4.0 LANDSCAPE CHARACTER TYPES

4.1 Introduction

4.1.1 This section sets out descriptions and guidelines for the Landscape Character Types identified within the Lake District.

4.2 Landscape Character Type Descriptions and Guidelines

Character Assessment

4.2.1 For each defined Landscape Character Type, its boundaries are mapped (see Figure 3.3) and its character described (and illustrated where appropriate) under the following headings:

- **Landscape Character Type Reference and Name**;
- **Location** – a short paragraph detailing location of the Landscape Character Type in relation to the National Park and adjacent Landscape Character Types;
- **Definitive Attributes** – a bullet point list of the main landscape attributes that contribute to character;
- **Physical Character** – a summary description of geology/soils, landform, hydrology and land cover elements that contribute to character;
- **Ecological Character** – a summary description of ecological habitats and their relative nature conservation importance that contribute to character, by reference to designated sites citations and the distribution of designated sites;
- **Cultural and Historical Character** – a summary description of the main cultural associations and historical features that contribute to character, by reference to the historic landscape characterisation data and distribution of designated assets;
- **Development, Settlement and Building Character** – a summary description of the settlement forms/origins and patterns, building styles and vernacular materials that contribute to character, by reference to fieldwork, research and existing assessments; and
- **Landscape Character Sub-Types** – where identified, a bullet point list of the main landscape attributes that contribute to the character of the Sub-Type that reflects a local variation in the character of the overall Landscape Character Type.

Current and Future Landscape Changes and Opportunities

4.2.2 Each Landscape Character Type is evaluated as follows:

- **Forces for Change** – a bullet point list of recent past changes in the Landscape Character Type; a concise description of how the intactness of the different components create a perception of the overall current condition of the landscape; and a separate bullet point
list of the positive and negative future changes and opportunities that are considered likely to affect the landscape over the short term (5 years) and long term (20 years +).

- 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.

**Guidelines for Managing Landscape Change**

4.2.3 The guidelines comprise 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. Where relevant, specific guidelines that apply to Sub-Types are also identified.
TYPE A: ESTUARY AND MARSH

CHARACTER ASSESSMENT

Location

The Estuary and Marsh Landscape Character Type (LCT) is situated at the western and south western edges of the Lake District, running along the western coastline and fringing the Ravenglass (a combination of the Rivers Irt, Mite and Esk) and Leven Estuaries and Morecambe Bay to the south. At its inland boundaries, this Landscape Character Type borders Coastal Margins (LCT B) and Coastal Sandstone (LCT E). This Landscape Character Type also continues outside the National Park boundary.

Definitive Attributes

- Predominantly flat topography;
- Land cover consisting of large expanses of mudflats, shingle and pebble beaches and saltmarsh;
- Surface deposits (sand, mud and pebbles) are predominantly underlain by a combination of Permian and Triassic mudstones;
- Tidal landscapes;
- Predominantly open landscape, with very few buildings or built forms visible, other than distant industrial structures (within adjacent Landscape Character Types);
- Patchwork of intertidal ecological habitats, consisting of saltmarshes, mudflats and dunes;
- Habitats support a rich variety of invertebrates, which provide a source of food for migrating waders and wildfowl;
- Vast skies and coastal breezes; and
- Strong sense of tranquillity throughout much of this Landscape Character Type.

Physical Character

The Estuary and Marsh Landscape Character Type consists of bands of mudflats, sandy/pebble beaches and saltmarshes lining the western coast and southern estuaries of the Lake District National Park. Permian and Triassic mudstones and sandstones predominantly underlie most of the beaches and marshes throughout the Type.

Topography is predominantly flat, with the most noticeable gradient visible where beaches slope upwards from the seashore (quite steeply in places) to meet adjacent Lowland and Coastal Farmland.

The large expanses of mudflats, which are generally visible within estuaries, are often exposed at low tide, whilst saltmarshes exhibit a dynamic pattern of interlinked, meandering river channels, which change with the rise and fall of the tide. There is a strong sense of openness throughout the Landscape Character Type, with very little woodland cover to contribute to sense of enclosure.

The physical character of the surface of this Landscape Character Type is constantly changing as a result of the processes of coastal erosion and deposition (interlinked with the processes of long shore drift).

Ecological Character

This landscape is of significant ecological interest, consisting of a diverse patchwork of intertidal habitats, including saltmarshes and mudflats, which support a rich variety of invertebrates (including ragworm, lugworm, bivalves and snails) providing food for wading birds and wildfowl (such as oystercatchers, dunlin, knot, curlew, redshank, turnstone, bar-tailed godwit, grey plover, ringed plover, shelduck, pintail, eider, red breasted merganser and goldeneye).

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1 This Landscape Character Type is identified within the Cumbria Landscape Classification as Landscape Character Type 1: Estuary and Marsh. For further information on this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
TYPE A: ESTUARY AND MARSH

1. Tidal landscape with vast skies and coastal breezes © CBA
2. Aerial Photograph of Estuary and Marsh area © GeoPerspectives
3. The diverse patchwork of intertidal habitats, includes saltmarshes and mudflats © CBA
4. Land cover consisting of large expanses of mudflats, shingle and pebble beaches and saltmarsh © NTPL / Joe Cornish
Ecological importance is signified through designation of several habitats within this Landscape Character Type. Morecambe Bay is a designated Special Protection Area (SPA), for its wide range of bird species throughout the year. In summer, areas of shingle and sand hold breeding populations of terns, whilst very large numbers of geese, ducks and waders overwinter and use the site in spring and autumn migration periods. Morecambe Bay is also a designated Special Area of Conservation (SAC) and Ramsar site for its combination of mudflats and sandflats (not covered by seawater at high tide); large shallows inlets and bays; perennial vegetation of stony banks; annuals colonising the mud and sand; Atlantic Sea Meadows, Shifting and Fixed Dunes; and Humid Dune Slacks. In addition to this, the bay is also a designated Site of Special Scientific Interest (SSSI) for its diverse saltmarsh vegetation (including common saltmarsh grass and glasswort) intertidal flats, wintering wading birds and wildfowl.

In addition to this, Drigg Coast (to the west of Ravenglass) is designated as a SAC for its mudflats and sandflats and also as a SSSI for its broad range of maritime habitats, supporting a particularly rich and varied flora of sea kale and Isle of Man cabbage. Priority habitats associated with this Landscape Character Type include estuaries, coastal sandmarsh and the Natterjack toad is a locally important species.

Cultural and Historical Character

The Estuary and Marsh Landscape Character Type is characterised by a predominant pattern of unenclosed or common land. There is a lack of recorded archaeological evidence in this area, but this is mainly due to a lack of investigation rather than limited previous activity. The estuary and marshes would have been prime food gathering locations, which indeed may have attracted temporary settlement.

Development, Settlement and Building Character

- There is an overall lack of built structures or buildings within this Landscape Character Type as a result of the constantly changing inter-tidal nature of the landscape; and
- Visible buildings are usually located on adjacent, slightly higher, farmland.

Landscape Character Sub-Types

Two Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these Sub-Types are generally typical of the Estuary and Marsh Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

**Sub-Type A1: Intertidal Flats**

- Wide beaches and expanses of mudflats within the estuaries and along the coastline, which are exposed at low tide;
- Dissected by dynamic, meandering river channels; and
- Beaches comprising mud, sand, shingle and pebbles (which often form the upper foreshore, associated with increased gradient).

**Sub-Type A2: Coastal Marsh**

- Extensive areas of salt marsh occurring around the sheltered waters of the estuaries;
- Often marked by low erosion cliffs to around 5m AOD where they are usually enclosed by man-made sea dykes;
- On the seaward edges, saltmarshes are characterised by a closely grazed fine sward, etched by an intricate maze of creeks and channels in a dendritic pattern;
- Higher, older saltmarshes meander towards the sea, which are frequently colonised by gorse scrub;
- Essentially open, other than patches of scrub and remnant field hedges on the higher marshes;
- Series of terraces within the marshes, which can be, related to isostatic uplift and creek migrations; and
- Sections of creeks can be cut off, leaving isolated sections of water known as pans or flosshes.
CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:

- An ever changing landscape created and maintained through natural processes (tidal erosion and deposition); and
- Evidence of human use in the past is limited due to lack of research and continual erosion by the sea. Likely to also have been used for gathering food (sustainable use leading to little historic record).

Current Landscape Condition

The condition of the Estuary and Marsh Landscape Character Type is generally good. The closely grazed fine sward saltmarshes, mudflats, remnant hedges and other habitats enrich the ecological condition of this landscape. There are some elements showing signs of decline in places, including the loss of some hedgerows, set back from the coastline.

Future Landscape Changes and Opportunities

In both the short term (5 years) and long term (20+ years) this dynamic landscape is likely to continue to be predominantly affected by natural processes. Within this Landscape Character Type, the key agent of change will be the tides. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Within this context, potential longer-term changes and key opportunities within Landscape Character Type A: Estuary and Marsh are outlined below:

- **Agricultural Change and Land Management** - An intensification of farming in this area could result in a dramatic decrease in species diversity on the saltmarshes. Similarly, a decrease in water quality as a result of agricultural run-off or other pollution sources could damage the water-based habitats within the mudflats and saltmarshes. An increase in erosion, as a result of increased access to this and adjacent Landscape Character Types, or lack of natural erosion (e.g. through coastal defences) could lead to reduced species diversity.

- **Climate Change** - Rising sea levels would have a dramatic impact on this Landscape Character Type as it would alter the shoreline, tidal flows and potentially inundate significant habitats. An increase in storm events could change the pattern and spread of habitats and therefore alter the character of the landscape (e.g. through erosion of saltmarsh). Depending on the nature of the change in climate, an increase in global temperatures might encourage alien species/ more competitive species to dominate and reduce plant life diversity.

- **Development** - Increased tourism use of the coastline could introduce buildings into a very open landscape with few vertical elements or enclosing features. Pressure to develop land can lead to increasing amounts of engineered features such flood defence, drainage works and raising of levels, all of which would detract from the flat, open and wild characteristics. Offshore/ inshore renewable energy developments would introduce industrial features into a character type where remoteness and tranquillity are key attributes. Associated diffuse or point source pollution could lead to a decrease in water quality and damage to water-based habitats and saltmarshes.

Sensitivities and Capacity for Change

The diverse patchwork of intertidal habitats, consisting of saltmarshes and mudflats, provide delicate naturally sensitive environments. This is recognised by the designation of much of the Landscape Character Type as SPA, SAC, Ramsar Site and SSSI. In addition to this, the strong sense of openness, with generally uninterrupted skylines; and strong intervisibility with surrounding Landscape Character...
Types (B: Coastal Margins, J: High Fell Fringe and E: Coastal Sandstone) contribute to overall high visual sensitivity. This Landscape Character Type is considered to have limited capacity to accommodate change or new development without compromising key characteristics, as a result of its valuable network of ecological habitats and high visual sensitivity.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

Due to the ecological importance of this area the overall strategy for this Landscape Character Type, is to conserve the diverse patchwork of intertidal habitats, including saltmarshes, mudflats and dunes. These habitats support a rich variety of species, which are protected through international and national designations.

Specific guidelines include:

**Physical Character**

- Encourage restoration and retention of hedgerows where currently neglected, to maintain historic enclosure pattern.

**Ecological Character**

- **Encourage** extensive grazing on saltmarshes to maintain low growing vegetation and diversity of sward;
- **Encourage** habitat linkage to increase robustness to climate change;
- **Protect** watercourses from agricultural run-off or other pollution sources in order to maintain a very high level of water quality;
- **Manage** access to prevent increased erosion of vulnerable habitats through disturbance; and
- **Manage** alien species/ more competitive species which threaten to dominate and reduce plant life diversity.

**Cultural and Historic Character**

- No guidelines recommended.

**Aesthetic and Perceptual Character**

- **Conserve** the open character and wildness of the landscape by minimising the introduction of new buildings and other built features. Where these are essential careful siting and design should avoid strong vertical or enforcing elements; and

- **Ensure** that where development for renewable energy, large scale drainage works, coastal defences, raising of levels or other significant works are proposed they should be accompanied by a landscape character and visual impact assessment clearly demonstrating how these developments might be accommodated in an open and sensitive landscape and adequately assessed for potential impact on key habitats.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:

**Sub-Type A1: Intertidal Flats**

**Physical Character**

- No guidelines recommended.

**Ecological Character**

- **Monitor** water quality and prevent point and diffuse pollution occurring within water courses to maintain healthy aquatic ecosystems.
- Cultural and Historic Character
  - No guidelines recommended.

Aesthetic and Perceptual Character

- No guidelines recommended.

**Sub-Type Type A2: Coastal Marsh**

Physical Character

- No guidelines recommended.

Ecological Character

- **Support** extensive grazing on saltmarshes through provision of information, good practice, sources of financial help in order to maintain characteristic vegetation and habitat diversity;
- **Identify** and **implement** opportunities for managed coastal realignment in appropriate locations to increase coastal habitats and mitigate the impact of storm events; and
- **Manage** access to vulnerable habitats and breeding areas during critical times of year to prevent disturbance and potential reduction/loss of key species.

Cultural and Historic Character

- No guidelines recommended.

Aesthetic and Perceptual Character

- No guidelines recommended.
TYPE B: COASTAL MARGINS

CHARACTER ASSESSMENT

Location and Boundaries

The Coastal Margins LCT is situated at the western and southwestern edges of the Lake District, running along the western coastline and fringing Estuary and Marsh (A) within the Ravenglass (a combination of the Ir, Mite and Esk rivers) and Leven Estuaries and Morecambe Bay to the south. At its inland boundaries, this Landscape Character Type borders a range of different Landscape Character Types including High Fell Fringe (J), Low Fell (K), Lowland (D) and Coastal Limestone (C). This Landscape Character Type also continues outside the National Park boundary².

Definitive Attributes

- Low-lying landscape with flat to undulating topography;
- Predominantly underlain by marine alluvium or undulating boulder clay;
- Combination of hummocky dunes, raised beaches and coastal mosses;
- Ecological habitats comprising shingle bank and dune communities; raised bogs and sphagnum filled pools in wetter areas and occasional remnant mosses;
- Pockets of pasture land;
- Settlement pattern generally consists of scattered farmsteads, with some good examples of stone bank barns;
- Remains of early prehistoric settlement beneath the sand dunes;
- Broughton-in-Furness is the only significant settlement; an 18th century planned Market Square, with formal render and stone buildings giving this small town a coherent visual character;
- A variety of building materials used, particularly on farm buildings, from river cobbles, quarry waste slatestone, to neater dressed limestone and sandstone; and
- Relatively strong sense of tranquillity throughout most of this Landscape Character Type.

Physical Character

The Coastal Margins Landscape Character Type encompasses a combination of dunes, raised beaches, coastal mosses and Coastal Plain, which is based on marine alluvium or reclaimed mosses and undulating boulder clay areas.

The landscape is low lying and topography is flat to undulating, with occasional low mounds. There is a stark topographical contrast between the Coastal Margins Landscape Character Type and adjacent Low Fell, Low Fell Edge and Rugged/Craggy Volcanic High Fells which provide a higher enclosing backdrop within views inland.

Dunes and Beaches vary from hummocky dunes to flat raised beaches, which have occasionally been regraded. The coastal mosses, which have been formed by peat accumulation in alluvial or boulder clay basins, rise up to three metres above surrounding levels.

