tower, the lower part dating from the 13th century with an early 16th century addition above⁵⁹;
- Settlements and stone bridges mark ancient bridging points of the rivers;
- The remains of Sawley Abbey are a visible landscape feature on the banks of the River Ribble.

Landscape Character Areas

4.10.8 Landscape Character Areas within this Landscape Character Type include:

⁵⁹ The Forest of Bowland: Landscape Assessment, Countryside Commission, 1992.

Landscape Character Area J1: Lune



- Flat, wide floodplain of the River Lune, which is surrounded by rolling drumlins and hills;
- Patchwork of medium to large size, regular fields of lush green pasture (predominantly improved agricultural land) are bounded by low clipped, often gappy, hedgerows with hedgerow trees.;
- River terraces and bluffs along the edge of the floodplain are sculptural elements which often support stone farm buildings and the remains of motte-and-bailey castles;
- Stone bridges are a feature and mark historic (medieval) crossing points of the river;
- There is also evidence of the industrial past and present; the route of a dismantled railway is still visible in the landscape;
- Large, traditional field barns are a key feature of the floodplain landscape;
- Panoramic open views northwards towards the peaks of the Yorkshire Dales and southwards to the dramatic rising Moorland Hills and Plateaux contribute to strongly recognisable sense of place.

Landscape Character Area J2: Ribble



- Open, flat, fertile plain encompassing a patchwork of pastoral fields which are delineated by a combination of hedgerows, wooden fencing, post and wire fencing or stone walls;
- The gently meandering course of the river Ribble is defined by the steep wooded bluffs and terraces which enclose the floodplain;
- Lush green fields of semi-improved pasture are grazed by sheep and cattle. The large regular fields are defined by gappy hedgerows;
- Mature floodplain trees are notable features in this Landscape Character Area; ash and oak stand in the floodplain, their silhouettes striking against the open landscape;
- General absence of settlement within the floodplain itself, but a number of large farms and country halls are positioned along the edges of the floodplain;
- There are a number of historic crossing points which coincide with these settlements where old stone bridges are important historic features of the floodplain;
- Panoramic, open views towards the central Bowland Moorland Hills and Plateaux to the north and Pendle Hill to the south;
- In the south of the area, the small village of Great Mitton is nestled within the valley corridor, at the point at which a minor road corridor crosses the river;
- There is a relatively strong sense of remoteness within much of the river corridor, which is slightly interrupted when it meanders around the northern edge of Clitheroe;
- Buildings associated within the Castle Cement works are dominant landmarks within views to and across this area.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.10.9 Observable changes in the past include:

- Loss of open floodplain views and riparian habitat by fencing out of river corridors, sometimes associated with tree planting;
- Eutrophication of the rivers as a result of high levels of nutrient input from surrounding pastoral farmlands;
- Decline of prominent scattered floodplain trees due to over-maturity;
- Loss of semi-natural wet meadow habitats due to agricultural intensification and amalgamation of farm units.

Current Landscape Condition

4.10.10 The overall condition of the Valley Floodplain Landscape Character Type is considered to be good to moderate, resulting from survival of the mosaic of linear freshwater and wetland habitats and remnant areas of neutral grassland, wet meadows, domed mosses, areas of standing water and marshland; and the mature landscape structure of woodland and field trees. There are some elements showing decline in places, particularly the loss and poor maintenance of occasional hedgerows, which have been supplemented in sections by post and wire fencing; and the loss of species-rich hay meadows.

Future Landscape Changes and Opportunities

4.10.11 In the short-term (5 years) it is likely that there will be positive changes in the form of managing important habitats through nature reserves and key landscape features in the wider landscape, such as hedgerows at field boundaries, woodland and field trees. However, negative changes are likely to include an increasing pressure on the quality of the landscape from tourist-related developments. Increasing traffic problems may also lead to highway improvements that detract from the rural character of some roads and reduce tranquillity.

4.10.12 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The amalgamation of farms and increased drive for efficient farm businesses or farms being sold as farmers and their families leave the industry; all have a direct impact on how the land is managed. As the key characteristics of

the area are significantly influenced by agricultural practices, change in the industry could lead to an encroachment on the woodland lining the river corridors. This may have a knock on effect on the maintenance of key landscape features, in particular boundary features and species rich pasture and floodplain habitats.

- *Climate Change* – Increasing temperatures may encourage expansion of tourist-related activities, putting further pressure on limited resources. Water quality in rivers may also be affected, having a negative effect on aquatic habitats and expansion of alien species into upper catchments. There may also be an increased incidence of flooding. Open grown-trees and some woodland may be at risk from a combination of summer drought and increased severity and frequency of storm events.
- *Development* – The built environment is predominantly in the vernacular style and is currently a distinct element of the landscape fabric. A loss of traditional skills and a reduction in the use of appropriate local materials will erode this distinct characteristic of the landscape, with increasing pressure on the landscape around towns from residential and other development. Features are vulnerable to highway improvements, expansion of villages and tourism facilities. Potential large-scale renewable energy developments and overhead transmission lines on the skyline of the valley sides may erode key views. Increasing traffic associated with tourism and recreation pressurising the road system may lead to inappropriate highway improvements, increased provision for car parking on undeveloped land and reduced tranquillity from noise and movement. Increased tourism and growth in holiday developments will lead to a loss of pasture or estate land developments.

Sensitivities and Capacity for Change

- 4.10.13 Overall visual sensitivity within the Valley Floodplain Landscape Character Type is considered to be high, as a result of the generally strong intervisibility with surrounding higher Landscape Character Types and the strong sense of openness within views along the valleys. A diverse patchwork of linear freshwater and wetland habitats remnant areas of neutral grassland, wet meadows, domed mosses, areas of standing water and marshland contribute to overall high ecological and landscape character sensitivity. In addition to this, there is a strong cultural pattern of hedgerows and stone walls which delineate field boundaries and contribute to overall high cultural sensitivity. As a result of the above factors, this Landscape Character Type is considered to have limited capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.10.14 The overall strategy for the Valley Floodplain Landscape Character Type is to conserve the diverse pattern of standing water, floodplain hay meadows, mature floodplain trees and the network of hedgerows and dry stone walls. The strong intervisibility with surrounding Landscape Character Types should also be conserved and key landscape features appropriately enhanced where in decline. Where lost, the natural river form should be restored and conserved (referring to Environment Agency guidance).

4.10.15 Specific guidelines include:

Physical Character

- **Ensure** effective catchment management to sustain water quality;
- **Encourage** the creation of new woodland along appropriate riverbanks, which complements the existing woodland pattern;
- **Conserve** the natural form of the rivers by avoiding engineered solutions to water management, such as canalisation, bank hardening and river straightening;
- **Conserve** natural river floodplain features, such as meanders, oxbows, old river channels, ponds and islands.