Ecological Character

The landscape is of ecological interest, encompassing shingle bank and dune communities; raised bogs and sphagnum filled pools in wetter areas and occasional remnant mosses. The shingle bank, dune and maritime heath communities support great crested newt, Natterjack toad and adders, whilst the Coastal Mosses (Sub-Type B2) support bog rosemary and cotton grass; and in drier areas: cranberry, cross-leaved heath, heather and purple moor grass. They are also rich in other wildlife, with adders, frogs, lizards, butterflies and a variety of birds and insects present. On the margins of the Sub-Type, Willow Carr and wet birch scrub give way to wet meadow. The Coastal Plain (Sub-Type B3) has been subject to

² This Landscape Character Type is identified within the Cumbria Landscape Classification as Landscape Character Type 2: Coastal Margins. For further information on this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
TYPE B: COASTAL MARGINS

1. Agricultural improvements of coastal plain through drainage, fertilising and reseeding © CBA

2. Aerial Photograph showing typical land pattern © GeoPerspectives

3. Low-lying landscape with flat to undulating topography © CBA

4. [Image of a coastal landscape with boats on land and water]
agricultural improvement through drainage, fertilising and re-seeding, limiting ecological interest mainly to hedges, copses, ditches, small woodlands and scrub.

In addition to this, Duddon Mosses SSSI encompasses an extensive system of raised mires, supporting areas with typical bog communities as well as areas of wet heath, scrub, broad-leaved and mixed woodland and acid grasslands. The mires also display a rich fauna, including Roe deer, nightjar, woodcock, heron, curlew, cuckoo, tawny and barn owls and buzzard. They are also designated as a SAC.

Important examples of lowland raised mire, including Meathop and Foulshaw Moss SSSI are also located where this type lies adjacent to Morecambe Bay. These two sites form part of a suite of SSSI’s that form the Witherslack Mosses SAC site. Foulshaw and Meathop mosses encompass large areas of open peat bog surrounded by woodland. The open bog is dominated by heather and cotton grass, in hummock and hollow topography with shallow bog pools, formed by several species of *Sphagnum* moss.

To the west of Ravenglass, parts of this Landscape Character Type fall within the Drigg Coast SAC/ and SSSI, which is designated, amongst other things, for its fixed dunes (which fall within this Landscape Character Type).

**Cultural and Historical Character**

The coast of the Lake District was settled in the early prehistoric period and the sand dunes cover the remains of Mesolithic, Neolithic and Bronze Age sites. To the west, the Coastal Margins are predominately unenclosed or common land, whereas towards the southern boundary they have a more mixed history with planned private enclosure and parliamentary enclosure surrounded by single ancient farms, wastes and commons and ancient woodland. The single ancient farms form the basis for the dispersed settlement pattern, which is evident today.

The historic core of Broughton-in-Furness has been designated as a Conservation Area to protect its special architectural and historic interest.

**Development, Settlement and Building Character**

- Settlement pattern is mixed, with dispersed farms spread throughout the Type;
- The landscape is accessed via minor tracks and paths and bounded by minor roads which serve a string of linear villages and isolated farms;
- Buildings tend to be substantial stone construction, closely spaced for shelter;
- Cobble stone banks, often with a hedge on top (known locally as kest) walls and hedgerows form the boundaries of farms and roads, though there is a tendency for these to be replaced by fences;
- Vernacular farm buildings lie on the fringes of the Coastal Mosses;
- Coastal plain settlements tend to be small villages or isolated farms connected by a network of minor roads and tracks, with a notable rectilinear pattern in the very flat areas;
- Vernacular buildings in stone, slate, cobbles, brick and clay are interesting features in this landscape;
- On exposed coasts, villages tend to be closely knit with stone walls for shelter; and
- Inland, buildings are more spread out and softened by hedges; some are lower lying where they are sited on the fringes of former mossland.

**Landscape Character Sub-Types**

Three Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these Sub-Types are generally typical of the Coastal Margins Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

**Sub-Type B1: Dunes and Beaches**

- Hummocky dunes and flat raised beaches; and
• Beaches comprising mud, sand, shingle and pebbles (which often form the upper foreshore, associated with increased gradient).

Sub-Type B2: Coastal Mosses

• Flat to undulating mosses (peat bogs or raised mires) have been formed by peat accumulation in alluvial or boulder clay basins, they rise up to three metres above surrounding levels. Formerly much more extensive, they have been reclaimed since the 12th century;
• Mosaic of moss, heath and willow carr or birch scrub woodland and pasture;
• Field shapes range from the small and irregular to undulating areas to large rectangular fields on flat mosses;
• Remnant patches of moss provide a rich note of interest in the rich agricultural landscapes which surround them; and
• Variety of moss plants is colourful and rough textured, contrasting with the monochrome smooth pasture fields.

Sub-Type B3: Coastal Plain

• Improved pasture predominates, which is mainly used for dairy cattle, but beef cattle and sheep are also found;
• In drier areas, particularly on boulder clay, arable crops are grown, whilst rougher pasture with rushes or gorse scrub occur around the moss and saltmarsh fringes;
• Tree cover is scarce on the outer exposed edges, whilst further inland small copses or shelterbelts associated with farms or churches are prominent features; and
• Birch woodland occurs on the edges of the mosses.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
• Agricultural improvement of coastal plain through drainage, fertilising and reseeding;
• Parliamentary and other enclosures in the Foulshaw, Ulpha and Meathop area;
• Coastal margins left as common land or unenclosed land;
• Historic development of Broughton-in-Furness as a key settlement within the area;
• Stone banks and walls replaced by fencing; and
• Reclamation of mosses since 12th century.

Current Landscape Condition

The overall condition of the Coastal Margins Landscape Character Type is considered to be moderate. The semi-natural vegetation within this landscape is occasionally grazed or mown, contributing to ecological diversity. There is, however, evidence of decline within this landscape, where cobble stone banks have been replaced by wire fences, leading to a loss of traditional vernacular landscape pattern. Run down industrial buildings or dilapidated agricultural buildings are also detractors. Decline in the condition and extent of hedgerows within this landscape is also evident, particularly on the coastal mosses, where they are tending to become overgrown or gappy. There is also evidence that the edges of some of the mosses are drying out due to drainage.

Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be continued positive changes in the form of continued management and enhancement of the numerous valuable SSSIs. As the area is off the main tourist routes, small scale local improvements in access will contribute to an improved understanding of the long term issues affecting the area.
Negative changes are likely to include continuing loss of mosses through drainage and conversion to pasture. As the mosses dry out along their margins, birch and willow scrub invade. Current large scale peat cutting is not sustainable and will have both a short term and long term impact on carbon sequestration and habitat loss.

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

- **Agricultural Change and Land Management** - Encroaching pasture is weakening the visual appeal of the mosses, as well as reducing species diversity and the neglect of hedges and kests around enclosure land reduces the potential landscape and wildlife benefits of hedgerows and in many places leads to substitution by wire fences. Mosses are also being lost through drainage, resulting in birch and willow invasion of dried out margins. In places, large-scale peat cutting could cause both a short and long-terms impact on carbon sequestration and habitat loss. Small-scale coniferous forestation is also changing the character and nature of the landscape along the coastal margins and runs against a general trend towards favouring native broadleaves. Dunes are dynamic features and an increase in erosion (e.g. through access) or lack of natural erosion (e.g. through coastal defences) could lead to reduction in species diversity.

- **Climate Change** - The coastal margins are vulnerable to a range of climate change effects such as increased salination of coastal mosses and increased storm events could change the pattern and spread of habitats and therefore alter the character of the landscape (e.g. through increasing erosion of the dunes). There could also be an increase in invasive species, better suited to new climatic conditions, affecting key landscape characteristics.

- **Development** - Within a relatively flat landscape, new farm buildings, pylons and other similar developments are much more obtrusive in terms of scale and visibility and in some places already detract from the existing vernacular style. There is likely to be continued pressure for access to water for recreation, creating pollution and loss of overall tranquillity.

**Sensitivities and Capacity for Change**

The coastal mosses (including a patchwork of bog rosemary and cotton grass, cranberry, cross-leaved heath and heather) and coastline (including shingle bank and dune communities, raised bogs, sphagnum filled pools in wetter areas, remnant mosses, fixed dunes, mudflats and sandflats) provide ecologically rare and sensitive habitats. This is recognised by the designation of much of the coastline as SPA and mosses as SSSI. This patchwork of habitats results in an intricate landscape pattern. The Coastal Margins Landscape Character Type (B) has strong intervisiblity with the Estuary and Marsh Landscape Character Type (A) and other adjacent Landscape Character Types. In places, there is a strong sense of openness, however, patches of willow carr and birch woodland provide a sense of enclosure, denoting moderate visual sensitivity overall. As a result, this Landscape Character Type is considered to have limited capacity to accommodate change overall without compromising key characteristics.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type is to conserve and manage the rich ecological heritage of the coastal habitats whilst protecting the mosses from further encroachment and loss. The inherent characteristics of flat to undulating topography and dispersed farmsteads should be retained with key landscape features such as hedgerows and hedge banks being targeted for better management. Specific guidelines include:
Physical Character

- **Enhance** existing coniferous woodland through reversion to broadleaved and discourage new conifer planting to reinforce the landscape structure; and
- **Encourage** increased woodland cover as a new and viable land use of degraded or derelict land, restored open cast site and land on the fringes of major settlements, whilst conserving the overall sense of openness.

Ecological Character

- **Restore** edge habitats through removal of invasive species and increasing water levels to maintain distinct species populations;
- **Manage** access to prevent increased erosion of vulnerable habitats through disturbance;
- **Encourage** retention and planting of hedgerows and restoration of hedgebanks; and
- **Encourage** habitat linkage to increase robustness to climate change.

Cultural and Historic Character

- **Prevent** loss of distinct settlement pattern and general open character of area through control of large scale and intrusive developments; and
- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape.

Aesthetic and Perceptual Character

- No guidelines recommended.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:

**Sub-Type B1: Dunes and Beaches**

*Physical Character*

- No guidelines recommended.

*Ecological Character*

- **Manage** access to dunes and beaches during critical times of year (e.g. breeding season and prolonged dry periods) to prevent reduction in/ loss of key species.

*Cultural and Historic Character*

- **Prevent** erosion of archaeological sites located within the sand dunes.

*Aesthetic and Perceptual Character*

- No guidelines recommended.

**Sub-Type Type B2: Coastal Mosses**

*Physical Character*

- **Restore** edges of mosses through removal of birch and willow and increased water levels to maintain wet habitat and distinct bog habitat; and
- **Control** large scale peat cutting to ensure no further large scale loss of moss habitat and landscape change.
Ecological Character

- **Conserve** the visual appeal and ecological richness of the mosses by preventing further encroachment, drainage and conversion to pasture.

Cultural and Historic Character

- No guidelines recommended.

Aesthetic and Perceptual Character

- No guidelines recommended.

Sub-Type Type B3: Coastal Plain

Physical Character

- **Encourage** retention of hedgerows around enclosure land and support planting of hedges where previously replaced by wire fences to strengthen landscape structure and provide habitat network; and
- **Enhance** existing coniferous woodland through encouraging natural regeneration of native broadleaves. New planting of woodland should be discouraged in open coastal margins to conserve distinct open landscape characteristic.

Ecological Character

- **Identify** and **implement** opportunities for managed coastal realignment in appropriate locations to increase coastal habitats and mitigate the impact of storm events.

Cultural and Historic Character

- **Control** intrusive farm and other developments (consider scale, location and use of vernacular materials) to minimise loss/erosion of vernacular style.

Aesthetic and Perceptual Character

- No guidelines recommended.
TYPE C: COASTAL LIMESTONE

CHARACTER ASSESSMENT

Location and Boundaries

The Coastal Limestone Landscape Character Type is situated at the southern edge of the Lake District National Park, to the west of Kendal and north of Grange-Over-Sands. At the northerly edges, the Type is situated adjacent to Low Fell (K) and Low Fell Fringe (L), which provide a sense of enclosure. This Landscape Character Type also continues outside the National Park boundary.

Definitive Attributes

- Rolling farmland is underlain by Carboniferous Limestone geology, which has a rough texture where limestone outcrops occur;
- Limestone hills (examples include Scout and Cunswick Scars), with cliffs and scree slopes, rise above the low-lying pastures and wetlands;
- Limestone features include steep scarp slopes, rocky outcrops and limestone pavements, set within a grazed landscape, with patches of woodland; and
- A combination of semi-improved pasture, species-rich calcareous grassland (often with pockets of limestone heath and juniper scrub) and semi-natural woodland dominate land cover and provide ecological interest.

Physical Character

The Coastal Limestone Landscape Character Type is underlain by Carboniferous Limestone geology, which denotes a rough texture in places where limestone outcrops occur. The predominantly rolling topography rises to 230m AOD near to Grange-over-Sands on Hampsfell.

The landscape exhibits features, which are typical of limestone geology, including areas of steep scarp slopes, rocky outcrops and limestone pavement. These are set within an overall grazed land cover, with scrub and woodland on the steep scarp slopes and pavements. In addition to limestone outcrops, underlying geology is visible within the stone walls as field boundaries.

Ecological Character

Semi-improved pasture on the dip slopes, species-rich calcareous grassland (often with pockets of limestone heath and juniper scrub) and semi-natural woodland associated with the limestone; provide ecological interest throughout this Landscape Character Type.

The ecological importance of the limestone landscape of this Landscape Character Type is recognised by the designation of Cunswick and Scout Scars as SSSIs. These two sites are also components of the larger Morecambe Bay Pavements SAC.

Morecambe Bay Pavements represents a diverse combination of limestone pavement flora, including Yew, Juniper, Hazel, Buckthorn and Ash. Yew woodland here represents the development of long-established stands on unstable scree and rocky slopes.

Yewbarrow (consists of a north-south ridge of Carboniferous Limestone) comprising a diverse and complex association of limestone and acidic grasslands, heath, scree, cliff, pavement and woodland habitats. At Hampsfell, the woodland and pavement habitat are more extensive and diverse whereas the dwarf shrub, heath and wetland components are better represented at Scout and Cunswick Scars.

Scout and Cunswick Scars, located 2km west of Kendal form a Carboniferous Limestone ridge. The Scars are made up of a complex of limestone habitats, which support a very rich flora of unimproved

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3 This Landscape Character Type is identified within the Cumbria Landscape Classification as Landscape Character Type 3: Coastal Limestone. For further information on this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
TYPE C: COASTAL LIMESTONE

1. Aerial Photograph showing typical land use pattern © GeoPerspectives
2. Rolling limestone has a rough texture where limestone outcrops occur, Cunswick Scar © LDNPA
calcareous grassland, areas of dry dwarf shrub heath with scattered trees and shrubs, woodland, open water and fen. Many areas of limestone scree within the grassland and heath communities support a distinctive flora of fern species.

Cultural and Historical Character

The Coastal Limestone Landscape Character Type is characterised by a network of historic land uses but is dominated by open fields, with ancient woodland, parliamentary enclosure and single ancient farms. These farms form the basis of the dispersed settlement pattern, which is evident today.

Development, Settlement and Building Character

- Settlement pattern consists of scattered farmsteads and houses, with Lindale being the only main settlement, a large nucleated group of old 20th century buildings;
- The widespread use of limestone as a building material gives visual coherence to the traditional buildings built between the 17th and 19th centuries; and
- North of Cartmel, the Field Broughton area is characterised by a number of formal Georgian villas, each with its attractive parkland landscape setting.

Landscape Character Sub-Types

There are no Sub-Types within the Coastal Limestone Landscape Character Type.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- Enclosure leading to a distinct pattern of open fields and dispersed settlements within the landscape; and
- Past mineral workings and removal of limestone pavements (now fully protected).

Current Landscape Condition

The overall condition of the Coastal Limestone Landscape Character Type is considered to be good. The historic pattern of fields bounded by stone walls is generally intact, although in places, neglect and loss of field boundaries is evident. The patchwork of semi-improved pasture, semi-natural woodland (with pockets of limestone heath and juniper scrub) and limestone pavements contribute to good ecological condition overall, though some species rich pastures are declining owing to lack of mixed grazing.

Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be continued positive changes in the form of continued protection of limestone pavements, restoration of unimproved calcareous grassland and ancient woodland through agri-environment schemes.

Negative changes are likely to include changes to hill farming practices which may alter the visual characteristics of the limestone hills and outcrops which are highly visible in the landscape. Increasing development pressure could clutter the current openness within views to the coast and interrupt skylines.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within the Landscape Character Type C: Coastal Limestone are outlined below:
• **Agricultural Change and Land Management** - CAP reform may lead to further reduction in stocking levels which in turn, may lead to increased rough grassland and scrub on the hills and outcrops. Conservation grazing initiative re-introducing hardy cattle breeds to help maintain limestone grassland and control scrub regeneration, especially on SSSIs. The continuing trend in the amalgamation of farming businesses may result in key landscape features being lost through neglect or removal to enable the amalgamation of adjacent fields. This, in turn, may lead to the creation of a more homogenous landscape with less distinctiveness and loss of localised character. Changes to hill farming practices may also alter the visual characteristics of the limestone hills and outcrops, which are highly visible in the landscape. This over-intensification could impact directly on important species and habitats and the visual characteristics of the landscape.

• **Climate Change** - Some niche and vulnerable species may not be able to adapt to climate change and maybe lost from this distinctive range of habitats.

• **Development** - Further limestone extraction would directly affect the limestone features of this area and may fundamentally alter the texture and pattern of the landscape. Energy related development (wind turbines, pylons) would interrupt key skylines and views out towards the coast or of the rocky outcrops and hills, eroding valuable landscape quality. An increase in traffic associated with tourism and recreation pressurising the road system could also lead to inappropriate highway developments. Increased accessibility would also put pressure on sensitive habitats.

**Sensitivities and Capacity for Change**

The patchwork of very rich flora on unimproved, species-rich calcareous grassland, ancient woodland and limestone pavement flora, including yew, juniper, hazel, buckthorn and ash, contribute to the ecological sensitivity of this Landscape Character Type. Ecological value is further recognised by designation of parts of the limestone landscape as SSSI and SAC. In addition, a strong sense of openness, with generally uninterrupted skylines, coupled with strong intervisibility with adjacent Landscape Character Types to the south, contribute to overall high visual sensitivity. Taking into account the above sensitive natural attributes and the dispersed settlement pattern of ancient farms, overall capacity to accommodate change without compromising key characteristics is considered to be limited.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type is to conserve important limestone grassland/ancient woodland habitats and manage changing upland landscape to retain key aesthetic and ecological qualities.

Specific guidelines include:

**Physical Character**

- **Target** agri-environment payments to conserve distinctive limestone characteristics; and
- **Conserve, enhance and expand** characteristic woodlands close to the coast and on limestone scarps and summits.

**Ecological Character**

- **Conserve** and **enhance** significant ecological assets such as calcareous grassland and other limestone habitats, semi-natural and ancient woodland and fen, maintaining a patchwork of habitats within the landscape;
- **Encourage** habitat linkage to increase robustness to climate change; and
- **Avoid** woodland planting on sensitive mossland and limestone grasslands.
Cultural and Historic Character

- **Conserve** past mineral workings taking into account an assessment of the historic value of such sites;
- **Encourage** management of designed landscape that retains design qualities; and
- **Identify** and plan for potential impacts of climate change on designed landscape in order to better understand ability to adapt, for example succession planning for parkland trees.

Aesthetic and Perceptual Character

- **Protect** key views and skylines from inappropriate development and clutter in order to retain strong sense of openness within views.
TYPE D: LOWLAND

CHARACTER ASSESSMENT

Location

The Lowland Landscape Character Type is situated at the western edges of the Lake District National Park, to the north of Ravenglass. Adjacent Landscape Character Types include High Fell Fringe (J), Coastal Margins (B), Estuary and, Marsh (A), and the Upland Valleys (H) of Eskdale and Wasdale. This Landscape Character Type also continues outside the National Park boundary.

Definitive Attributes

- Gently rolling or undulating low-lying topography, dissected by meandering river valleys;
- Underlain by sandstone;
- Pasture fields dominate land cover, with pockets of woodland, arable fields, scrub and more marginal land, dominated by hedgerow field boundaries;
- Ecological character comprises a combination of semi-natural ancient woodland and wetland habitats, along river corridors and within botanically rich exposures of sand; and
- Settlement pattern consists of a combination of dispersed and nucleated settlements and scattered farmsteads.

Physical Character

This Landscape Character Type is underlain by sandstone. Occasional meandering valleys dissect an otherwise generally rolling or undulating topography. The landscape is low-lying in nature (generally below 100m AOD).

The predominant land cover is pasture, with pockets of woodland, arable fields, scrub and more marginal land. This combination exhibits a muted and relatively harmonious colour across the landscape. Hedges, fences and hedgerow trees dominate field boundaries, denoting a recognisable landscape pattern.

Ecological Character

Within this Landscape Character Type, ecological interest is particularly notable within areas of semi-natural woodland, wetland habitats along river corridors and botanically rich exposures of sand. Hedgerows also provide key wildlife habitats and corridors.

The ecological importance of part of the Lowland Landscape Character Type is recognised by the designation of Drigg Holme (on the floodplain of the River Irt) as a SSSI. The site comprises a suite of neutral and acidic grasslands within a rich and varied hay meadow flora, with over 150 different flowering plants visible. Species-rich hedgerows with guelder rose, willow, hawthorn, blackthorn and sycamore present also divide up the area.

Cultural and Historical Character

A mixture of historic landscape types is visible within the current landscape, consisting of former common fields, ancient enclosures, small patches of intakes and blocks of planned enclosures. There are also large blocks of plantation woodland, with fragments of ancient woodland. The pattern of distribution of these landscape types relates to topography, with the former common fields situated on the low-lying western side of the area, and the planned enclosure plus much of the plantation woodland, on the higher ground. Between are zones of ancient enclosure interspersed with blocks of planned enclosures.

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4 This Landscape Character Type is identified within the Cumbria Landscape Classification as Landscape Character Type 5: Lowland. For further information on this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
1. The High Fell Ridge provides a dramatic backdrop to this low-lying area © CBA
2. Aerial Photograph showing typical field pattern © GeoPerspectives
3. Gently rolling or undulating topography © CBA
4. Predominately pasture land cover © CBA
enclosure, some intakes and scattered ancient woodland. Hedgerows are the dominant type of field boundary with stone walls restricted largely to the planned enclosures of the fell edges.

The historic core of Ravenglass village has been designated as a Conservation Area to protect its special architectural and historic interest and character.

Development, Settlement and Building Character

- Settlement pattern consists of dispersed and nucleated settlements and scattered farmsteads, and a number of late Georgian houses in mature landscaped grounds;
- The two main settlements of Gosforth and Ravenglass have quite different characters. Whilst Gosforth has a linear core of 17th to 19th century buildings, surrounded by large housing estates, Ravenglass is a small historic medieval market centre and port, with a unique identity; and
- The use of local building materials, in particular Eskdale granite and St Bees red sandstone, forms a consistent feature of farmsteads, houses and older parts of settlements.

Landscape Character Sub-Types

Two Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these Sub-Types are generally typical of the Lowland Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

Sub-Type D1: Low Farmland

- Intensively farmed agricultural land below 100m AOD;
- Predominantly pasture land cover, with occasional patchy woodland and arable farmland; and
- Generally large fields bounded by hedges or fences and/or hedgerow trees, however, tree clumps, riverside and hedgerow trees are notable features as well as hedgebanks.

Sub-Type D2: Rolling Lowland

- This Sub-Type is located adjacent to the western edges of the National Park and lies predominantly outside the Park boundary;
- Lowland agricultural landscape, dominated by undulating topography, with dissecting valleys;
- Land cover is dominated by pasture and some woodland, scrub and other marginal land; and
- Hedgerow trees and hedgerows are dominant on lower ground, with variable field patterns relating to topography.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:

- Commons created on low lying ground;
- Planned enclosure fields on higher ground;
- Inter-mixing of enclosure, intakes and ancient woodland on middle ground; and
- Historic development of Ravenglass as the key settlement within this area.

Current Landscape Condition

The overall condition of the Lowland 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

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

Negative changes may include the amalgamation of farms, leading to a change in the character of the valley floors with new access tracks and larger fields being created to improve efficiency. 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 large agricultural buildings (potentially for over-wintering stock) affecting character and views. Increased financial pressures and reduced availability of higher level agri-environmental payments leading to field boundaries, walls and hedges suffering from lack of management.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within the Landscape Character Type D: Lowland 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 landscape characteristics of this 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 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 distinct characteristics of this area. Encroachment of large scale developments 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

The natural or ecological sensitivity of this Landscape Character Type is represented by a combination of semi-natural woodland, wetland and hedgerows. A pattern of ancient enclosures, the predominantly rural character, pockets of parkland and the low density, dispersed settlement pattern, contributes to overall cultural sensitivity. Overall, visual sensitivity is judged to be moderate. In places, woodland and hedgerows limit views, whilst there is strong intervisibility with adjacent High Fells. Overall the Lowland Landscape Character Type is considered to have limited to moderate capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

The overall strategy for this 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. This landscape is a patchwork of different land uses on low-lying topography dissected by meandering river valleys. This diversity is its key characteristic.
Specific guidelines include:

**Physical Character**

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

**Ecological Character**

- *Encourage* conservation of existing key landscape features and habitats; and
- *Encourage* habitat linkage to increase robustness to climate change.

**Cultural and Historic Character**

- *Encourage* conservation of significant historic features and buildings;
- *Encourage* sympathetic new uses for disused farm buildings to ensure they remain a viable and contributory feature within this landscape; and
- *Encourage* the use of local building materials, in particular Eskdale granite and St Bees red sandstone.

**Aesthetic and Perceptual Character**

- No guidelines recommended.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:

**Sub-Type D1: Low Farmland**

**Physical Character**

- No guidelines recommended.

**Ecological Character**

- *Target* agri-environment schemes toward wetland, hedgerow, and small woodland management, to mitigate against the negative impacts of farm intensification on landscape character and reduction of habitat value and water quality due to climate change.

**Cultural and Historic Character**

- *Manage* recreational development, housing, farm development and road improvements/traffic management to prevent cumulative urbanisation of rural landscape and loss of rural roads character; and
- *Conserve* and *manage* boundary features (hedges, hedgebanks and stone walls) where possible within the agricultural landscape to enhance landscape structure.

**Aesthetic and Perceptual Character**

- No guidelines recommended.

**Sub-Type Type D2: Rolling Lowland**

**Physical Character**

- No guidelines recommended.

**Ecological Character**

- No guidelines recommended.
Cultural and Historic Character

- **Target** agri-environment payments and use development control to protect and maintain landscape features and support the maintenance and restoration of vernacular buildings and the careful design of new buildings.

Aesthetic and Perceptual Character

- **Conserve** and **enhance** the open landscape and the distinct patchwork of land uses to reinforce landscape character.
TYPE E: COASTAL SANDSTONE

CHARACTER ASSESSMENT

Location

The Coastal Sandstone Landscape Character Type is located along the West Coast (adjacent to the Estuary and Marsh (A) and Coastal Margins (B) Landscape Character Types), and bordered inland by High Fell Fringe (I) and Rugged/Angular Slate High Fell (G). Outside the National Park, this Landscape Character Type extends northwards along the coastline to encompass the sandstone cliff scenery of St. Bees Head, with its lighthouse and rolling coastal hills. This Landscape Character Type also continues outside the National Park boundary.

Definitive Attributes

- Landscape underlain by a relatively broad band of Triassic sandstone (and mudstones), producing low-lying ground that is suitable for agriculture;
- Gently rolling topography slopes gradually upwards in a west to easterly direction, from the sea towards the dramatic rising High Fells to the east;
- Strong sense of openness prevails in several locations, with extensive views westwards across the Irish Sea and eastwards towards the imposing High Fell backdrop;
- Hedgerow network, pockets of semi-natural woodland and a number of small river or stream corridors running through the landscape, provide ecological interest; and
- Settlement pattern consists of a combination of small red sandstone hamlets or villages and dispersed farmsteads.

Physical Character

The landscape is underlain by a relatively broad band of Triassic sandstone (and mudstones), which line the western coast from Silecroft in the south, to Drigg and further north, outside the National Park at St. Bees. Most of the underlying rocks are fairly soft, producing low-lying ground that is suitable for agriculture. For a long time, this sandstone has provided a key resource as a local building material (as is evident at the 12th century Calder and Furness Abbeys).

Gently rolling topography slopes gradually upwards in a west to easterly direction, from wide expanses of sea towards the dramatic rising High Fells to the east. Sandstone cliffs do not dominate the western edge of this Landscape Character Type (as is the case further north at St. Bees) however to the north of Bootle, the subtle gradient of a steeper coastal profile begins to develop.

As a result of the predominantly flat to rolling topography, a strong sense of openness prevails in several locations, with extensive views westwards across the Irish Sea and eastwards towards the imposing High Fell backdrop.

Ecological Character

Land cover is dominated by rolling pasture fields, divided by a combination of hedgerow and hedgebank field boundaries. Woodland cover is generally absent; however, occasional small patches and copses of trees punctuate the landscape.

Within this Landscape Character Type, the hedgerow network, pockets of semi-natural woodland and a number of small river or stream corridors running through the landscape, provide ecological interest. Where this Type extends to the north outside the National Park, the dramatic cliffs at St. Bees provide an important breeding site for a variety of seabirds.

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5 This Landscape Character Type is identified within the Cumbria Landscape Classification as Landscape Character Type 4: Coastal Sandstone. For further information on this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
1. Subtle gradient of the sandstone coastal profile © CBA
2. The imposing High Fell backdrop to the east of the LCT © CBA
3. Landscape underlain by Triassic sandstone, producing low-lying ground that is suitable for agriculture © CBA
Annaside SSSI (between the sea to the west and the River Annas to the east) provides a nationally important site for Natterjack toads, whilst Annaside and Gutterby Banks SSSI encompasses a sequence of interbedded tills, sands, gravels and silts (related to the glacial history of the Cumbrian coast). There are also several natterjack toad sites and ponds along the coastal edge and throughout the farming hinterland. At Silecroft, Shaw Meadow and Sea Pastures SSSI supports a mosaic of species rich wet pasture, lowland heath, more and acid grassland.

Cultural and Historical Character

The coastal sandstone is markedly different to most of the other Landscape Character Types. The area was heavily settled in the prehistoric and later periods, and the cropmarks of enclosures and other features are visible from the air. The area contains very little woodland, and is characterised by large former common fields, surrounded by ancient enclosures and blocks of planned enclosure. Field boundaries are mainly hedgerows and hedgebanks, with fencing where hedges have not been maintained. The settlement pattern is mixed, with dispersed farms across the whole character type, and small settlements such as Silecroft, Bootle and Hycemoor sited next to their associated former common fields. Two further common fields appear to relate to Annaside, which can be considered as an agglomerated settlement (a loose nucleated settlement) where dwellings may be widely spread, but clearly grouped. Single ancient farms form the basis of the dispersed settlement pattern.

Development, Settlement and Building Character

- Settlement pattern consists of a combination of small hamlets or villages and dispersed farmsteads spread across the Landscape Character Type;
- The settlements of Silecroft, Bootle and Hycemoor, sited next to their associated former common fields contribute to the pattern;
- The distinctive red colour of the local sandstone is visible as a building material within the buildings of several of these settlements, such as Bootle; and
- In this exposed, open landscape, the older buildings are tightly grouped for shelter, with farm buildings using locally available cobbles and rubble, in contrast to the houses which have a neater, weatherproof render finish

Landscape Character Sub-Types

There are no Sub-Types within the Coastal Sandstone Landscape Character Type.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- Construction of Sellafield Nuclear Power Station;
- Creation of caravan parks along the coastline; and
- Railway line developed parallel to the shoreline in the south.

Current Landscape Condition

The overall condition of the Coastal Sandstone Landscape Character Type is considered to be moderate to good. The rolling pasture fields are generally in moderate ecological condition, however, there is evidence of the loss of traditional hedgebanks that delineate field boundaries. This has led to a weakened landscape pattern.
Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be continued positive changes in the form of access to the coast. However, negative changes are likely to include the associated increase in recreational and development pressure.