Ecological Character

- **Conserve** valuable floodplain habitats by encouraging low intensity grazing in the remaining semi-natural habitats (which include mire, fen, flushes, marshy grassland and wet meadow);
- **Link** woodlands on the fringes of the floodplain with those on valley sides forming strong ecological linkages⁶⁰;
- **Allow** natural regeneration through grazing restrictions wherever possible⁶¹;
- **Frame** strategic views from higher ground and bluffs⁶²;
- **Bring** all woodlands into active management to secure their long-term future⁶³;
- **Ensure** that settlements encroachment does not threaten the existing woodland resource⁶⁴;
- **Preserve** long, open views of the valley plains through careful selection of planting sites and species⁶⁵;
- **Ensure** that woodland creation does not adversely affect existing areas of ecological value⁶⁶;
- **Restore** and **enhance** wetland habitats;

⁶⁰ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶¹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶² Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶³ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶⁴ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶⁵ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶⁶ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

- **Target** agri-environment scheme support for management of broadleaved woodland, wetland pasture and meadow habitats;
- **Encourage** conservation of existing key habitats and landscape features and expand the resource through habitat restoration and re-creation guided by ecological networks;
- **Ensure** that UK Biodiversity Action Plan habitats are appropriately managed.

Cultural and Historic Character

- **Encourage** use of local materials and vernacular styles in developments to strengthen local character, including limestone and gritstone;
- **Conserve** and **enhance** the distinct pattern of stone walls and hedgerows delineating field boundaries in order to maintain landscape structure;
- **Conserve** historic and archaeological sites in the Valley Floodplains and consider the setting of historic and archaeological sites when planning and implementing all landscape management action;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;

Aesthetic and Perceptual Character

- **Conserve** open views along and across the valley floodplains towards adjacent Landscape Character Types.

LANDSCAPE CHARACTER TYPE K: DRUMLIN FIELD

Key Characteristics

- 1 Small copses of mixed woodlands punctuate the landscape and provide visual foci.
- 2 Strong field pattern with distinctive limestone walls and low hedgerows enhance landform.
- 3 Rounded drumlins create a distinctive rolling topography.



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4.11 K: DRUMLIN FIELD

CHARACTER ASSESSMENT

Location

- 4.11.1 The Drumlin Field Landscape Character Type occurs at the northern edge of the AONB and continues to the north (within Craven District⁶⁷) and west of AONB. There are four occurrences of this LCT within the Study Area, to the north of Caton, east of Hornby, northwest of Settle and south of Gisburn.

Landscape Character Description

- 4.11.2 Drumlins are distinctive rounded hills, usually 100-200m high, which occur in 'fields' or clusters, and are usually aligned in one direction. They were formed when glaciers scoured the uplands, and dropped the debris as thick 'boulder clay' which was then moulded into steep sided, rounded topped hills by the ice as it moved on – leaving a landscape as if drawn by a young child with smooth hills, winding rivers and farmsteads atop the hills.
- 4.11.3 The Drumlin Fields are characterised by small copses of woodland, sheltered marshy hollows, hedgerows and walls following the skylines of the hills and narrow streams winding between them. Major roads often skirt the areas, and settlements tend to lie on the sheltered lower slopes of the hills. Strong field patterns and some evidence of ancient ridge and furrow suggest a long history of farming these areas, and secluded woodland and wetlands have become important wildlife refuges because of their isolation. Framed views out of the areas look inwards towards the upland Bowland Fells and out to Yorkshire's Three Peaks.

Key Environmental Features

Physical

- 4.11.4 This distinctive landscape type is characterised by a 'field' of rolling drumlins. The consistent orientation of the hills gives the landscape a uniform grain, which is sometimes difficult to appreciate from within the field. The regular green hillocks are between about 100m and 200m high with steep sides and broad rounded tops. However, there are often solid rock outcrops within the field where the underlying bedrock is exposed. The Drumlin Field landscape was created by the erosion and deposition actions of glacial ice sheets. The ice moulded dense boulder clay into oval whaleback hills. The alignment of the drumlins gives a distinctive grain to the landscape and provides important evidence of the movement of the

⁶⁷ Craven District (Outside the Yorkshire Dales National Park and Forest of Bowland AONB) Landscape Appraisal: Final Draft, October 2002, Landscape Design Associates for Craven District Council.

glacial ice sheets in the Quaternary period. Becks and immature rivers wind through the hills and there are occasional tarns in the hollows between them.

Ecological

- 4.11.5 Agricultural improvement through drainage, fertilisation and reseeded has reduced the extent of valuable grassland and wetland habitats to pockets of species-rich grassland and remnant mires. Important ancient woodland survives on the steep scarp slopes above the Lune and its tributaries. Rivers and streams provide important freshwater habitats for a range of species and the small areas of swamp and tall herb vegetation associated with the margins of water bodies are important as feeding and breeding sites for amphibians and invertebrates. Robert Hall Moor, to the south west of Wennington, has been designated as a SSSI for its unimproved grassland, flushes and scrub which is situated on a drumlin. The site is remarkable for its range of plants represented (over 150 species). In addition, Austwick and Lawkland Mosses (two connected areas of peatland in the valley of the River Wenning) are a designated SSSI on account of the wide range of habitats, raised mire, acid bog and poor fen communities. Inter-drumlin wetland are also a key ecological habitat.

Cultural and Historical

- 4.11.6 The gentle slopes of the free draining drumlins have proved attractive areas for settlement and farming from the middle of the prehistoric period. Old English place names ending in 'ton' and 'ham' predominate, although there are some clusters of Scandinavian place names. Roman roads and other remains occur within this Landscape Character Type. Whilst there is evidence of Parliamentary enclosure on the higher ground, many fields are considerably older, some having their origins in medieval field systems. The landscape is generally rural with isolated historic farms, hamlets and villages linked by winding lanes.

Development, Settlement and Buildings

- Dispersed settlement pattern of stone villages, hamlets and farmsteads which are sited in sheltered locations on the mid-slopes of drumlins;
- Scattered, isolated limestone field barns are also a feature of this area.

Landscape Character Areas

- 4.11.7 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area K1: Gressingham



- Framed views from lower points and open views from higher points north-westwards across Nether Kellet and Over Kellet to the urban areas of Carnforth and across Morecambe Bay;
- Mature single trees punctuate enclosed rolling pastoral fields, which are often lined with hedges and fences;
- Patches of mature mixed coniferous woodland, coupled with the rolling topography, contribute to an intermittent sense of enclosure, moving through the landscape;
- Dramatic, framed views northwards towards the peaks of the Yorkshire Dales;
- The small, nucleated hamlets of Gressingham and Aughton, alongside scattered, isolated farmsteads contribute to settlement pattern;
- Mature deciduous trees are clustered around farmsteads;
- Low hedgerows delineate field boundaries in places, often flowing over the top of hills;
- Framed views southwards towards the dramatic rising mass of Moorland Hills and Plateaux within the Forest of Bowland.

Landscape Character Area K2: Lower Tatham



- Mature, single deciduous trees are often located on ridgelines and in fields;
- The network of minor roads crossing the landscape, are often lined with low mixed hedgerows (often trimmed and containing hedgerow trees) and mature deciduous trees;
- Patches of mixed woodland and the rolling nature of the topography contribute to an intermittent sense of enclosure and frame views across the landscape;
- Mixed ancient semi-natural woodland parcels show an extensive history of coppice activity and contribute a sense of enclosure;
- Damp birch woodland blocks are also a feature of the landscape;
- Framed views southwards into the corridor of the River Hindburn;
- Dramatic, open views northwards towards the Peaks of the Yorkshire Dales;
- Dramatic, open views southwards towards the rising mass of Moorland Hills and Plateaux within the Forest of Bowland;
- Scattered traditional stone farmsteads punctuate the surrounding rolling pastoral farmland.