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

- **Agricultural Change and Land Management** - The current neglect of boundary features, enabling the amalgamation of adjacent fields and in many places substitution by fences, could continue as financial pressures increase within the farming industry. The amalgamation of farming businesses could also create more homogenous landscapes with less distinctiveness and loss of localised character. Meanwhile access related pressures on the landscape are likely to increase and will require intervention in order to manage conflicting land uses and mis-use.

- **Climate Change** - The erosion of the distinct sandstone cliffs due to increasing storm events and/or sea level changes may, over time, change the defining characteristics of this area. Climate change could also lead to an increase in invasive species better suited to climatic conditions affecting key landscape characteristics.

- **Development** - Increased development around Sellafield and other similar industrial complexes may result in visually intrusive buildings in open landscape. Similarly the spread of residential development around villages without appropriate consideration of siting and effect on local landscape character is likely to affect the quality of the landscape. A loss of traditional skills and reduction in the use of appropriate local materials will erode distinctive characteristics of the landscape. The increase in size of residential properties could also lead to greater visibility and loss of landscape quality.

Sensitivities and Capacity for Change

The Coastal Sandstone Landscape Character Type is considered to have high visual sensitivity as a result of the strong sense of openness throughout and strong intervisibility with the High Fells. Patches of semi-natural ancient woodland, and the network of mature hedgerows contribute to ecological sensitivity, whilst the pattern of former common fields, surrounded by ancient enclosures, contribute to overall cultural sensitivity. Overall, the capacity of this Landscape Character Type to accommodate change without compromising key characteristics is considered to be limited to moderate.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type is to sensitively manage increased access to the coast, and ensure appropriate new development minimises impact on local character. The extensive views, rolling coastal topography and dramatic cliff scenery are important features to conserve and enhance.

Specific guidelines include:

**Physical Character**

- **Identify** and **implement** opportunities for managed coastal realignment in appropriate locations to mitigate the impact of storm events and prevent coastal squeeze; and

- **Conserve** and **enhance** boundary features to improve and maintain landscape structure;
Ecological Character

- **Improve** and **restore** habitat for Natterjack toads; and
- **Encourage** habitat linkage to increase robustness to climate change.

Cultural and Historic Character

- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Manage** future increased access to the coast in order to avoid conflict with other land uses and loss of landscape quality and biodiversity;
- **Manage** development around Sellafield and other similar industrial complexes to minimise visually intrusive buildings in open landscape; and
- **Guide** new development around villages to ensure appropriate siting, use of local materials such as sandstone and consideration of effect on local landscape character.

Aesthetic and Perceptual Character

- No guidelines recommended.
TYPE F: RUGGED/CRAGGY VOLCANIC HIGH FELL

CHARACTER ASSESSMENT

Location and Boundaries

This is the largest Landscape Character Type and covers land above the fell wall, encompassing a broad band running east to west across the central part of the Lake District. To the north, Rounded, Angular High Fells (G) and Upland Valleys (H) dominate, whilst to the south, Low Fell (K), Lowland Valleys (M) and Coastal Margins (B) border this Landscape Character Type.

Definitive Attributes

- The underlying geology is the Borrowdale Volcanic Group of igneous rocks, with areas of granite to the west;
- At the largest scale, the LCT has a dome-shaped topography, with the highest point being Scafell Pike;
- From the highest point, ridges radiate out, with the landform gradually lowering towards the edges of the Lake District;
- Uplifting panoramic external views from the fell summits, including the Cumbria Coastal Plain, Irish Sea, Isle of Man and Morecambe Bay from western and southern fells, the Northern Pennines, Howgills and Yorkshire Dales from the Helvellyn Range and eastern fells;
- Superimposed on this are complex topographical patterns caused by glacial and fluvial erosion;
- Land cover is generally either bare rock, scree or low-growing vegetation, with low-density sheep grazing occurring over much of the area;
- There are scattered tarns and a complex network of becks;
- Little woodland cover in general, although important areas of juniper and native oak woodland remain (particularly extensive in Borrowdale), with small areas of commercial conifers (particularly in the west);
- The fell wall marks the edge of the open land, with remains of archaeologically earlier enclosures and field systems within upland areas;
- Settlement above the moorland line is limited to isolated farms, with very few occupied buildings; and
- Archaeological remains of settlement and industrial sites scattered within the Upland Fell landscape.

Physical Character

The Borrowdale Volcanic Group of rocks underlies this Landscape Character Type. These rocks are igneous and formed as volcanic lavas and ash flows, which erupted approximately 450 million years ago, with areas of granite towards the west of the area. The Borrowdale Volcanics Group forms the highest and craggiest part of the Lake District. The highest peaks are Scafell Pike (978m), Scafell (964m), Helvellyn (950m), the Old Man of Coniston (803m) and the Langdale Pikes (736m). At the simplest level, the area has a dome-shaped topography, with the ridges radiating out from the highest point of Scafell Pike. Between the ridges lie the lakes and valleys of the central Lake District. The landform gradually lowers towards the edges of the National Park.

Tens of thousands of years of erosion by ice, water and weather have created a highly complex topography within this Landscape Character Type. There are classic examples of glacial features such as arêtes, corries, and corrie lakes, pyramidal peaks, hanging valleys, drumlins, moraines and U-shaped valleys. There are also examples of V-shaped valleys, which have been eroded by streams, and of frost shattering of rocks to produce scree slopes.

Soils are thin and generally acidic, although base minerals in crags have weathered to produce small pockets of fertile soils, particularly alongside watercourses. Where underlying rocks are sufficiently impermeable, peat has developed on the surface. The poorness of the soils means that vegetation growth is generally limited to low-growing vegetation on the higher ground, although there is a wide diversity of species present. The majority of the Landscape Character Type is grazed by hardy sheep, including the locally distinctive Herdwick breed, resulting in an upland mosaic of vegetation cover,
TYPE F: RUGGED / CRAGGY VOLCANIC HIGH FELL

1. Tens of thousands of years of erosion by ice, water and weather have created a highly complex topography © NTPL / Joe Cornish
2. Aerial Photograph showing typical field pattern © GeoPerspectives
3. Land cover is generally either bare rock, scree or low-growing vegetation © NTPL / Joe Cornish
4. View across the fells, Base Brown, Borrowdale © LDNPA
including grass, bracken, heather and bilberry. There are remnant areas of native oak woodland and juniper, particularly on valley sides; these are extensive in some areas such as Borrowdale and Hartsop. There are also areas of wood pasture and occasional small trees such as rowan or birch, particularly within gills.

Ecological Character

The upland fells of the Lake District contain a number of habitats, which are rare in the UK. Certain species thrive here on the relatively poor soils and in the harsh environment. Consequently, extensive tracts of fell within the Landscape Character Type (totalling 26,999 ha) are designated Special Areas of Conservation for the species and habitats they support. Additional areas are designated SSSIs. Due to historic overgrazing and loss of upland habitats, the ecological character of the High Fells is in large parts highly impoverished. This situation is, however, now improving, and Natural England reports many areas to be ‘unfavourable recovering’ (which means that, whilst these habitats are not yet fully restored, providing that the appropriate recovery and management measures are sustained, the area will reach favourable condition in time).

Many of the upland tarns contain rare aquatic plant and animal species, some of which are confined to individual tarns, such as the powan fish (locally known as “schelly” in Red Tarn, Helvellyn). Areas of exposed rock, including screes and rocky slopes support a variety of ferns, grasses, mosses, and occasional scattered trees including aspen, holly, rowan, hawthorn and rock whitebeam.

The ground cover vegetation contains important wet and dry upland heathland habitats, blanket bogs, and also the most southerly examples of montane heaths found in Britain. Montane heath and grassland is widely distributed among the High Fells (above 700m). On some of the highest summits (particularly Helvellyn), there are remnant alpine species such as moss campion, and areas of disturbed ground due to frost heave and solifluxion, which provides a rare, changing habitat for colonising species. There is a rich variety of flora within the Landscape Character Type, including tall herb ledge communities. These species grow alongside gills and on cliff ledges (e.g. on Helvellyn and Fairfield, Honister Crag, Scafell Pikes, Pillar, and Wasdale Screes), particularly where base-rich rocks have weathered to form relatively fertile basic soils.

There are some stands of juniper on valley sides (Birk Fell supporting the most extensive), and juniper bushes are also scattered on inaccessible cliffs and slopes around the area. Associated with them are open silver birch woods, with scattered rowan, ash, bird cherry, holly, hawthorn and dog rose. The cliffs of Helvellyn contain the only known population of upland downy willow in England.

There are important areas of atlantic oak woodland with rich bryophyte communities along some valley sides. These woods are particularly extensive in Borrowdale and near Hartsop, though smaller remnant patches occur throughout the area.

Cultural and Historical Character

Although today the Upland Fells are sparsely populated, the archaeological record reveals a rich history of settlement and industry across the area spanning several thousand years. Indeed, many of the areas, which appear the most ‘empty’ today (e.g. the areas around Devoke Water, Caw Fell and Stockdale moor); contain the most extensive archaeological remains of earlier settlement and activity. Prehistoric sites include the Central Fells Stone Axe Production Sites, Castlerigg Stone Circle (technically outside this Landscape Character Type, but visible from many points within it), and prehistoric hut circles and cairnfields scattered around the area. The routes of Roman Roads are still used along High Street and Wrynose/Hardknott Pass. There are many examples of medieval shielings, field systems and settlements in areas higher than those enclosed and settled today, such as Mickleden above Langdale. This settlement pattern may have been due to a milder climate, or to increased population pressure on the land. From medieval times onwards, much of the archaeology is industrial, and includes the remains of thousands of mines and mineral workings. As well as slate and building stone, the Upland Fells also produced lead, copper and silver ores, gold, and other minerals. In many areas, the shafts and entrances of these mines are still visible, along with their spoil tips, hushes, and occasionally abandoned buildings, trackways and pieces of machinery.
Extensive areas of post medieval enclosure define the field patterns within the eastern fells, both intakes and 19th century planned enclosures, which extend up onto the high moorland. The enclosures are large and irregular in shape, defined mainly by topography, and in places enclosure boundaries have not been maintained and the character is starting to revert to open moor.

The enclosure is slightly different in the central fells. From the late medieval period, enclosed areas were extended up the lower fell sides through intaking, and in the post-medieval period the intakes became extensive where topography allowed, providing cow pastures, with extensive, characteristic ring garths still extant in many areas. Open fields were usually small in these valleys, and were enclosed at an early date, apart from a small area in Great Langdale where part of the open field survived as a common until the 19th century. Herdwick sheep are native to this part of the Lake District landscape. After enclosure, the fells were left as unenclosed common land. This provided a communal grazing resource, with rights given to farmers to graze their sheep on individual sections. On this open land it was important that the sheep remained within a particular section of the fell, known as a ‘heaf’. Over time, and with diligent shepherding, this has become learnt behaviour that is passed from ewe to lamb over succeeding generations.6

**Development, Settlement and Building Character**

- Few occupied buildings, as the landscape has so little shelter, and is often a long way from farmed land;
- Occasional isolated farms in high valleys such as Boredale (to the east of Ullswater) but these are relatively rare;
- Several of the highest occupied buildings (a former shepherd’s bothy in the Black Sail valley above Ennerdale and former mine buildings in Coniston, Glenridding and Honister) are now Youth Hostels;
- The majority of the industrial buildings in the area (mostly now abandoned) were constructed in the 19th century, when the scale of mining and quarrying in the area increased to supply the needs of the industrial revolution and its associated building. The difficulty of transporting building materials in the Upland Fells meant that any construction used locally available stone; and
- Within these landscapes of old industry are impressive examples of high quality stonemasonry, using the very hard volcanic rock for wheelpits, associated water leats, retaining walls and inclined tramways.

**Landscape Character Sub-Types**

Three Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these sub-types are generally typical of the Rugged/Craggy High Fells Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

**Type F1: Upland Tarns**

- Tarns are scattered throughout the Landscape Character Type;
- Each has a very different character and sense of place;
- Some tarns such as Easedale Tarn and Red Tarn are deep corrie lakes; and
- Other tarns (such as Angle Tarn) are shallower and have formed in upland basins.

**Type F2: Upland Forests**

- Relates to scattered patches of 20th century coniferous plantations; and
- Sessile upland oak dominated woodland remnants, examples include Keskadale oak woodlands in the Newlands Valley.

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6 [http://www.fellsanddales.org.uk/trails/fell_sheep.pdf](http://www.fellsanddales.org.uk/trails/fell_sheep.pdf)
Type F3: Post-Industrial Landscapes

- The summit of Honister Pass has a large and active slate quarry - the presence of large-scale moving machinery, and its visual impact within the landscape give it a distinct character within this Landscape Character Type;
- The grey, craggy rocks with little vegetation in the area to the west of Coniston, including the Old Man of Coniston and Wetherlam has a long history of slate and mineral extraction, which is clearly visible in today’s landscape - this visible industrial archaeology makes the area a distinct cultural sub-type; and
- There are only two examples of an extensive industrial element in this landscape type – as noted above.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- A dynamic landscape constantly changing, evidence of past glacial activity and still being shaped by weathering
- Significant archaeological record demonstrating several thousand years of settlement which has influenced the landscape through farming, mining, cultural and religious activities, road building and fluctuating population density;
- Substantial evidence of increased industrial activity in the 19th century changing large parts of the landscape with current mining/quarrying activity continuing the process in a few places;
- Post-medieval enclosure defining field patterns within the eastern fells of large irregular fields defined limited by topography. Central fells with early enclosed fields extending up the fell sides, ring garths and extensive intakes providing cow pastures;
- More recent changes such as footpath erosion as the result of recreational pressures on key routes; and
- Lack of stone wall management and introduction of fencing in some areas, which may lead to a change in landscape pattern and visual clutter.

Current Landscape Condition

The overall condition of the Rugged/Craggy Volcanic High Fell Landscape Character Type is considered to be poor to moderate, due mainly to historic overgrazing of montane heathland habitats and blanket bogs. The condition, composition and structure of these habitats is, however, beginning to change with lower stocking rates and grazing levels increasing natural scrub and woodland regeneration. Much of the remaining semi-natural woodland has a poor age structure and suffers from grazing, preventing regeneration. Scrub is starting to develop in some areas of fell where grazing pressure has been reduced within this Landscape Character Type. In places, lack of stone wall management and replacement with fences is a visual detractor. Upland path erosion is also increasingly a visual detractor despite efforts to restore the worst affected areas.

Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be little discernable change in the landscape of the High Fells as the area is remote and the key agents of change are natural processes acting over the long term. However, negative changes within this timescale could occur as the result of any wind farm or other large-scale energy developments, increase in mining or quarrying activity and sustained pressure from recreational activities and increased fencing to restore habitats.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within Landscape Character Type F: Rugged/Craggy High Fell are outlined below:
• **Agricultural Change and Land Management** – Any changes to grazing pressure will affect the composition and structure of the vegetation in the long term. A retreat from marginal land may also lead to a loss of enclosure fields, changes in vegetation structure and an increase in large agricultural buildings for overwintering stock. In areas where stocking numbers are reduced, this may lead to a spread of invasive species, such as bracken and gorse, leading to development of scrub, then woodland and changed characteristics. More extensive farming of livestock may also result in a loss of key landscape features to enable the amalgamation of adjacent fields. Recent and future efforts to promote tree regeneration will also become increasingly apparent in the next 20 years, in some instances, right up to the tree line. Management of recreational activities, whether large national events or more local activities, can have positive and negative effects on the landscape. Careful planning and sensitive management can avoid or mitigate impacts; over management can compound effects and lead to deterioration in landscape quality. A reduction in non-native conifer woodland and planting of native woodland along gills and on valley sides would transform the existing character through reinforcement of positive attributes.