Landscape Character Area K3: Lawkland



- At the eastern edge of the area, the main road corridor the A65(T) introduces a source of noise and movement which disturbs the otherwise relatively strong sense of tranquillity throughout;
- A railway line, with its associated bridges, also cuts through the landscape;
- A distinctive pattern of drystone walls line field boundaries and contribute to an instantly recognisable landscape pattern;
- Neatly clipped hedges often line road corridors and single deciduous trees are dotted with the patchwork of pastoral fields;
- The gently meandering, unenclosed course of several beck (stream) corridors cross the landscape and break up the homogeneity of the surrounding fields;
- Settlement pattern consists of a series of scattered, traditional stone farmsteads and small hamlets, such as Lawkland and Eldroth;
- Panoramic, open views northwards and eastwards towards the dramatic limestone peaks and scars of the Yorkshire Dales contribute to instantly recognisable sense of place and provide orientation within views across this area.

Landscape Character Area K4: Coronation



- This Landscape Character Area is situated outside the AONB;
- Situated at the eastern edge of the Study Area, this area encompasses a series of low drumlin mounds which are cloaked in a patchwork of pastoral fields;
- The fields are delineated by a network of hedgerows, with occasional drystone walls and fences at field boundaries;
- In addition, several small patches of woodland, small reservoirs and narrow stream corridors contribute to landscape pattern;
- Sense of tranquillity is relatively strong throughout much of the southern part of the area, but is disturbed in the north by proximity to the A59 main road corridor;
- Views southwards towards Pendle Hill and northwards across the Ribble Valley contribute to recognisable sense of place;
- The edges of Barnoldswick urban area are visible from the eastern edge of the area.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.11.8 Observable changes in the past include:

- Amalgamation of farmsteads which resulted in an expansion of field sizes;
- Neglect of farm woodlands and prominent hill top copses;
- Small-scale introduction of non-vernacular materials;
- Loss of over-mature single field trees.

Current Landscape Condition

4.11.9 The overall condition of the Drumlin Field Landscape Character Type is considered to be good. A predominantly intact network of stone walls and hedgerows delineate field boundaries and road corridors and trees and woodland are generally in good condition. There is however, evidence of decline of landscape elements, such as stone walls and traditional field barns in places and occasional gappy hedges.

Future Landscape Changes and Opportunities

4.11.10 In the short –term (5 years) it is likely that there will be positive changes in the form of managing key landscape features in the wider landscape, such as hedgerows and stone walls at field boundaries, woodland and field trees. However, negative changes are likely to include increasing traffic pressure on minor road corridors, which may lead to highway improvements that detract from their rural character and reduce tranquillity; and potential new telecommunications or renewable energy developments on the tops of the drumlins.

4.11.11 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The mature hedgerow and wall networks contribute to a recognisable landscape pattern and if not supported through agri-environment payments, could fall out of active management. This could then have significant effect on both biodiversity and landscape character. More extensive farming of livestock could also lead to a loss of key landscape features through neglect or removal to enable the amalgamation of adjacent fields. Amalgamation of farms may influence field sizes and field boundaries and field expansion would weaken the strong field pattern and reduce ecological interest. Larger farm sizes increase the demand for new agricultural

buildings, affecting character and views. There is also potential for the continued neglect of farm woodlands

- *Climate Change* – Climate change could have an impact on agricultural practices and there could be a move in the future to plough up pasture and plant new crops. These could be anything from vegetables, animal feed or biofuel to new types of crops, however any increase in arable production would significantly change the character of this area. Climate change could also lead to increased numbers and severity of storm events and summer drought, impacting on open grown trees and woodland.
- *Development* – Sustained pressure to develop renewable energy resources could lead to increased development of key skylines and view eroding valuable landscape quality. Similarly, the loss of vernacular building styles and use of inappropriate building materials will result in the loss of local landscape characteristics. At present, the road network is predominantly rural and could face significant highway improvements in the future as a result of increasing traffic flows.

Sensitivities and Capacity for Change

4.11.12 This Landscape Character Type is considered to have moderate ecological sensitivity as a result of the pockets of species-rich grassland and remnant mires, coupled with moderate cultural and historic sensitivity resulting from the presence of archaeological sites on the drumlins. Landscape character sensitivity is considered to be moderate to high as a result of pattern of landscape features, including stone walls, hedgerows and pockets of woodland. Overall, the Drumlin Field Landscape Character Type is considered to have limited capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.11.13 The overall strategy for this Landscape Character Type is to conserve the distinctive rolling landform, and to maintain the distinctive landscape pattern of pasture fields delineated with dry stone walls and hedgerows. Inter-drumlin wetlands should be retained and enhanced. The strong built vernacular character, and skyline and views into and out of the area should be retained. Built development on ridgelines and hill tops should be avoided.

4.11.14 Specific guidelines include:

Physical Character

- **Conserve** the distinctive rolling landform by minimising vertical elements such as communication masts and windfarms;
- **Avoid** built development on ridgelines and hilltops.

Ecological Character

- **Bring** all woodlands into active management⁶⁸;
- **Increase** the proportion of woodland cover through small-scale copse planting⁶⁹;
- **Establish** localised and long distance ecological networks that extend beyond the Drumlin Fields⁷⁰;
- **Seek** opportunities for the re-introduction of traditional management of coppiced woodlands⁷¹;
- **Avoid** loss and erosion of woodlands through the amalgamation and diversification of farms⁷²;
- **Ensure** that new woodland does not adversely affect other valuable habitats or archaeological features⁷³;
- **Conserve** and **maintain** distinctive clumps of trees;
- **Conserve** semi-natural habitats, such as grasslands and inter-drumlin wetlands;
- **Encourage** the management of traditional coppice woodlands;
- **Conserve** and **restore** inter-drumlin wetlands and semi-natural grasslands wherever these occur;
- **Encourage** continued management of the hedgerow network;
- **Avoid** loss or damage to mature field trees through intensification of agricultural practices;
- **Ensure** that UK Biodiversity Action Plan habitats are appropriately managed.

Cultural and Historic Character

- **Conserve** the intact network of limestone walls at field boundaries, which contribute to distinctive landscape pattern;
- **Avoid** ribbon development which may detract from the characteristic dispersed pattern of groups of buildings in a rural setting;
- **Restrict** built development on the skyline of drumlins; buildings should be sited on the mid-slopes, above poorly drained land;
- **Encourage** the repair of stone walls where in decline or dilapidated, utilising local vernacular materials (limestone);

⁶⁸ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁶⁹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁷⁰ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁷¹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁷² Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁷³ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

- **Conserve** the dispersed pattern of stone villages, hamlets and farmsteads located in sheltered locations on the mid-slopes of the drumlins;
- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;