• **Climate Change** - Climate change has the potential to increase weathering activity, especially through flash floods, although it is unlikely to dramatically change what is already a dynamic landscape. However, an increase in invasive species better suited to new climatic conditions could affect key landscape characteristics. It is possible that the arctic alpine vegetation currently confined to the highest summits especially alpine and boreal species could be lost altogether and the altitudinal limit of woodland and dry heath could also increase. Fluctuating temperatures could also lead to an increase in incidences of moorland fires and an increase in the severity of storm events and summer droughts, could impact on open grown trees and woodlands. Increased flash flooding could also lead to gully erosion in upland becks, streams and rivers.

• **Development** - Large scale wind farms (within and near to the National Park) would radically change the nature of the uninterrupted fells skyline and key views and other large scale energy developments could introduce built elements into a landscape with few buildings or major structures, eroding the open and undeveloped character of this landscape. Increases in mining or quarrying activity, whilst not new to this landscape, could rapidly transform significant landscape features and lead to increased traffic on the roads and inappropriate highway improvements, changing the character of minor road corridors. Sustained pressure from recreational activities may cause long lasting scars without sensitive management. A loss of vernacular styles of building and use of inappropriate building materials may result in the loss of local landscape characteristics. In turn, this could also lead to a loss of traditional skills.

**Sensitivities and Capacity for Change**

The Rugged Craggy High Fells Landscape Character Type is considered to have 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. Rare, niche habitats associated with the upland tarns; and patchwork of wet and dry heathland habitats, blanket bogs, alpine and boreal heaths and tall herb ledge communities and remnant atlantic oak woods contribute to very high ecological sensitivity. This is recognised by the fact that much of the Landscape Character Type is designated as SAC and SSSI. Coupled with this, the type is considered to have high cultural sensitivity on account of the rich archaeological record of settlement and industry, including a range of sites and monuments from Prehistoric to Medieval periods. In addition, there is a strong sense of tranquillity and remoteness throughout. As a result of the above factors, this Landscape Character Type is considered to have very limited capacity to accommodate change without compromising key characteristics, apart from change which reinforces positive attributes, such as habitat enhancements, including sensitively placed gill and other woodland.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type is to conserve and enhance the mosaic of vegetation types, the exposed and undeveloped character of skylines and the overall strong sense of
remoteness and tranquillity. The rich archaeological record and rare niche ecosystems and habitats should be protected against disturbance and development pressures.

Specific guidelines include:

**Physical Character**

- **Encourage** grazing management that promotes more favourable condition of upland semi-natural vegetation; and
- **Encourage** the creation of native woodland on valley sides and lower fells;

**Ecological Character**

- **Promote** land management designed to achieve favourable condition of its important vegetation types and to improve resilience to the effects of climate change, including expansion of sensitively placed broadleaved gill and other woodland and improve other habitat linkages;
- **Encourage** broadleaved woodland regeneration or planting in appropriate locations which are at high risk of erosion and run off, to benefit water quality, and flood mitigation downstream. New native woodland can enhance the landscape, biodiversity and nature conservation interest of the area;
- **Control** invasive species that may spread as a result of new climatic conditions to ensure retention of key landscape characteristics of the high fells; and
- **Encourage** sensitive management and restoration of wood pasture habitat.

**Cultural and Historic Character**

- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape.
- **Protect** the stone axe production sites in the Central Fells from erosion, including that from footpaths;
- **Ensure** archaeological sites are cleared of bracken and scrub vegetation. A low level of stock grazing is a sustainable way of achieving this but at a level that avoids erosion;
- **Ensure** careful planning and sensitive management of recreational and tourism activities in order to maintain landscape quality;
- **Control** other large-scale energy, mining/ quarrying developments which could rapidly transform significant landscape features and characteristics;
- **Encourage** ongoing active management of enclosure fields, intakes and cow pasture as well as restoration of walls and isolated vernacular buildings;
- **Prevent** woodland establishment on historically important enclosed valley sides and archaeological sites;
- **Promote** whole fell grazing management where possible erecting new fences on open fell only where alternatives are not practicable;
- **Avoid** stone clearance and the use of ancient cairns, walls and buildings as sources of building or repair material;
- **Conserve** footpaths, bridleways or byways along with their associated features such as pinch stiles and gates, which represent historic routeways;
- **Ensure** careful design of new fencelines to minimise visual and perceptual impacts, for example avoiding crossing and close proximity to fell paths, siting below ridgelines etc; and
- **Remove** redundant fencing from fell.

**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; and
- **Maintain** the sense of openness and control the level and impact of fencing on unenclosed fell land.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:
Sub-Type F1: Upland Tarns

Physical Character

- **Prevent** point and diffuse pollution to retain water quality.

Ecological Character

- **Manage** recreational activities to prevent trampling of rare, niche ecosystems and habitats or development of erosion scars; and
- **Conserve** native flora and fauna through managing invasive species.

Cultural and Historic Character

- No guidelines recommended.

Aesthetic and Perceptual Character

- **Ensure** that large scale developments are subject to landscape character and visual impact assessment in order to minimise impact on key attributes and the undeveloped, open and tranquil character.

Sub-Type F2: Upland Forests

Physical Character

- **Encourage** active management of woodland, conversion of coniferous plantations to broadleaved, and **restore** woodland boundaries, to encourage regeneration of broadleaves and maintain varied structure.

Ecological Character

- No guidelines recommended.

Cultural and Historic Character

- **Encourage** extensive grazing that utilises enclosure fields, intakes and cow pasture and reduces pressure on woodland areas; and
- **Conserve** and **extend** broadleaved woodland, protecting against loss from development or agricultural intensification.

Aesthetic and Perceptual Character

- No guidelines recommended.

Sub-Type F3: Industrial Landscapes

Physical Character

- No guidelines recommended.

Ecological Character

- No guidelines recommended.
Cultural and Historic Character

- **Conserve** and **Enhance** industrial archaeological heritage, recognising its significant contribution to the cultural landscape;
- **Control** major new mining or quarrying activity which has the potential to rapidly transform significant landscape features; and
- **Ensure** careful planning and sensitive management of recreational and tourism activities in order to maintain landscape quality.

Aesthetic and Perceptual Character

- No guidelines recommended.
TYPE G: RUGGED/ANGULAR SLATE HIGH FELL

CHARACTER ASSESSMENT

Location and Boundaries

This Landscape Character Type is predominantly situated to the north of the National Park, with the outlier of Black Combe located further to the south-west. The High Fells of Skiddaw Slates are highly visible, and form prominent landmarks within most of the northern Lake District, with the rounded peak of Skiddaw summit, the saddle-shape of Blencathra, and the pointed top of Grizedale Pike being particularly distinctive features visible from a very wide area within and without the National Park. To the south, this Landscape Character Type borders Rugged, Craggy High Fells (F).

Definitive Attributes

- Geology of Skiddaw Slates, containing various mineral and metal deposits;
- Skiddaw slates are easily weathered, and this has resulted in the smooth profile of much of the Landscape Character Type;
- Elevated land within the type includes the summits of Skiddaw, Blencathra, Grisedale Pike, Causey Pike, Grassmoor and Black Combe;
- Uplifting panoramic external views from the fell summits, including the Irish Sea, Isle of Man and Morecambe Bay from Black Combe, and the Solway Coast and North Pennines from the northern fells;
- Predominantly covered by acid grassland and blanket bog, with some extensive blocks of forestry, including Whinlatter and Lamplugh Fell and generally little deciduous woodland;
- Enclosed fields are rare and restricted to lower ground and occasional settled valleys, with the majority of the Landscape Character Type as open moorland above the fell wall;
- Settlement is limited to occasional isolated buildings such as Skiddaw House hostel and properties in Mosedale; and
- Archaeology includes a Neolithic enclosure on Carrock Fell, and evidence of prehistoric settlement and stone axe production. The majority of the archaeology is industrial on the Caldbeck Fells, and relates to the extensive mining, which has taken place in the area for several thousand years. In contrast, Black Combe has little or no remains of former extractive industries.

Physical Character

The fells’ distinctive smooth, steep outlines are formed by their geology of easily-weathered Skiddaw slates. Within the general Skiddaw Slates area, the geology is extremely complex and contains numerous mineral veins and extrusions of relatively rare rocks such as gabbro. The area is therefore of great geological importance and has been extensively mined in the past. Evidence of mining activity is clearly visible in the form of tips, entrances and hushes on the hillsides.

The topography is complex. The overall structure of the Skiddaw massif is dome-shaped, and is cut by several narrow stream-cut valleys, including those of Glenrattera Beck, Dash Beck and Mosedale. There are also glaciated valleys, which are more rounded in profile. Blencathra and Bowscale Fell exhibit classic glacial features, including corries with craggy headwalls, corrie lakes and arrêtes. Of these, Sharp Edge on the eastern side of Blencathra is particularly well known as a challenging route.

The range of hills between Derwentwater and Crummock Water still retain a smooth profile, but their topography is much more pronounced, with steeper valleys and more pointed peaks. Further west, around Loweswater, the hills are lower, with a similar but smaller-scale topography.

Soils are generally thin and acidic, and peat formation has occurred in less well-drained areas. There are some areas of scree, and some recent landslips, particularly on steeper slopes in the western part of the area, and on the western side of Skiddaw, but the vast majority of the area is covered by surface vegetation. Vegetation is predominantly low growing, with rough acid grassland and heather, with some areas of bracken. The lower slopes support some higher vegetation, including gorse, juniper
Section 4.0 – Landscape Character Types

TYPE G: RUGGED / ANGULAR SLATE HIGH FELL

1. Prehistoric monuments indicate enduring influence of humans on this landscape © NTPL / Joe Cornish
2. Aerial photograph showing typical field © GeoPerspectives
3. Relatively narrow stream-cut valleys © CBA
4. The distinctive profile of the Fells’ edge, Back o’Skidda’ from Barkbethdale © LDNPA
and small trees such as rowan and hawthorn. In areas of lower grazing pressure, bilberry is beginning to re-appear.

**Ecological Character**

Since the foot and mouth outbreak in 2001, which saw a dramatic reduction in sheep numbers, the grazing pressure on the area has been reduced and this has already had a marked effect on the vegetation of the area.

A large proportion of this Landscape Character Type is designated SSSI and also forms part of the much larger Lake District High Fells SAC. The majority of the area is designated as a Special Area of Conservation. The type contains a number of habitats, which are rare within the UK, and have developed on the thin, acidic soils, and in the relatively harsh environment of this Landscape Character Type. Such habitats include wet and dry heathland, montane heaths and extensive areas of blanket bog. Skiddaw has the largest extent of heather and bilberry heath in the Lake District (approximately 3000ha). On the summit of Skiddaw, frost heave and solifluction create patches of disturbed ground, which provide suitable environments for moss and lichen species. Scree slopes also provide a suitable micro-climate for siliceous scree communities, and there are several rare species of fern and moss.

There is an important upland bird population, including merlin, buzzard, and red grouse. Twelve species of mammal (including roe deer) and five species of amphibian and reptile have been recorded on the Skiddaw massif. Old sessile oak woodlands (e.g. Birklegg, Keskadale and Brundholme) are found on steep south-facing slopes, and contain rich bryophyte and lichen communities.

Caldbeck and Uldale Commons, which are located on the Skiddaw Massif, and are owned by the National Park, are managed for their ecological and habitat value. There are currently several schemes in place aiming to diversify the vegetation in the area, including tree planting schemes, stock reduction on moorland, and a project to increase the juniper cover by germinating seedlings off-site then replanting them.

In addition, Buttermere Fells SSSI supports a range of montane and sub-montane dwarf shrub heath communities, including one of the largest known areas of Bilberry (*Vaccinium myrtillus*) heath in the Lake District with peregrine, merlin, raven and occasionally dotterel. This site also encompasses the nationally important sites of Keskadale and Birklegg sessile oak woods mentioned above.

Pillar and Ennerdale SSSI provides another area of ecological interest within this Landscape Character Type, designated as one of the best known examples of altitudinal succession in England. The varying woodland and heathland habitats within this site support one of the best breeding bird assemblages in West Cumbria, including buzzard, peregrine, merlin, raven, red grouse, wheat-ear, whinchat and ring ouzel.

**Cultural and Historical Character**

The archaeology of this Landscape Character Type reflects its past importance as a place for defence, settlement and industry. There is a concentration of archaeology around Carrock Fell spanning several thousand years, including prehistoric cairnfields, field systems and axe factory, a Neolithic Enclosure, and a medieval sheiling. There is also a significant concentration of industrial archaeology, including the Carrock End Copper Mine, and the Carrock Fell mines, which were used until the late 20th century and produced lead, tungsten, copper and arsenic. The remains of a 16th century wooden railway have recently been discovered in Silver Gill mine (Roughton Gill) which is a Scheduled Ancient Monument. Radiocarbon dating evidence has recently been obtained for both 12th century mining and smelting and part of a 16th century wooden railway at Silver Gill mine. The richness of the minerals in the Caldbeck Fells is summed up in the 18th century quote, Caldbeck and the Caldbeck Fells are worth all England else (*Hutchinson, W., 1974, The History of the County of Cumberland*). The past use of the Black Combe area of this Landscape Character Type is markedly different, with little known archaeology and no remains of former extractive industries present.
Development, Settlement and Building Character

- Distinctive lack of built structures in this elevated, exposed landscape;
- Very few walls, with buildings limited to isolated slate-built properties including the hostel at Back-o’-Skiddaw and properties in Mosedale; and
- Some Forestry Commission buildings, including a modern visitor centre, offices, and mid 19th century foresters’ cottages within Whinlatter Forest.

Landscape Character Sub-Types

Two Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these sub-types are generally typical of the Rounded/Angular High Fell Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

Sub-Type G1: Upland Valley

- A narrow settled valley to the north east of Blencathra at Mosedale;
- The valley contains improved fields, a farmstead and block of woodland; and
- There is a surfaced road running up the valley, which provides access to the higher fells.

Sub-Type G2: Upland Forests

- Whinlatter forest is an extensive upland area of Forestry Commission planted forest (acquired by the Forestry Commission in 1919);
- It is managed for commercial timber production and for recreation;
- Whinlatter Pass runs through the forest; and
- Blocks of plantation forestry exist on valley sides elsewhere, especially on slopes above Bassenthwaite Lake at Dodd Wood, Wythop Wood and Lamplugh Fell.

Sub-Type G3: Post-Industrial Landscapes

- The mineral workings in the Skiddaw/ Caldbeck area have a long history of mineral extraction, which is clearly visible in the today’s landscape.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:

- Glacial activity and continual weathering which has shaped geology and created a distinct upland landscape;
- Extensive mining of minerals leaving an area rich in industrial archaeology;
- Loss of dry heath and increase in acid grassland due to high grazing pressures (grouse butts now in grassland). Relatively recent dramatic reduction in stock numbers leading to the appearance of, heather, bilberry and juniper heath in areas of low grazing pressure;
- Retreat from marginal land leading to the loss of some enclosure fields and a change in vegetation structure;
- Sustained pressure from recreational activities causing lasting scars;
- More extensive farming of livestock leading to key landscape features suffering; and
- Lack of management (e.g. walls) and introduction of fencing, leading to some visual clutter.
Current Landscape Condition

The overall condition of the Rugged/ Angular Slate High Fell is considered to be poor to moderate, though improving. As a result of historic overgrazing, the condition of acid grassland, blanket bog and rough grassland is generally poor though recovery is beginning as a result of recent reductions in grazing. The condition, composition and structure of these habitats is, however, beginning to change with lower stocking rates and grazing levels leading to improved mosaics of upland vegetation. In places, lack of stone wall management, and replacement with fences is a visual detractor. Upland path erosion is also a visual detractor. There is generally good survival of historic and archaeological features.

Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be continued positive changes in the form of several schemes, which aim to diversify the vegetation in parts of the area. The schemes involve gillside woodland planting, stock reduction on moorland and an attempt to increase juniper cover through off-site germination of seeds. Negative changes are likely to include an increase in the spread of invasive species such as bracken and gorse in areas where stocking numbers are reduced on existing pasture.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within the Landscape Character Type G: Rugged/ Angular High Fell are outlined below:

- **Agricultural Change and Land Management** - The regeneration and enhancement of moorland, woodland, gill and bog habitats will mature over the long term and enhance and reinforce the key landscape characteristics of the high fell. Conversely 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 characteristics, though this would eventually develop into woodland, potentially reinforcing positive attributes where sites are not sensitive. More extensive farming of livestock and reduced higher level agri-environment funding may also lead to a loss of stone walls on higher ground and an increase in large fields and large agricultural buildings for over-wintering stock. The sustainable management of heather moorland will help to contain excessive erosion and retain a key habitat. The reduction in non-native conifer woodland and the planting of native woodland in gills will gradually transform the existing character through reinforcement of positive attributes. Conifers may be acceptable in mixed woodland when this appropriate in the landscape, and nature conservation interests are not compromised, however, small-scale coniferous forestation will change the character and nature of the landscape.

- **Climate Change** - Fluctuating temperatures, precipitation and general weather patterns will continue to affect this dynamic landscape, leading to increases in incidences of moorland fire and excessive erosion, the possible spread of invasive species and changes in species composition of habitats. It is possible that alpine and boreal vegetation currently confined to the highest summits could be lost altogether and the altitudinal limit of woodland and dry heath could also increase. It is also possible that climate change will lead to increased flash flooding and gully erosion in upland becks, streams and rivers.

- **Development** - Large-scale renewable energy developments would break up the uncluttered skyline and key views and erode the open and undeveloped character of the area. There is also the potential for an increase in large agricultural buildings for over wintering stock and an increase in the size and visibility of residential properties. There is also potential pressure from tourist related developments affecting the quality of the landscape. Related to this, increasing traffic on narrow roads and car park development is likely to change the character of minor roads and tracks.
Sensitivities and Capacity for Change

The Rugged/Angular High Fell Landscape Character Type is considered to have very high visual sensitivity, as a result of the very open character, uncluttered skylines and associated long distance views. Areas that may appear to be hidden within one viewpoint are likely to be highly visible and exposed from another. There is strong intervisibility with the Upland Valley, and Rugged Craggy High Fell Landscape Character Types, towards the edges of the Fells, and with surrounding landscape types outside the National Park. In higher locations, views are limited by the elevated topography. The area also forms a striking backdrop in views from surrounding areas outside the park. In addition, the Rugged, Angular High Fells encompass extensive rare and fragile natural habitats, coupled with a rich archaeological resource. Sense of remoteness and tranquillity is generally very strong throughout the Landscape Character Type. As a result, overall capacity to accommodate change within this Landscape Character Type without compromising key characteristics is considered to be very limited apart from change which reinforces positive attributes such as habitat enhancements including sensitively placed gill and other woodland.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

The overall strategy for this Landscape Character Type is to conserve and enhance the diversity of habitat and species in the high fell and to protect key skylines and views from development. The open moor, rich mosaic of wet and dry heathland, exposed, uncluttered skylines and lack of built structures are valuable attributes of this landscape type that should be conserved.

Specific guidelines include:

Physical Character

- **Restore** areas at high risk of erosion where this threatens Bassenthwaite and other lakes through siltation; and
- **Encourage** the establishment of native woodland on valley sides and lower fells;

Ecological Character

- **Manage** the spread of invasive species;
- **Support** and **promote** schemes focused on the regeneration, extension and enhancement of moorland, woodland, gill and bog habitats to enhance and reinforce the key landscape characteristics of the High Fell;
- **Encourage** the sustainable management of heather moorland 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;
- **Encourage** broadleaved woodland regeneration or planting in appropriate locations, which are at risk of erosion and run off, to benefit water quality, and flood mitigation downstream. New native woodland can enhance the landscape, biodiversity and nature conservation interest of the area; and
- **Encourage** sensitive management and restoration of wood pasture habitat.

Cultural and Historic Character

- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape.
- **Protect** the stone axe production sites in the Central Fells from erosion, including that from footpaths;
- **Ensure** archaeological sites are cleared of bracken and scrub vegetation. A low level of stock grazing is a sustainable way of achieving this but at a level that avoids erosion;
- **Prevent** woodland establishment on historically on archaeological sites;
- **Ensure** effective planning for controlling moorland fires;
- **Conserve** footpaths, bridleways or byways along with their associated features such as pinch 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; and

• **Remove** redundant fencing from fell.

### Aesthetic and Perceptual Character

• **Maintain** the sense of openness and control the level of impact of fencing on unenclosed fell land;

• **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; and

• **Ensure** careful design of new fencelines to minimise visual and perceptual impacts, for example avoiding crossing and close proximity to fell paths, siting below ridgelines etc.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:

#### Sub-Type G1: Upland Valley

**Physical Character**

- No guidelines recommended.

**Ecological Character**

- No guidelines recommended.

**Cultural and Historic Character**

- No guidelines recommended.

**Aesthetic and Perceptual Character**

- **Encourage** sensitive location and design of large agricultural buildings for over-wintering stock and inappropriate development of prominent residential properties in order to maintain landscape quality.

#### Sub-Type G2: Upland Forests

**Physical Character**

- **Encourage** reversion of non-native conifer woodland to broadleaved, outside strategic Forestry Commission plantations and **expand** native woodland on valley sides and in gills, reinforcing landscape structure and diversity

**Ecological Character**

- No guidelines recommended.

**Cultural and Historic Character**

- No guidelines recommended.

**Aesthetic and Perceptual Character**

- No guidelines recommended.
**Sub-Type G3: Post-Industrial Landscapes**

*Physical Character*

- No guidelines recommended.

*Ecological Character*

- No guidelines recommended.

*Cultural and Historic Character*

- **Conserve** and **Enhance** industrial archaeological heritage recognising its significant contribution to the cultural landscape;
- **Control** major new mining or quarrying activity which has the potential to rapidly transform significant landscape features; and
- **Manage** existing and increased pressure from recreational and tourism developments throughout the area.

*Aesthetic and Perceptual Character*

- No guidelines recommended.
TYPE H: UPLAND VALLEY

CHARACTER ASSESSMENT

Location

The Upland Valley Landscape Character Type dissects the High Fells within the National Park, creating a distinctive pattern like the spokes of a wheel. In some instances, this Landscape Character Type continues outside the National Park boundary.

Definitive Attributes

- U-shaped valleys, formed by glaciers cutting through underlying rock, during the last Ice Age;
- Underlying geology varies, largely depending upon the geology of surrounding Landscape Character Types;
- Topography differs greatly, ranging from dramatic and steep valley sides with scree, sloping down towards a deep lake (in the case of Wasdale) to valleys with gently rolling sides with a slow-moving river on the broad valley floor;
- Valley floors are either dominated by a lake or river; and pastoral farmland, with distinctive patterns of drystone walls and barns;
- Valley sides are generally covered by a mixture of predominantly pastoral farmland (in-bye land) and woodland (deciduous, coniferous and mixed), with some of the steeper valley sides characterised by scree;
- Settlement pattern consists of isolated farms on the valley sides, small nucleated and linear settlements and small towns on the valley floor, at the edge of a lake or adjacent to a river;
- Many archaeological features can be found in the Upland Valley landscape; the cairnfields in the Ennerdale valley, the prehistoric rock art near Buttermere are all evidence of the rich cultural history of the landscape;
- Designed landscapes, parkland and former deer parks occur throughout the area, associated particularly with lakeshores and large country houses; and
- Communications (from winding single-track paths to busy dual carriage ways) generally run along the valley sides or follow the edge of the valley floor.

Physical Character

The U-shaped valleys of the Upland Valley landscape were shaped by glacial activity in the last Ice Age, when glaciers cut through the underlying geology (predominantly Borrowdale Volcanic Group). This has created a dramatic landscape where some of the deepest lakes are flanked by the highest mountains.

The soils of the lower valley slopes and valley bottoms often include stony, river-washed gravels. Lakeshores may be silty, shingled or rocky and sometimes abut scree slopes rising steeply to adjacent fells. Fallen boulders and rock outcrops occur on the lower valley sides with occasional rocky promontories protruding from the valley floor.

Land cover is dominated by rough pasture, many of the steeper slopes being covered with bracken, scrub and wood pasture. Many of the lower fields form the inbye for hill sheep farms. Fields predominantly consist of semi-improved and improved grassland, whilst irregular tracts of unimproved grassland and wetland are associated with lower-lying and wetter land. Mires, reed swamps and carr woodland are also present at lake-heads and in places along lakeshore.

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7 This Landscape Character Type is partly identified within the Cumbria Landscape Classification as Landscape Character Type 8: Main Valleys. For further information on elements of this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
Section 4.0 – Landscape Character Types

TYPE H: UPLAND VALLEY

1. Drystone walls bound regular fields in the dry valley bottoms © NTPL/Joe Cornish
2. Typical settlement pattern, Ambleside © LDNPA
3. The vast scale of the landscape is evident from the valley floor © NTPL/Joe Cornish
4. Valleys, are often dominated by a lake or river © NTPL/Joe Cornish
Ecological Character

Ecological character consists of a diverse patchwork of lakes, mires, and rivers, woodland and bogs, which support a rich variety of invertebrates and wildfowl. Linear broadleaved woodlands often edge streams and watercourses draining the valley bottom. Small patches of birch, willow and alder carr are typical in lowland mires, around deltas and at the lake edges. Copses and individual broadleaved trees, usually ash and sycamore, are found by hamlets and farmsteads. Single mature trees, especially pollarded ash, are also a feature, as are clusters following walls or in close proximity to buildings.

Within the Upland Valley Landscape Character Type, areas of important semi-natural atlantic oak woods and associated rich bryophyte flora remain on lower valley sides. Naddle Forest, Birk Fell, Low Wood, Lodore Wood Troutdale Woods, Borrowdale Wood Complex and Wast Water are all designated as Special Areas of Conservation (SAC). In addition, Duddon Valley Woodlands, Baybrown Wood and Thirlmere Woods are designated as SSSI.

Bassenthwaite Lake is designated as a National Nature Reserves (NNR), SSSI and SAC. The lake supports a population of vendace, a fish that is only found in one other location in the UK. There is also an extremely rich aquatic flora, including the nationally scarce floating water-plantain, six-stamened waterwort and thread rush. The reserve has a range of habitats from open water to wet woodland and supports important collections of breeding and wintering birds.

The River Derwent and tributaries SSSI encompasses a diverse natural succession of plant communities from source to mouth and contains salmon, brook and river lampreys. Derwent Water also has populations of the nationally rare fish called vendace. Other lake-related ecological designations include Ennerdale SSSI – for its characteristics freshwater flora and fauna which include examples of nationally rare willow and alder carr and drier oak woodland; and Elterwater SSSI – one of the least disturbed examples of lakeshore wetlands in South Cumbria.

Cultural and Historical Character

The pattern of field boundaries is dominated by formal and informal boundaries that are representative of historic enclosure. A small to medium scale, predominantly rectilinear, intricate pattern of fields crosses the valley bottoms, where fields are enclosed by a mixture of well-maintained hedgerows and dry-stone walls with occasional, traditional, vertical slate flag walls and iron railings. At the valley heads and floor edges, an irregular, smaller-scale, more ancient pattern of walled enclosures (which are generally those that pre-date the enclosure acts of the late 18th and early 19th centuries) reflects the undulating landform. In places, walls and hedges have been removed, become derelict, or modern fencing materials have been introduced and new boundaries created. This weakens the traditional, ordered patterns of fields.

Many archaeological features can be found in the Upland Valley landscape. The cairnfields in the Ennerdale valley, the ancient stone art near Buttermere, are all evidence of the rich cultural history of the landscape.

There are important former deer parks, designed landscapes and areas of parkland within this area which are key characteristics, particularly around lakes and associated with large country houses, for example around Rydal and Grasmere which often cross into neighbouring areas of high fell. Their mature trees make a highly significant positive contribution to the lakeland landscape.

Settlement and Built Character

- This Landscape Character Type contains the majority of settlements in the Lake District, from individual vernacular farmsteads to the busy town of Keswick;
- Settlement pattern generally consists of hamlets and tight-knit small settlements huddles by the lakeshores, with farmsteads and barns scattered on the rising ground of the lower valley sides and valley heads;
- A great wealth of fine historic buildings, which include 10 Conservation Areas;
• Architecture ranges from medieval halls, traditional vernacular, romantic picturesque Georgian, to railway tourism and Victorian imposing developments of housing, hotels and terraces;
• Settlement character ranges from traditional agricultural (Hartsop, Troutbeck, Watendlath, Kentmere) to former industrial communities (Glenridding, Chapel Stile, Elterwater, Staveley), to the picturesque wooded settlement (Grasmere, Rydal) to key market towns/ tourist centres (Keswick and Ambleside);
• Traditional stone and slate buildings are a distinctive part of the landscape fabric. Together with the pattern of field boundaries they represent a continuity of traditional agricultural land use for inbye land, linked to the hill sheep farming system;
• This type has particularly good examples of buildings illustrating the history of farming, from impressive 17th, 18th and 19th century bank barns to small field barns; and
• In a valley situation, the settlement focus is very often a bridging point, and this type contains many examples of bridges, from packhorse to more formal 18th and 19th century structures, which add an important element to the built character.

Landscape Character Sub-Types

Four Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these Sub-Types are generally typical of the Upland Valley Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

Sub-Type H1: Valley with Lake

• Predominantly flat landscape, dominated by lakes of varying sizes and shapes;
• Combination of habitats along the immediate lakeshore, including reeds, parkland, pasture with copses and broadleaved trees and woodland giving a soft appearance; and
• Footpaths often follow lakeshore.

Sub-Type H2: Valley with River Floodplain

• Predominantly flat landscape;
• Valley floor dominated by river floodplain which may include a broad or relatively narrow river corridor;
• Pasture fields generally run alongside the river, with occasional meadows and clumps of woodland adjacent to the river course; and
• Scattered farmsteads within the valley bottom and pattern of stone walls at field boundaries.

Sub-Type H3: Enclosed Valley Side

• Sloping landform, forming the lower slopes of the dale;
• Patchwork of predominantly pastoral fields, delineated by a series of stone walls, or in some cases, hedgerows (‘in-takes’); and
• Often lined with clumps of trees, with some wood pasture or more extensive patches of woodland.

Sub-Type H4: Open Valley Side

• Sloping landscape, forming the higher slopes of the dale, which form a transition a transition zone with adjacent High Fells on both sides of the dale;
• Generally open landscape, with few divisionary walls or boundaries; and
• Often grazed, with some areas of juniper scrub, wood pasture and patches of woodland.
CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- Gradual change in the pattern of settlements as population and land use change over time;
- Increasing influence of linear elements such as road and rail interfering with natural contours and sinuous lines in the landscape and disruption of tranquillity from traffic noise and movement;
- Improvement of pasture to create fields that are intensively grazed and subsequent loss of species diversity and changes in colour and texture of the landscape;
- Small to medium rectilinear and intricate field pattern created through historic enclosure, now being eroded through lack of management and introduction of new boundaries and materials;
- Pollution from agricultural run off from adjacent pastoral fields; and
- Lack of management of some parkland landscapes as use reverted to purely agricultural.

Current Landscape Condition

The overall condition of the Upland Valley Landscape Character Type is considered to be good, with high water quality within most lakes, rivers and waterbodies, rich biodiversity in the largely intact hedgerow network and patchwork of woodlands, and a strong archaeological record. There are, however, some elements of declining condition: some hedgerows, hay meadows, walls, pollards, mature trees and vernacular buildings are in poor condition and evidence of a gradual loss of traditional management is apparent.