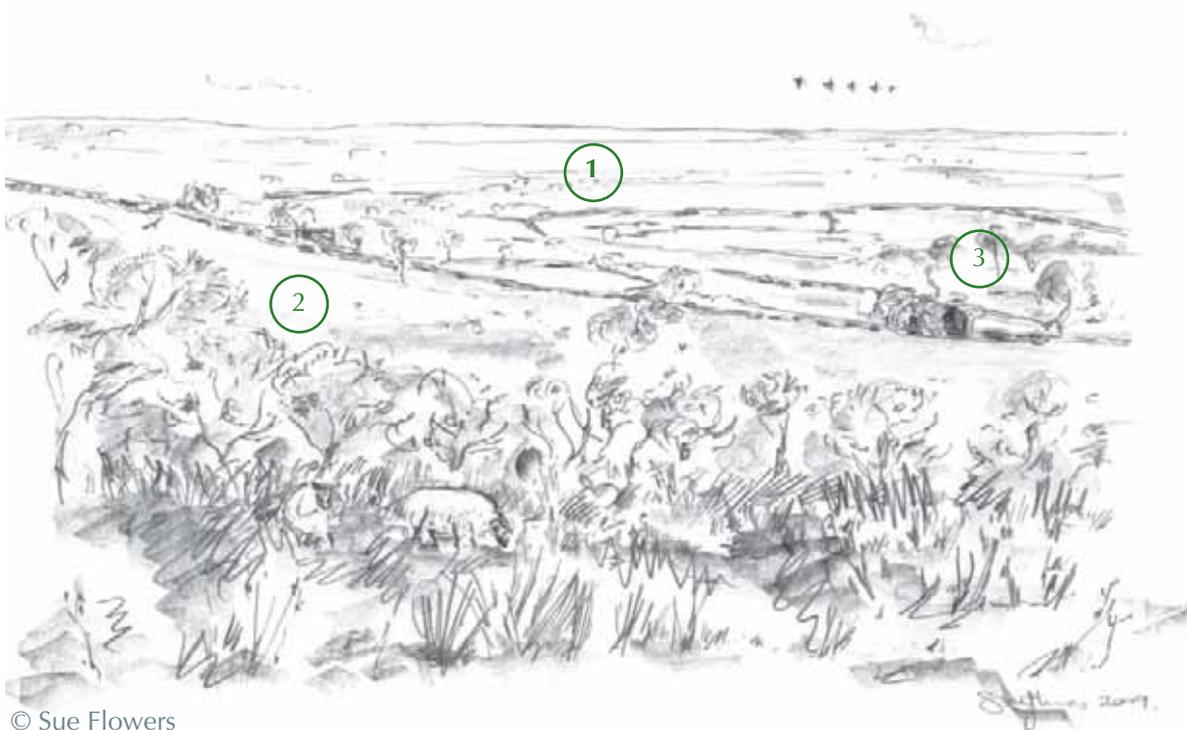
Aesthetic and Perceptual Character

- **Maintain** the predominantly open character of the landscape;
- **Protect** key views to and from the area from tall and vertical large-scale developments that may erode the open and undeveloped character of the area;
- **Shelter** built development within the undulating landform- avoid ridgelines or hill tops.

LANDSCAPE CHARACTER TYPE L: ROLLING UPLAND FARMLAND

Key Characteristics

- 1 An intact network of drystone walls at field boundaries creates a distinctive landscape structure.
- 2 Stunted, wind-blown hawthorns and gorse on roadsides and steeper hills.
- 3 Isolated farmsteads, stone barns and walled circular enclosures.



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4.12 L: ROLLING UPLAND FARMLAND

CHARACTER ASSESSMENT

Location

- 4.12.1 The Rolling Upland Farmland Landscape Character Type occurs within the eastern half of the Study Area, to the east of Slaidburn. It also continues outside the boundary of the AONB. To the west, this LCT is bordered by Undulating Lowland Farmland with Parkland (Landscape Character Type G), whilst the northern edge is formed by Forestry and Reservoir (Landscape Character Type M).

Landscape Character Description

- 4.12.2 Rolling Upland Farmland is a predominantly pastoral landscape with the underlying geology reflected in the materials used in field boundary walls and farm buildings. The combination of limestone and gritstone has created a gentle landscape of soft rolling hills, cloaked with moorland grasses in the higher parts, and lush green pastures and herb rich meadows on the lower slopes.
- 4.12.3 Stands of beech trees are a distinctive feature, growing on rocky slopes and outcrops, and often enclosed by circular walls. Similarly, stone circles act as sheep folds, and exist with isolated farmsteads and stone barns. An intact network of stone walls, which suggest a sense of enclosure in an exposed landscape, creates a distinctive landscape structure. Small clustered stone villages occur on south facing slopes and there are also some small linear settlements. Stunted wind blown hawthorns and gorse line the lanes and steeper hillsides; views out are towards Gisburn Forest and Pendle Hill.

Key Environmental Features

Physical

- 4.12.4 The combined presence of Millstone Grit and limestone has created a gentle landscape of rolling hills. This is further softened by the effects of glacial gravel and clay deposits, which in places have been eroded to expose rocky outcrops. The underlying geology is also exposed by the materials used in boundary walls and in farm buildings. The Rolling Upland Farmland is undulating in character; the majority of streams being confined to areas where Millstone Grit is dominant.

Ecological

- 4.12.5 Trees are common as individual and linear features throughout the landscape and provide local habitats and wildlife corridors. Occasional ancient woodlands survive and constitute an

important ecological resource. Despite modern agricultural practices some isolated hay meadows and herb-rich pastures of national importance have survived, particularly to the east of Slaidburn. Barn Gill Meadow (to the north east of Slaidburn) has been designated as a SSSI for its two types of herb-rich grassland in which over 73 species of plants have been recorded. Lancliff Cross Meadow, to the east of Slaidburn is also designated as a SSSI as it represents one of the best examples of the few remaining species-rich meadow grasslands in the county. In addition, Strandridge Farm Pasture, also to the northeast of Slaidburn is designated as a SSSI for its unimproved enclosed herb-rich flushed pasture. Within the Rolling Upland Farmlands, Hesley Moss has been designated as a SSSI as a result of its reasonable intact example of a basin raised mire. Such mires were formerly extensive but have been greatly reduced in England, where nearly all the remaining area has been damaged by drainage, fire or peat cutting.

Cultural and Historical

- 4.12.6 The modern landscape is shaped by years of sheep grazing. Stone farmsteads, many of which are located next to streams, and boundary walls, illustrate the proximity of the underlying rocks. The boundaries represent what appears to be Parliamentary enclosure of once marginal land. Roads are narrow and winding, traversing the areas to link dispersed settlements.

Development, Settlement and Buildings

- Isolated stone farmsteads, stone barns and walled circular enclosures are visible built features;
- Small, isolated, traditional stone hamlets are also a feature of this Landscape Character Type.

Landscape Character Areas

- 4.12.7 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area L1: Harrop Fold



- A patchwork of marginal pastures and more fertile pastoral fields, lined with a distinctive pattern of drystone walls contributes to landscape pattern within this area;
- There is a strong sense of remoteness, isolation and tranquillity throughout most of the area;
- A network of narrow, often single track roads, lined with dry stone walls, species-rich roadside verges and occasional stunted hawthorns and oaks provide access;
- Isolated farmsteads are located at the end of farm tracks where farm buildings are generally tightly grouped around the house. There is evidence of increasing renovation and gentrification of farmsteads;
- Strong sense of openness throughout much of this landscape;
- Dramatic, open views westwards towards Harrop and Newton Fells, White Hill and Bleasdale Unenclosed Moorland Hills;
- To the north of the area, Gisburn Forest is landmark feature within views northwards, which encloses views of the surrounding higher Moorland Hills;
- To the south, panoramic, open views across the flat floodplain of the River Ribble, across Clitheroe urban area, towards the dramatic profile of Pendle Hill contribute to recognisable sense of place.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Past Landscape Changes

4.12.8 Observable changes in the past include:

- Conversion of traditional farm buildings to holiday homes;
- Improved pasture surrounded by stone walls where intensive farming has spread onto higher ground;
- Outside of protected nature conservation areas ecological interest has been depleted through agricultural improvements.