Future Landscape Changes and Opportunities

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

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

- **Agricultural Change and Land Management** - Farming is no longer the main contributor to many Lake District communities with many farmers now having an off farm source of income. This area is vulnerable to reduced farming activity and a potential amalgamation of farming businesses into more extensive holdings increasing the demand for new agricultural buildings with an intensive approach to livestock rearing affecting character and views. Potential amalgamation of farming businesses may also lead to the creation of more homogenous landscape with less distinctiveness and loss of localised character. This may have a knock on effect on the maintenance of key landscape characteristics, in particular boundary features and species rich pasture and floodplain habitats. The neglect of hedges around enclosed land may reduce potential landscape and wildlife benefits and lead to substitution by fences. Woodland is not currently extensive in this character type, however existing coniferous woodland may over time be replaced by native broadleaves. Many of the existing broadleaved woodlands are unmanaged, with a poor age structure and thus vulnerable to loss over the longer term. Many designed landscapes and parkland are at risk of gradual loss from lack of replacement planting or conservation of key features.

- **Climate Change** - Increasing temperatures may encourage further expansion of tourist related activities putting further pressure on limited resources. Water quality in rivers and lakes may also be affected, having a negative effect on aquatic habitats and expansion of alien species into upper
catchments. 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 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 and second homes will lead to a loss of pasture or estate land developments.

**Sensitivities and Capacity for Change**

Overall character and visual sensitivity within this Landscape Character Type are considered to be high,
as a result of the generally strong intervisibility with surrounding Landscape Character Types. A diverse
patchwork of lakes, mires and rivers, rich floodplain and lakeshore habitats, woodland, designed
landscapes, parkland and bogs contribute to overall high ecological sensitivity. In addition to this, the
rectilinear, intricate pattern of fields crossing the valley bottom, delineated by a network of well-
maintained hedgerows and dry stone walls and ancient pattern of walled enclosures at dale heads,
contribute to overall high cultural sensitivity. As a result of the above factors, this Landscape Character
Type is considered to have very limited capacity to accommodate change without compromising key
characteristics.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type, is to conserve and enhance the distinct pattern of
settlement, fields, boundaries, parkland and woods to maintain landscape quality. The inherent
characteristics of the Upland Valley should be reinforced through ensuring an appropriate balance
between definitive attributes of pasture, settlement and the patchwork of diverse habitats.

Specific guidelines include:

**Physical Character**

- **Encourage replacement of coniferous species by native broadleaves in order to strengthen landscape
  character; and**
- **Conserve, enhance and sensitively expand broadleaved woodland.**

**Ecological Character**

- **Manage** water quality in rivers and lakes to minimise pollution on aquatic habitats; and
- **Encourage** habitat linkage to increase robustness to climate change.

**Cultural and Historic Character**

- **Conserve** the distinctive pattern of early enclosure of upland moor as typified by the presence of
  small irregular intakes, bounded by stone walling, outgangs and isolated farmsteads or hamlets;
- **Support and encourage** an actively but sensitively farmed landscape. In particular farms that use
  extensive grazing methods on sensitive sites and maintain key landscape characteristics such as
  boundary features, trees and species rich habitats;
- **Conserve** historic routeways preserved as footpaths, bridleways o byways along with their associated
  features such as pinch stiles and gates;
- **Ensure** that the expansion of tourist-related activities does not compromise landscape quality;
• **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;
• **Conserve and enhance** designed landscapes, parkland, deer parks and historic estates, encouraging their active and sympathetic management and restoration;
• **Encourage** replacement planting of mature in-field and boundary trees;
• **Clear** archaeological sites of bracken and scrub vegetation. A low level of stock grazing is a sustainable way of achieving this but at a level that avoids erosion;
• **Identify** and plan for potential impacts of climate change on designed landscape in order to better understand ability to adapt, for example succession planning for parkland trees;
• **Conserve** distinct landscape features and areas that are vulnerable to developments such as highway improvements or the expansion of villages and tourism facilities;
• **Encourage** development proposals, which respect or reinforce local vernacular character; and
• **Conserve** archaeological and historic environment features such as packhorse and other bridges which have a strong influence on landscape character.

**Aesthetic and Perceptual Character**

• No guidelines recommended.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:

**Sub-Type H1: Valley with Lake**

**Physical Character**

• No guidelines recommended.

**Ecological Character**

• **Protect** water bodies from diffuse and point source pollution in order to maintain water quality and conserve aquatic habitats.

**Cultural and Historic Character**

• No guidelines recommended.

**Aesthetic and Perceptual Character**

• No guidelines recommended.

**Sub-Type Type H2: Valley with River Floodplain**

**Physical Character**

• No guidelines recommended.

**Ecological Character**

• **Protect** watercourses from point source and diffuse pollution and encourage more natural drainage systems where appropriate.

**Cultural and Historic Character**

• **Conserve** vernacular bridges (including stone Packhorse bridges), which facilitate access and contribute to the cultural and aesthetic value of the landscape.
Aesthetic and Perceptual Character

- No guidelines recommended.

**Sub-Type Type H3: Enclosed Valley Side**

*Physical Character*

- **Conserve** and **enhance** wood pasture and mature individual trees especially pollards and open grown specimens and encourage succession planning.

*Ecological Character*

- No guidelines recommended.

*Cultural and Historic Character*

- **Conserve** and **enhance** stone walls and field barns in order to strengthen and reinforce distinctive landscape pattern.

Aesthetic and Perceptual Character

- No guidelines recommended.

**Sub-Type Type H4: Open Valley Side**

*Physical Character*

- **Support** grazing regimes that maintain and encourage juniper scrub and wood pasture on the higher valley sides, and contribute to a key characteristic of the valley landscape.

*Ecological Character*

- No guidelines recommended.

*Cultural and Historic Character*

- No guidelines recommended.

Aesthetic and Perceptual Character

- No guidelines recommended.
TYPE I: UPLAND LIMESTONE FARMLAND

CHARACTER ASSESSMENT

Location and Boundaries

The Upland Limestone Farmland Landscape Character Type extends along the northern and eastern edge of the Lake District, flanked by the High Fell Fringe Landscape Character Type. It is part of a broader band of Limestone, which stretches north and eastwards outside the National Park8.

Definitive Attributes

- Dominated by Carboniferous Limestone geology, which gives rise to a typical upland limestone farmland landscape;
- Topography is primarily gently rolling, forming a stark contrast with the ruggedness of the neighbouring volcanic rocks of Borrowdale and Skiddaw;
- The openness of the landscape facilitates panoramic views in places;
- Strong intervisibility with landscape to the north of the National Park boundary and with the rising mass of Blencathra;
- Typical limestone landscape features such as pavements and scars are less common than the Coastal Limestone LCT in the south;
- Improved and semi-improved pastoral farmland (the fields lined with hedgerows) dominates this landscape in the north, with occasional clumps of trees and small woods adding variety. To the west and east drystone walls predominate, with extensive parkland and (mainly coniferous) plantations, associated with the Lowther Estate, in the east;
- Lacking in large expanses of ancient woodland and woodland plantations; ancient woodland, with occasional small copses (both deciduous and coniferous) more of a feature towards the east;
- Settlement pattern consists of several small villages (for example, the historic villages of Caldbeck and Askham) and dispersed farmsteads. Several historic halls and Estates and deer parks are also dotted across the landscape;
- Archaeological features such as limekilns (for example at Aughertree Fell, near Caldbeck) and old quarries are evidence of the industrial activities, which helped to shape this landscape. Other archaeological elements include stone circles, ‘tumuli’ and Roman forts;
- A network of secondary roads connects the scattering of villages and farms; and
- To the west of Shap and east of Bampton, the landscape is characterised by a pattern of medium to large-scale regular-shaped fields.

Physical Character

Typical limestone surface features such as large scars and gorges are generally absent in this predominantly open farmland landscape. There are localised outcrops of pavement and small scars in places, particularly in the east at Burtree Scar and Knipe Scar, and Clints Crags in the west. The underlying geology of the area is reflected, in the building materials used for dispersed farms, field boundaries and village buildings and stone wall field boundaries. This is generally a gentle and rolling landscape, the topography of which offers extensive views towards the central High Fells and in open parts, across the lowland landscapes outside the National Park.

Clints Crags SSSI provides one of the best examples of limestone pavement in West Cumbria with additional interest provided by an area of calcareous grassland to the south. The pavement at Clints Crags comprises one major block with a steep scar to the south and moderate terracing to the north. The clints are massive and uniform in size with very few solution features, whilst a high proportion of the grikes are deep and narrow. The pavement supports open ash woodland with wych elm, rowan, hawthorn and hazel.

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8 This Landscape Character Type is identified within the Cumbria Landscape Classification as Landscape Character Type 12: Higher Limestone. For further information on this Landscape Character Type outside the boundaries of the National Park, refer to Cumbria Landscape Classification, Cumbria County Council (October 2005).
TYPE I: UPLAND LIMESTONE FARMLAND

1. Improved pastoral farmland with hedgerow lined fields dominated in the north of this LCT © CBA
2. Aerial Photograph showing typical field pattern © GeoPerspectives
3. The openness of the landscape facilitates panoramic views in places © CBA
The improved and semi-improved pastoral farmland is divided in small, generally regular fields, which are typically lined with hedgerows. Tree cover is generally sparse or absent, apart from some occasional extensive coniferous plantations and occasional woodland clumps.

Ecological Character

Herb-rich calcareous grassland and woodland habitats, including ancient clough woodland, provide considerable ecological interest throughout this Character Type, as do the becks, rivers and mires.

The River Eden and its tributaries cross this Landscape Character Type in several places, and are designated as Special Area of Conservation (SAC) and SSSI for the high diversity of aquatic plants, native, white-clawed crayfish and a high diversity of breeding birds associated with the riparian habitats.

Clints and Moots disused quarries contain several pools that support large great crested newt populations. In addition, habitats associated with the quarry spoil, early successional vegetation and surrounding pasture, culminate in designation of these sites as a SAC and SSSI.

Cultural and Historical Character

To the north, the landscape is dominated by the former common field systems of the villages of Caldbeck, Uldale and Ireby, though the latter lies just outside the National Park boundary. These former common fields are larger than average for the National Park. Around these are ancient enclosures, and beyond these, to the north are some intakes and then open commons, which extend beyond the Park boundary. There are only a few small patches of planned enclosures, on the edges of the former common fields around Calbeck and Ireby. In addition to the villages of Calbeck, Uldale and Ireby there are a number of dispersed farms, which tend to be scattered across the ancient enclosures, with some following the fell edge near Calbeck. The field boundaries are almost all hedgerows and contain large numbers of standard trees. In the west the village of Blindcrake has anciently enclosed, narrow, walled strip fields fossilising the ancient open field structure, and the remains of medieval deer parks associated with Isel Hall. In the East are extensive parkland remains and estate villages associated with several historic estates which extend outside the National park in several places.

Settlement and Built Character

- Settlements are generally dispersed or nucleated in form stretching evenly across the Upland Limestone Farmland. Building styles reflect the local vernacular, using locally available limestone;
- A strong architectural unity throughout this fringing area, with fairly formal 17th, 18th, and 19th century traditional buildings using locally available limestone and sandstone, with slate roofs;
- A range of attractive settlements characterises this Landscape Character Type, from the linear arrangement at Blindcrake, to the village greens of Askham, Helton, Hesket Newmarket and part of Calbeck, and to the 18th century planned estate village of Lowther. 5 of these settlements are designated Conservation Areas;
- These settlements illustrate very clearly factors such as geology, land quality and ownership, as well as reflecting Medieval field patterns and later agricultural and economic prosperity.

Landscape Character Sub-Types

There are no Sub-Types within the Upland Limestone Farmland Landscape Character Type.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- Improved and semi-improved pasture with occasional planned woodland and tree planting
- Influence of large managed estates establishing a mixture of parkland and small hamlets
• Former common field systems around villages showing move from mixed farming to predominantly livestock based farming; and
• Disused limekilns and quarries indicating previous industrial activity shaping the landscape.

Current Landscape Condition

The overall condition of the Upland Limestone Farmland Landscape Character Type is considered to be good to moderate, resulting from the rich ecological condition of herb-rich calcareous grassland and woodland habitats, beckas, rivers and mires and the survival of historic estate features. Woodland and clumps of trees are generally well managed, and there is an intact hedgerow and wall network. There are some elements showing signs of decline in places, particularly the loss and poor maintenance of occasional hedgerows and replanting of historic parkland with conifers. Much of the remaining parkland is in moderate condition with key features lacking maintenance and a lack of replanting of parkland trees.

Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be continued positive changes in the form of small-scale changes such as low impact diversification into bed & breakfast accommodation or other tourism related ventures. The diverse patchwork of herb-rich calcareous grassland and woodland habitats are likely to continue in positive management as much of the land is part of the wider National Trust estate.

Negative changes are likely to include a slow erosion of character within villages through loss of vernacular styles of building and use of inappropriate materials. The area is popular with artists and wind turbine development occurring on important skylines would have a significant impact on landscape quality.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within Landscape Character Type I: Upland Limestone Farmland 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, particularly where very narrow strip fields still persist. This could then have a 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. Larger farm sizes increase the demand for new large agricultural buildings, affecting character and views. In turn, this could lead to the creation of a more homogenous landscape with less distinctiveness and loss of localised character. Small-scale coniferous forestation could change the character and nature of the landscape.

• **Climate Change** - Climate change could have an impact on agricultural practices and with evidence of mixed farming in the past, there could be a move in the future to plough up pasture and plant crops. These could be anything from vegetables, animal feed, 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 views eroding valuable landscape quality. Similarly, the loss of vernacular styles of building and use of inappropriate building materials will result in the loss of local landscape characteristics and have a knock on effect on this distinct Landscape Character Type. At present the road network is predominantly rural and could face significant highway improvements in the future as the result of increasing traffic flows. Increased mining or quarrying activity could also rapidly transform significant landscape features. Limestone extraction could also fundamentally...
affect the texture and pattern of the landscape. A potential increase in tourism and growth in holiday developments and second homes could lead to a loss of pasture or estate land to development.

**Sensitivities and Capacity for Change**

Herb-rich calcareous grassland and woodland, meadows and disused quarries, contribute to the relatively high ecological sensitivity of this Landscape Character Type. Cultural and archaeological sensitivity is high in the west and east associated with historic estates and parks, and moderate elsewhere. Overall visual sensitivity is moderate to high. In the north this is judged to be moderate owing to the rolling landform, but in the west and east, visual sensitivity is judged to be high where sensitive cultural landscapes coincide with open landforms). There is a predominant sense of openness, however patches of woodland provide a sense of enclosure and limit long distance views in places, particularly in the north of the area. Intervisibility with the adjacent High Fell and High Fell Fringe Landscape Character Type is strong making the area highly sensitive to interruption by large scale vertical features which would interrupt views into and out of the area. Overall, the Upland Limestone Landscape Character Type is considered to have limited to moderate capacity to accommodate change without compromising key characteristics.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type, is to conserve and maintain the diverse patchwork of habitats, historic landscape and vernacular built character and to protect skylines and views into and out of the area. This landscape type is particularly vulnerable to neglect and loss of diversity of its key landscape features such as common field systems, strip fields, parkland, dispersed settlement and mature hedgerow and wall networks.

Specific guidelines include:

**Physical Character**

- No guidelines recommended.

**Ecological Character**

- **Encourage** habitat linkage to increase robustness to climate change.

**Cultural and Historic Character**

- **Target** agri-environment schemes to provide support for the conservation and maintenance of key landscape features, including parkland;
- **Ensure** highway improvement schemes respect and reflect the local character to retain local landscape quality;
- **Conserve** and **maintain** the wall and hedgerow network (with hedgerow and in field trees) to contribute to the reinforcement of landscape pattern;
- **Identify** and plan for potential impacts of climate change on designed landscape in order to better understand ability to adapt, for example succession planning for parkland trees;
- **Ensure** that historic buildings and features are conserved and restored and that new buildings and construction is located and designed appropriately; and
- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape.