Forces for Change

Current Landscape Condition

4.12.9 The overall condition of the Rolling Upland Farmland Landscape Character Type is considered to be good. A predominantly intact network of stone walls delineates field boundaries and road corridors and roadside trees and pockets of woodland are generally in good condition. There is however, evidence of decline of landscape elements, such as stone walls and a loss of traditional building materials in barn conversions.

Future Landscape Changes and Opportunities

4.12.10 In the short –term (5 years) it is likely that there will be positive changes in the form of managing key landscape features in the wider landscape, such as stone walls at field boundaries. However, negative changes are likely to include increasing traffic pressure on minor road corridors, which may lead to highway improvements that detract from their rural character and reduce tranquillity; and potential new telecommunications or renewable energy developments.

4.12.11 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The drystone wall network that contributes to a recognisable landscape pattern and if not supported through agri-environment payments, could fall out of active management. This could then have significant effect on landscape pattern. More extensive farming of livestock could also lead to a loss of key landscape features through neglect or removal to enable the amalgamation of adjacent fields. Amalgamation of farms may influence field sizes and field boundaries and field expansion

would weaken the strong field pattern and reduce ecological interest. Larger farm sizes increase the demand for new agricultural buildings, affecting character and views.

- *Climate Change* – Climate change could have an impact on agricultural practices and there could be a move in the future to plough up pasture and plant new crops. These could be anything from vegetables, animal feed or biofuel to new types of crops, however any increase in arable production would significantly change the character of this area. Climate change could also lead to increased numbers and severity of storm events and summer drought, impacting on open grown trees and woodland.
- *Development* –The loss of vernacular building styles and use of inappropriate building materials will result in the loss of local landscape characteristics. At present, the road network is predominantly rural and could face significant highway improvements in the future as a result of increasing traffic flows.

Sensitivities and Capacity for Change

4.12.12 This Landscape Character Type is considered to have moderate ecological sensitivity as a result of the presence of trees and pockets of ancient woodland which provide local habitat and wildlife corridors. Cultural and landscape character sensitivity is considered to be high as a result of the intact network of limestone drystone walls which contribute to a coherent pattern. Overall, the Rolling Upland Farmland Landscape Character Type is considered to have limited capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.12.13 The overall strategy for this Landscape Character Type is to conserve and maintain the distinctive landscape pattern of pasture fields delineated with stone walls, the strong built vernacular character and sense of remoteness resulting from the network of narrow lanes. There is also a need to protect skylines and views into and out of the area.

4.12.14 Specific guidelines include:

Physical Character

- **Conserve** the distinctive undulating landform by minimising vertical elements such as communication masts and wind turbines;

Ecological Character

- **Bring** all woodlands into active management⁷⁴;

⁷⁴ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

- **Avoid** loss and erosion of woodlands through the amalgamation and diversification of farms⁷⁵;
- **Conserve** the remaining unimproved grasslands and hay meadows by employing traditional management practices and avoiding the use of artificial fertilisers;
- **Manage** limestone grasslands to meet biodiversity objectives;
- **Conserve** stands of beech and walled enclosures;
- **Conserve** and **maintain** distinctive clumps of trees;
- **Increase** links between existing woodlands to reverse the fragmentation of the woodland resource⁷⁶;
- **Ensure** that other wildlife habitats are not compromised by woodland development⁷⁷;
- **Conserve** pockets of ancient woodland;
- **Encourage** conservation of existing key habitats and landscape features and expand the resource through habitat restoration and re-creation guided by ecological networks;
- **Ensure** that UK Biodiversity Action Plan habitats are appropriately managed.

Cultural and Historic Character

- **Conserve** the intact network of limestone walls at field boundaries, which contribute to distinctive landscape pattern;
- **Encourage** the repair of stone walls where in decline or dilapidated, utilising local vernacular materials (limestone);
- **Conserve** the dispersed pattern of stone villages, hamlets and isolated farmsteads;
- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible.

Aesthetic and Perceptual Character

- **Maintain** the predominantly open character of the landscape;
- **Protect** key views to and from the area from tall and vertical large-scale developments that may erode the open and undeveloped character of the area.

⁷⁵ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP.

⁷⁶ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP

⁷⁷ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP

LANDSCAPE CHARACTER TYPE M: FORESTRY AND RESERVOIR

Key Characteristics

- 1 A textured landscape, set against the smoother, muted backdrop of Moorland Hills.
- 2 Expanses of open water of reservoirs, with associated wetland birds.
- 3 An 'engineered character' as a result of the influence of reservoir(s) and plantation woodland(s)



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4.13 M: FORESTRY AND RESERVOIR

CHARACTER ASSESSMENT

Location

- 4.13.1 The Forestry and Reservoir Landscape Character Type occurs twice within the Study Area, firstly to the north-east of Slaidburn (encompassing Gisburn Forest) and secondly on the Pendle Hill outlier, to the south and east of Barley. This LCT is bordered by a combination of Moorland Fringe (D), Rolling Upland Farmland (M) and Enclosed Moorland Hills (C) Landscape Character Types.

Landscape Character Description

- 4.13.2 The man made or 'engineered' features of these upland hills dominate the character and feel of these areas. Both reservoirs and forestry do exist elsewhere within the AONB, but not with the same level of dominance as seen in this landscape. Reservoir 'furniture' such as dams, stone walls, roads and slipways and buildings add to the built feel of the areas, although these are often ornate rather than purely functional structures.
- 4.13.3 The landscape is dominated by open water and coniferous forestry, although there are also large areas of pastoral fields running down to the banks of the reservoirs, and small patches of broadleaved woodland. Field boundaries are mostly dry stone walls, and these also line the narrow lanes. Small traditional stone built villages nestle at the foot of Pendle.
- 4.13.4 Gisburn Forest, Stocks Reservoir and the Barley reservoirs exist within what was once Rolling Upland Farmland, it was transformed in the early and mid twentieth century due to a rising demand for water and timber, and was largely de-populated to make way for the developments. Relic farmsteads within Gisburn Forest and the drowned village of Dale Head are testament to a once thriving community. Old field boundaries can still be found in the forest here and around Barley.

Physical

- 4.13.5 The underlying geology and topography of this Landscape Character Type is similar to that of the Rolling Upland Farmland Landscape Character Type. Landscapes within this type would once have been upland farmland landscapes, before the reservoir and woodland were superimposed onto the landscape pattern. The combined presence of Millstone Grit and limestone has created a gentle landscape of rolling hills. This is further softened by the effects of glacial gravel and clay deposits, which in places have been eroded to expose rocky outcrops

Ecological

- 4.13.6 Plantation woodlands which are fenced to exclude grazing, attract small mammals to the dense understorey. Due to a dense canopy, the more mature woods support fewer mammals, although species such as gold crest, coal tit, and siskin are all found in the plantations. Forest rides provide habitat for a number of uncommon plant species. In some areas, the semi-natural broadleaved woodland edge and individual native trees along the banks provide important wildlife habitats. The draw down zones on reservoirs are important habitats for a specialised flora including a number of nationally scarce species. Reservoirs such as Stocks are important for breeding and over wintering wildfowl and waders. These interests are, however, compromised at times by angling and water-based recreation.

Cultural and Historical

- 4.13.7 The construction of the reservoirs (particularly the larger one at Stocks) has destroyed many early remains of land use and settlement. In the mid-late 19th century the rural landscape of the valleys was transformed by the construction of numerous large water bodies to supply the growing populations of the surrounding conurbations. The appropriation of the land by the water undertakings and consequent depopulation had a significant landscape impact. The remains of these farms are still extant. The reservoirs represent important feats of engineering and constructions, such as feeder conduits, overflow cascades and slipways, embankments and tunnels, are of historical significance. Much of the mixed woodland planting associated with the reservoirs originated as 19th century catchment plantings and continues to be managed by the water authorities today. The reservoirs reflect the demands of the rapidly expanding urban populations in industrial centres during the Victorian period. Stocks, the largest reservoir within the AONB, was opened by HRH the Prince George KG, on July 5th 1932. After treatment, the water from Stocks goes mainly to the Fylde area of Lancashire. Before work could start on the dam, a village to house 300-400 men and their families had to be built, which, when complete had its own water supply, sewerage scheme, electricity supply, canteen, cinema and a recreation hall. The construction village is now long gone and all that remains to be seen is the dam, the causeway and the tramways from nearby quarries, which were used to supply the building sites. .

Development, Settlement and Buildings

- The settlement pattern is dominated by scattered stone farmsteads and hamlets, with the villages of Barley and Roughlee nestling within the valley of Pendle Water;
- At Stocks reservoir, the church provides one of the only built elements.

Landscape Character Areas

- 4.13.8 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area M1: Gisburn



- Dense coniferous woodland provides a strong sense of enclosure within the Gisburn Forest;
- A patchwork of pastoral fields slope down to the edge of Stocks reservoir, punctuated with clumps of deciduous trees and delineated by a network of wooden fences and occasional stone walls;
- A stone bridge crosses the corridor of Bottom's Beck and is a landscape feature;
- In addition to this, the isolated church and associated small wind turbine provide some of the only landmark built elements within this area;
- On sunny days, the water within Stocks reservoir glints and glistens, providing an instantly recognisable feature within open views from surrounding higher Landscape Character Types (such as the Unenclosed Moorland Hills and Moorland Plateaux);
- Open views across the wide expanse of water, with glimpse views towards the smooth texture of the Unenclosed Moorland Hills to the north and west, contribute to a recognisable sense of place;
- Areas of felling and re-planting also contribute texture to the landscape of this area;
- Road corridors within the forest are often lined with mossy stone walls and deciduous trees, which give the impression of a softer woodland edge, hiding the more regular plantation woodland from view;
- At the eastern edge of the area, open, expansive views towards the Yorkshire Dales contribute to recognisable sense of place;
- Waders are often seen on Stocks Reservoir.

Landscape Character Area M2: Barley



- The small, linear village of Roughlee at the eastern edge of the area encompasses traditional gritstone cottages and terraces which nestle at the foot of Pendle Hill;
- Landscape pattern is dominated by a pattern of small reservoirs (including Upper and Lower Black Moss and Lower Ogden) and regular-edged blocks of coniferous plantation woodland, which are overlain on a pattern of pastoral fields;
- Field boundaries with surrounding pastoral fields are delineated with low to medium hedges, which often contain hedgerow trees;
- Smooth, pasture fields extend to the edge of the reservoirs;
- The network of minor road corridors that cross this landscape are often lined with stone walls;
- The small village of Barley, displaying predominantly traditional stone buildings, is situated towards the centre of the area and nestles against a backdrop of Unenclosed Moorland Hills within views across the landscape;
- Open views towards Pendle Hill to the north provide a recognisable sense of place;
- The reservoirs and woodland blocks are instantly recognisable landscape features within views from the nearby Pendle Hill Unenclosed Moorland Hills and Moorland Plateaux Landscape Character Areas;
- The dramatic valley of Ogden Clough is a striking landscape feature to the north of Barley.

LANDSCAPE CHANGES AND OPPORTUNITIES

Past Landscape Changes

4.13.8 Observable changes in the past include:

- Flooding or partial flooding of valleys to create reservoirs;
- Loss of hamlets, villages or farmsteads;
- Creation of areas of commercial coniferous forestry woodland;
- Loss of traditional field boundary features.

Forces for Change

Current Landscape Condition

4.13.9 The overall condition of the Forestry and Reservoir Landscape Character Type is considered to be good to moderate, resulting from the moderate ecological value of areas of woodland, which are generally well managed; and the well managed nature of the reservoirs and their associated structures.

Future Landscape Changes and Opportunities

4.13.10 In the short-term (5 years) it is likely that there will be positive changes in the form of restructuring and management of woodland and hedgerows and reservoir edges. Negative changes may include an increased pressure on this landscape from recreational activities, leading to a potential increase in traffic on the surrounding network of rural roads

4.13.11 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – The restructuring of coniferous woodland and replacement with broadleaves could have a positive impact on the landscape, resulting in more natural edges to woodland and less geometric landscape pattern. Changes in land ownership or agricultural management may also lead to fragmentation of ownership of areas of woodland.
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops. It is also possible that climate change will lead to an increase in flash flooding and loss of key tree species.

- *Development* – It is likely that there will also be increased pressure from recreational and tourist related developments, affecting the character and quality of the landscape. There is also potential pressure from the widening of existing road corridors, or upgrading with additional signage and lighting. Potential increases in visitor numbers to Gisburn Forest associated with the new mountain biking tracks.

Sensitivities and Capacity for Change

4.13.12 The Forestry and Reservoir Landscape Character Type is considered to have moderate visual sensitivity as a result of the variable sense of enclosure and moderate intervisibility with adjacent Landscape Character Types. In places, open views can be gained across the landscape, whilst in others, views are limited by woodland cover. A diverse patchwork of woodland contributes to overall moderate ecological sensitivity. In addition to this, the generally well maintained dry stone walls and stone bridges contribute to overall high cultural and landscape character sensitivity. As a result of the above factors, this Landscape Character Type is considered to have limited to moderate capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.13.13 The overall strategy for the Forestry and Reservoir Landscape Character Type should be to conserve and enhance woodland, maintain open views to surrounding Landscape Character Types and repair landscape elements such as stone walls where these are in decline. Built reservoir features, the open reservoir edges, and the mosaic of habitats found there should also be conserved and enhanced.

Physical Character

- No guidelines recommended.

Ecological Character

- **Enhance** the visual character of this Landscape Character Type through new native woodland screen planting around commercial forestry plantations⁷⁸;
- **Restructure** coniferous plantations to increase the proportion of native broadleaved trees⁷⁹;
- **Harness** arisings from conifer plantation restructuring as a timber supply to local construction and craft companies⁸⁰;
- **Incorporate** rides and glades into woodland structure to increase their biodiversity⁸¹;

⁷⁸Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP;

⁷⁹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP;

⁸⁰ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP

⁸¹ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP

- **Bring** existing woodland into active management⁸²;
- **Screen** commercial planting with visually striking mixes of native broadleaves to create better wildlife habitats and amenity resources⁸³;
- **Encourage** the maintenance of existing woodland boundary walls, banks and hedges, giving priority to those important for stock control;
- **Encourage** the maintenance of distinctive woodland features such as woodland banks and ditches, saw pits, charcoal burning sites and veteran trees by management;
- **Encourage** the enhancement of the character of native broadleaved woodland by stock-proofing to prevent grazing and allow natural regeneration, thinning to remove non-native and invasive species as well as restocking with appropriate native species where natural regeneration does not occur;
- **Encourage** the enhancement of reservoirs by appropriate planting of native trees and shrubs on banks, sympathetic grading of lake margins as well as encouragement and planting of marginal vegetation, where there is no conflict with wildlife value;
- **Encourage** conservation of existing key habitats and landscape features and expand the resource through habitat restoration and re-creation guided by ecological networks;
- **Ensure** that water margins and open water areas are protected for wildlife;
- **Ensure** that plantation rides and glades are managed for biodiversity;
- **Ensure** that UK Biodiversity Action Plan habitats are appropriately managed.

Cultural and Historic Character

- **Encourage** the maintenance and conservation of existing reservoirs, historic bridges and their associated historic features;
- **Conserve** the distinctive built character of the reservoirs and associated structures;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;
- **Ensure** that new drainage pipelines are well integrated into the surrounding landscape.

Aesthetic and Perceptual Character

- **Protect** key views to and from the area from tall and vertical large-scale developments that may erode the open and undeveloped character of the area.

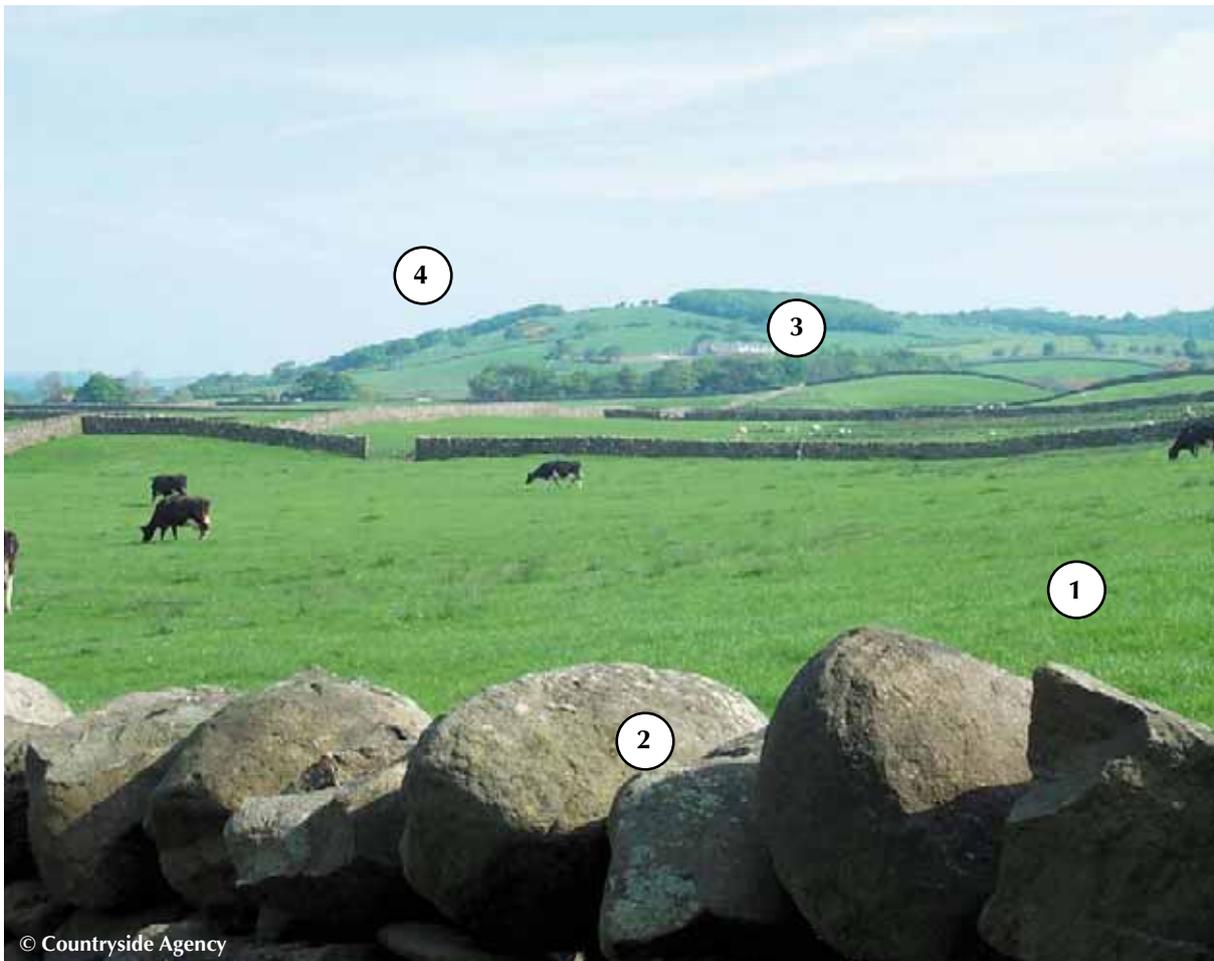
⁸² Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP

⁸³ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission, TEP

LANDSCAPE CHARACTER TYPE N: FARMED RIDGES

Key Characteristics

- 1 Mosaic of mixed farmland and woodland forms a textural backdrop to the surrounding lowlands.
- 2 Low stone walls often delineate field boundaries.
- 3 Settlement pattern of isolated stone farmsteads.
- 4 Rounded ridge profiles of the gritstone outcrops.



© Countryside Agency

4.14 N: FARMED RIDGES

CHARACTER ASSESSMENT

Location

- 4.14.1 There are two occurrences of the Farmed Ridges Landscape Character Type within the AONB, one to the west of Quernmore and the other on the Pendle Hill outlier, to the south of Sabden. In both instances, this Landscape Character Type continues outside the AONB boundary and is surrounded by a variety of different Landscape Character Types.

Landscape Character Description

- 4.14.2 Although relatively low in comparison to the Bowland Fells, the sinuous gritstone outcrops which form the distinctive Farmed Ridges provide a textural backdrop to the surrounding lowlands. The ridges, which rise quite dramatically from the surrounding landscape to elevations of 140-230 m, have distinctive rounded profiles and are predominantly covered with a mosaic of mixed pastoral farmland and visually striking broadleaved woodlands. The ridge tops which afford long, open views across surrounding lowlands are often crowned with a woodland, settlement or road.
- 4.14.3 Settlements tend to be linear, or scattered isolated farmsteads. Low stone walls are often used to delineate field boundaries in pasture land used for sheep, beef and dairy cattle. Designed landscapes and country houses reflect the long history and suitability of the ridges for settlement

Key Environmental Features

Physical

- 4.14.4 These gritstone outcrops are relatively low in comparison to the Moorland Plateaux, Unenclosed and Enclosed Moorland Hills Landscape Character Types, however their distinctive ridge profiles set them apart from the adjacent lowland agricultural landscapes. The ridges are formed from high areas of Millstone Grit which rise dramatically from the surrounding landscape to elevations of between 140 and 230 metres. The Millstone Grit outcrops in places, but is largely overlain by Boulder clay.

Ecological

- 4.14.5 Intensive farming practices mostly concerned with the grazing of beef, dairy cattle and sheep limit the nature conservation value of this area, although the small pockets of woodland on the sides of the ridges provide some ecological interest.

Cultural and Historical

- 4.14.6 The elevated nature of the ridges and the excellent views of the valleys and Lancashire Plain have ensured that they have been important strategically and symbolically throughout history. Intensive farming of recent history threatens to remove traces of early enclosure, although the early origin of field patterns is still discernable in the landscape.

Development, Settlement and Buildings

- Isolated farmsteads are a key feature of this landscape;
- Quernmore Park Hall, built from sandstone is a key historic landmark within the area.

Landscape Character Areas

- 4.14.7 Landscape Character Areas within this Landscape Character Type include:

Landscape Character Area N1: Quernmore



©Tarja Wilson

- This area provides a backdrop to views south and westwards from the wide valley floodplain of the River Ribble;
- Panoramic, open views from the western edge of this area across Lancaster towards Morecambe Bay contribute to recognisable sense of place.
- Dense, mixed woodland on the top of the ridge provides a strong sense of enclosure and limits views across the area;
- Quernmore Park Hall estate, with its estate gates and parkland trees is a key landscape feature which contributes to recognisable sense of place;
- Distinctive landscape pattern of mixed woodland and pastoral farmland, predominantly delineated by stone walls;
- Minor road corridors are often lined with trimmed hedgerows.

Landscape Character Area N2: The Heights



- Panoramic, open views northwards towards moorland on Pendle Hill which provides the skyline backdrop;
- Panoramic views southwards across the East Lancashire valleys to the South Pennines;
- Open views across the corridor of Sabden Brook, which is lined with patches of mature trees;
- Stronger sense of openness to the east of Sabden;
- The enclosed, wooded southern side of the ridge provides the setting to the village of Sabden within views southwards and limits views towards the urban areas of Padiham and Barrowford;
- A rough texture of scrub and rough grassland is the predominant land cover;
- From the top of the ridge, open, panoramic views southwards across the urban areas of Padiham and Barrowford contribute to recognisable sense of place.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

4.14.8 Observable changes in the past include:

- A decline in mature hedgerow trees as a result of age or loss due to agricultural intensification;
- Amalgamation and diversification of dairy farms;
- Addition of visual clutter (including communication masts) on prominent ridge-top skylines.

Current Landscape Condition

4.14.9 The overall condition of the Farmed Ridges Landscape Character Type is considered to be good. The landscape elements such as stone walls, hedgerows and patches of woodland within this Landscape Character Type are generally in good condition. There are some elements showing signs of decline in some places, particularly the loss or poor maintenance of stone wall and hedgerow field boundaries. Overall, however, there is a predominantly intact landscape pattern throughout this Landscape Character Type.

Future Landscape Changes and Opportunities

4.14.10 In the short term (5 years) it is likely that there will be continued positive changes in the form of improvements in the biodiversity of woodlands.

4.14.11 Negative changes are likely to include the spread of bracken where grazing is lost, increasing traffic on small roads and pressure on sensitive habitats from increased access.

4.14.12 Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The AONB Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key guidelines within this Landscape Character Type are outlined below:

- *Agricultural Change and Land Management* – Neglect of hedges around enclosed land could reduce the potential landscape and wildlife benefits in many places, leading to a substitution by fences. Increased farm sized may increase the demand for new large agricultural buildings and associated development affecting key views. Loss of farm woodlands would result in changes to the landscape pattern of hillsides.
- *Climate Change* – The likely effects of climate change on this landscape are not easily identifiable with current information, however, agricultural practices could be affected, with a move to plough up pasture and plant new crops.

- *Development* –Communication developments may lead to increased visual clutter from mobile phone masts or inappropriately designed transport schemes.

Sensitivities and Capacity for Change

4.14.13 Overall ecological and landscape character sensitivity within the Farmed Ridges Landscape Character Type is considered to be moderate as a result of patches of mixed woodland which contribute to the mosaic pattern. Visual sensitivity is also moderate, resulting from the intermittent sense of enclosure provided by areas of dense woodland. Outside this woodland, there is strong intervisibility with adjacent Lowland Undulating Farmland and Moorland Hills Landscape Character Types.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

4.14.14 The overall strategy for the Farmed Ridges Landscape Character Type should be to conserve the distinctive mosaic of mixed farmland and woodland, the intricate pattern of stone walls that delineate field boundaries and the long, open views across surrounding lowlands from the ridge top settlements and roads. There is also a need to appropriately enhance hedgerows and repair stone walls where these are in decline, and to conserve the smooth, uncluttered skyline of the ridges.

4.14.15 Specific guidelines include:

Physical Character

- **Conserve** the rounded profile of gritstone outcrops.

Ecological Character

- **Extend** woodlands on ridge sides through native planting and the modification of grazing regimes to assist with natural regeneration, particularly in areas where woodland seed banks may remain on the sites of former woodlands⁸⁴;
- **Increase** the robustness of the woodland resource by focusing natural regeneration and new planting in close proximity to existing woodland⁸⁵;
- **Ensure** that productive cattle and sheep grazing can be maintained whilst enhancing nature conservation interests and maximising opportunities for woodland regeneration⁸⁶;

⁸⁴ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP.

⁸⁵ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

⁸⁶ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP

- **Ensure** that opportunities for woodland development do not impact detrimentally on the valuable habitats that are present⁸⁷;
- **Maintain** the network of hedgerows to conserve the historic field pattern;
- **Replant** degraded sections of hedgerow which contribute to the overall landscape pattern;
- **Encourage** conservation of existing key habitats and landscape features and expand the resource through habitat restoration and re-creation guided by ecological networks;
- **Ensure** that UK BAP habitats are appropriately managed.

Cultural and Historic Character

- **Conserve** the distinctive pattern of stone walls at field boundaries;
- **Encourage** the use of local building materials, in particular limestone and gritstone;
- **Encourage** sympathetic conversion of buildings of industrial heritage;
- **Encourage** sympathetic new uses for disused farm buildings to ensure they remain a viable and contributory feature within this landscape;
- **Conserve** the rural setting of individual farms by ensuring new built development does not encroach;
- **Ensure** that new development reflects the pattern of clustered settlements of local stone buildings and short terraces to counteract the pressures for ribbon development and reflect the characteristic settlement pattern;
- **Ensure** that highway improvement schemes respect and reflect local character and **encourage** the use of traditional signage where possible;

Aesthetic and Perceptual Character

- **Conserve** long, open views across surrounding lowlands from ridge-top settlements and roads;
- **Minimise** vertical structures on the skyline;
- **Retain** the predominantly rural character of the ridges by minimising the use of urban elements such as kerbs and street lights outside settlement.

⁸⁷ Lancashire Woodland Vision, Lancashire County Council, Forestry Commission and TEP