**Aesthetic and Perceptual Character**

- **Protect** skylines and 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, especially around the highly sensitive, strip field, estate and parkland areas in the West and East.
TYPE J: HIGH FELL FRINGE

CHARACTER ASSESSMENT

Location and Boundaries

The High Fell Fringe Landscape Character Type occupies an area to the north and west of the National Park, with an isolated area to the southeast. It is bordered almost entirely to the north and west by the Upland Limestone Farmland (I) and to the south by High Fells (F and G) or Upland Valley (H) Landscape Character Types.

Definitive Attributes

- Within this fringe environment the underlying geology is transitional, with six different types of underlying geology represented;
- To the north, the transition from Carboniferous Limestone through the Borrowdale Volcanic Group and into the Skiddaw Group is represented, whilst to the west, the transition from sandstone to Borrowdale Volcanic Group and south east, the transition from Silurian Flags and Slates to Coniston Limestone is visible;
- Topographically, landscapes within this type vary from 100m to 300m AOD;
- A transitional landscape, between more open moorland or fell and lower, more enclosed landscapes;
- Hills are dissected by numerous streams and minor river valleys;
- Predominantly improved pasture and meadows with a pattern of stone walls giving way to hedges at lower levels;
- Small patches of woodland on steeper slopes and alongside streams and rivers, with numerous field boundary trees and tree clumps occurring around farms;
- Scattered farms and hamlets, served by minor roads and specifically located at the base of the slopes; and
- Archaeological remains are prolific throughout this Type, with many scheduled monuments including prehistoric funerary cairns, field systems, hut circles, stone circles and Roman forts.

Physical Character

The transitional geology imparts a generally non-coherent character within this Landscape Character Type. The landscape varies between intimate pastoral patterns of small fields to rolling higher topography with long distance views.

To the south east, the landscape comprises rolling hills with occasional rocky outcrops, which are dissected by numerous streams and minor river valleys. Here, landcover is predominantly improved pasture and meadows with a strong pattern of stone walls giving way to hedges at lower levels.

The rich and varied geology of this Landscape Character Type, has led to designation of several sites as Sites of Special Scientific interest for their geological interest. The quarry at Little Mell Fell provides an example of an outcrop of Cockermouth Lava, whilst Thornsgill Beck, Mosedale Beck and Wolf Crags show strongly weathered sections of pre-Devensian till overlain by Late Devensian till. These deposits, together with a Loch Lomond Stadial moraine at Wolf Crags and meltwater deposits in Mosedale, provide an exceptional geomorphological and sedimentary record in this part of the country. The weathered tills are particularly significant in providing the clearest evidence available of pre-Devensian glaciation in north west England.

In addition, the Waberthwaite Quarry faces and outcrops within this site provide exposures of a rock-type known as granodiorite.

Ecological Character

Ecological interest is mainly confined to small sites designated as National Nature Reserves (NNR) and Sites of Special Scientific Interest (SSSI). Many of these are wetlands or woodlands. Ecological interest
TYPE J: HIGH FELL FRINGE

1. Predominantly improved pasture and meadows at lower levels © CBA
2. Aerial Photograph showing typical field patterns © GeoPerspectives
3. Dispersed farms are generally of the ‘great rebuilding’ of the late 17th century © NTPL/Alasdair Ogilvie

Lake District National Park Landscape Character Assessment and Guidelines  September 2008
in other areas has been depleted by agricultural improvement. There are, however, a number of small ancient semi-natural woodlands scattered within the landscape.

Eyckett Hill SSSI comprises three separate parts; the largest centred on Naddles Crags with smaller areas alongside the road to the north and adjacent to Greenah Crag Farm to the south. The interest of the site is both geological and biological though the latter is restricted to the mire-swamp system around Naddles Crags and the unimproved grasslands of the roadside verge to the north.

The mire-swamp system at Eyckett Hill covers approximately 12 ha and has a topographical situation, which is unique in West Cumbria, combined with an unusual drainage pattern. It occupies several parallel troughs in the underlying Eyckett Volcanic Rock, which is important in providing a source of bases to the mire. The troughs are partially blind-ended and peculiar in that they largely drain through clefts in the intervening ridges towards the lower lying Skiddaw Slate landscape to the west. These physical attributes, together with the relatively unimproved and closed nature of the catchment, have given rise to an interesting combination and variety of mire communities supporting several nationally uncommon plant species. Mungrisdale Mires and Overwater are also designated as SSSIs within this Landscape Character Type.

Cultural and Historical Character

Fells within this Landscape Character Type are dominated by intakes and ancient enclosures, which probably represent late medieval assarts. Field boundaries are mainly hedgerows, with stone walls restricted to the intakes, and around the edges of ‘thwaite’ farms. The vast number of Scheduled Monuments (SM) within this Landscape Character Type, including prehistoric cairnfields, monuments and earthworks, hillforts, Roman forts and medieval moated sites, demonstrates lengthy human occupation, giving a strong historical character. There are some areas of parkland and designed landscapes associated with historic estates around Dalemain, Dacre and Muncaster Castle.

Development, Settlement and Building Character

- Predominantly dispersed settlement pattern, with building groups, hamlets and small villages scattered over the area;
- Settlement names include a number of ‘thwaites’, such as Branthwaite, Farthwaite, Orthwaite and Sillathwaite, indicating that these settlements were established from woodland clearings;
- The dispersed farms are generally good examples of the ‘great rebuilding’ of the late 17th century, as most of the sites were already established in medieval times along the river and valley sides;
- Buildings reflect the very varied underlying geology and surface river/ glacial materials, with the use of boulders, cobbles, Skiddaw black slates, green slates, granite, limestone and sandstone; and
- Of particular significance in this Landscape Character Type are the well known examples of Grade1 listed medieval buildings, such as Dacre Castle and Church, Muncaster Castle and Church, and Hutton John Fortified Hall House.

Landscape Character Sub-Types

There are no Sub-Types within the Hill Fell Edge Landscape Character Type.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Past Landscape Changes

Observable changes in the past include:

- A wide variety of settlements and land use over time, demonstrated through the varied archaeology of the area;
- Improved pasture surrounded by stone walls where intensive farming has spread onto higher ground;
- Overgrazing, resulting in a lack of taller vegetation, particularly alongside streams and on valley sides and lack of woodland regeneration;
• Outside of protected nature conservation areas ecological interest has been depleted through agricultural improvement; and
• In the past the creation of settlements through woodland clearances, indicated through place names (Thwaites).

**Current Landscape Condition**

The overall condition of the High Fell Fringe Landscape Character Type is considered to be generally good. There are relatively few sites important for their ecological habitats in this type as it is predominantly improved agricultural land, but there are numerous sites of historic and archaeological interest, including prehistoric funerary cairns, field systems, hut circles, stone circles and Roman forts. The stone walls and hedgerow network are generally well maintained. However, there is some evidence of the loss and poor maintenance of some hedgerows and loss of field boundary trees. The limited areas of parkland and designed landscapes in this type are generally in good condition.

**Future Landscape Changes and Opportunities**

In the short term (5 years) it is likely that there will be continued positive changes in the form of on-going management within SSSIs and National Nature Reserves. Similarly, the vast number of Scheduled Monuments will ensure a continued protection of important archaeological features within the landscape.

Negative changes are likely to include reduced budgets of national agencies and organisations to actively conserve protected areas and the continued decline of valuable habitats and features within the wider landscape. Increasing tourist visits to and through this area may increase the pressure on vulnerable areas.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park 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 Landscape Character Type J: High Fell Fringe are outlined below:

• **Agricultural Change and Land Management** - The intimate stream and river corridors are vulnerable to pollution and run-off associated with the predominantly adjacent pastoral fields. As these aquatic features have a high biodiversity value, improvements in catchment sensitive land management will have a positive effect on key habitats and landscape features in the area. 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, 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. Increasing erosion activity could deplete the historic landscape record and increase the deterioration of important historical features.

• **Development** - As with many rural areas in the Lake District, increasing traffic associated with tourism and recreation could put pressure on the road system. This in turn could lead to inappropriate highway improvements 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

Overall, this Landscape Character Type is considered to have moderate ecological sensitivity, with valuable ecological sites confined to wetlands or woodland (depleted in places by agricultural improvement). Cultural and historic sensitivity is high as a result of the rich archaeological record of prehistoric cairnfields, monuments and earthworks and local areas of parkland and designed landscapes. In addition to this, a dispersed settlement pattern predominates throughout. There is strong intervisibility with adjacent higher Landscape Character Types giving high visual sensitivity. Overall the High Fell Fringe Landscape Character Type has limited to moderate capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

The overall strategy for this Landscape Character Type is to protect and conserve the existing rich landscape resource and seek to conserve and enhance the wider landscape beyond protected areas. The strongly recognisable landscape pattern and its important natural and cultural features need special attention.

Specific guidelines include:

Physical Character

- **Actively manage** the changing landscape to ensure key landscape features and attributes are not lost through climate change or other significant agents of change;
- **Encourage** broadleaved/native woodland planting in selected areas, away from archaeological remains; and
- **Encourage** the appropriate management of semi-natural woodland, including the conservation of historic features such as charcoal pitsteads, charcoal burners huts, woodbanks, pollards, saw-pits, stone walls and tracks.

Ecological Character

- **Improve** water quality within surrounding upland catchments to protect and conserve aquatic habitats.
- **Encourage** restoration of bankside vegetation along watercourses; and
- **Encourage** sustainable management of moorland, wood pasture, gill woodland and wetland habitats.

Cultural and Historic Character

- **Conserve** the archaeological and historic environment in order to maintain a rich cultural landscape;
- **Clear** archaeological sites of bracken and scrub vegetation. A low level of stock grazing is a sustainable way of achieving this but at a level that avoids erosion;
- **Retain** landscape elements such as stone gateposts and limekilns;
- **Avoid** stone clearance and the use of ancient cairns, walls and buildings as sources of building or repair material;
- **Target** agri-environment schemes to conserve and enhance valuable landscape features, including traditional farm buildings, gill woodland and rich archaeological features; and
- **Maintain** the strong landscape pattern through active management and enhancement of stone walls and other boundary features.

Aesthetic and Perceptual Character

- **Conserve** the rural character of the existing road network; and
- **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.
TYPE K: LOW FELL

CHARACTER ASSESSMENT

Location
The Low Fell Landscape Character Type occupies a large proportion of the south eastern corner of the National Park and is dissected by a number of Lowland Valleys (Type M). To the south, the Low Fell slopes downwards to meet the Low Fell Fringe (L), Coastal Limestone (C) and Coastal Margins (B) Landscape Character Types. To the north, the dramatic backdrop of the Rugged/Craggy High Fells provides the setting to the Low Fell Landscape Character Type.

Definitive Attributes
• A landscape of low undulating fells and ridges, which are dissected by Lake Windermere and Coniston Water;
• Rugged Fells which rise to approximately 300m in height and are dissected by streams and minor river valleys;
• Underlying geology of siltstones and mudstones;
• Large areas of semi-natural and coniferous woodland;
• Land cover consists of a diverse patchwork of rough grassland, semi-improved pasture, small broadleaved and coniferous copses, rock outcrops, heathland, tarns and becks, small wetlands, mires and bracken;
• Dispersed settlement pattern, served by a network of minor roads and tracks;
• Strong landscape pattern of dry stone walls, villages, hamlets, isolated farms and barns, built from local limestone and slate; and
• Traffic noise impacts from the A590 trunk road.

Physical Character
The Low Fell Landscape Character Type is predominantly underlain by a combination of siltstones and sandstones of the Silurian Age (from the Windermere Group). The rocks dip gently to the south, leaving generally steeper north facing hillsides. Despite their relative low height in comparison with adjacent High Fells, the elevated open land on tops of ridges within this Landscape Character Type provides striking long distance views northwards towards the Higher Fells and to Morecambe Bay to the south.

The folded and fractured shales have produced a smooth and more rounded landscape of rolling wooded hills (semi-natural and coniferous woodland) and valleys with rocky ridges and basins of improved grassland. Large ‘allotments’ also exhibit complex mosaics of grassland, heath, mire and juniper scrub, with a diverse and luxuriant ground flora.

The landscape to the west of Windermere is one of the most densely wooded areas in England, with extensive stands of oak and birch interspersed with stretches of ash and alder. These woodlands are often associated with the numerous stream valleys that cut through them. Woodland is thinner on some of the western slopes, leaving yew, oak, birch and hazel, juniper and holly. In places there are extensive conifer plantations, especially around the Grizedale area.

At lower levels, open grassland predominates, with notable contrast between rich green improved pasture enclosed by stonewalls and open moorland of rough grass, bracken and remnant heather. In places, however, the contrast is weakened by intervening semi-improved grassland.

Intricate patterns of undulating and twisting minor roads which serve the scattered hamlets and farmsteads are sporadically lined with hedges or shrubby vegetation and mature individual trees including ash, oak and hazel; the lanes are an important part of the landscape.
TYPE K: LOW FELL

1. Strong landscape pattern of dry stone walls with a diverse patchwork of land use types © CBA

2. Aerial Photograph showing land use pattern © GeoPerspectives

3. Rural settlement is predominately dispersed and built of local material, then lime rendered © NTPL/Val Corbett
Ecological Character

The Low Fell Landscape Character Type supports a diverse range of habitats, including yew woods, broadleaved and mixed woodland and coniferous plantation, quarries, basin mires, man-made tarns, unimproved pastures and flushes, swamps and mosses.

Ecological interest is signified through designation of several habitats within this Landscape Character Type. Yewbarrow Woods SSSI, which lies within the well-wooded Rusland Valley is also designated as SAC for its extensive stands of yew.

This Landscape Character Type is particularly rich in important wetland sites including Claife Tarns and Mires SSSI, noted for its rich wetland flora and its outstanding assemblage of dragonflies; and Ludderburn and Candelstick Mires SSSI in which 15 species of bog moss have been recorded. In addition to this, Jenny Dam supports a population of medicinal leech. Blelham Bog, also within this Landscape Character Type, was thought to be an example of a natural 'hydroseral' succession from wet willow woodland to sphagnum bog, however, recent research has suggested that the character of the site might be largely man-made, the result of peat cutting and the diversion of local streams in the 19th century. Although a small reserve, the site has diverse habitats including two bog types, wet woodland, dry acidic woodland and acid grassland and is notable for its invertebrate population.

Subberthwaite, Blawith and Torver Low Commons SSSI (which is also designated SAC) offers another wetland habitat of transition mires and quaking bogs, located on a broad hilly plateau with mires dominated by tall sedges and rushes with mixed herbs over a ground layer of bog-mosses and feather mosses. Tarn Hows is also noted for its aquatic plants and mire habitat. Additional ecological interest is provided within Tarn Hows SSSI, which is designated for its particularly diverse aquatic flora.

Cultural and Historical Character

This Landscape Character Type is characterised by ancient woodland, most of which was coppiced to serve various woodland industries, such as iron smelting, gunpowder manufacture and bobbin making. Single ancient farms form the basis of the dispersed settlement pattern, which is evident in the landscape today. The field systems within the structure of woodlands comprise blocks of ancient enclosures, amongst extensive former common waste, which were enclosed systematically in the late 18th and 19th centuries.

The LCT also contains Grizedale Forest, woodland which was planted from the late 18th century onwards within intakes and planned enclosure, and much of which is still coniferous. In other areas small patches of plantation woodland are scattered amongst the ancient and planned enclosures, whilst there are a number of small tarns in the former common waste. Parkland dominates along the western shore of Windermere and occurs throughout the type. The apparently natural site of Tarn Hows is a designed landscape, with the lake formed from three smaller tarns and extensive woodland plantings, which attracts very large numbers of visitors.

Development, Settlement and Building Character

- Outside the main settlements, a predominantly dispersed settlement pattern of farmsteads and hamlets, with some good examples of large houses from the 17th, 18th and 19th centuries;
- Overall character is of an intimate settlement pattern, with a complex network of narrow, winding roads, a strong agricultural character with clusters of buildings dotted about the landscape;
- Hawkshead is an outstanding, unique example of a late medieval, 17th and 18th century small market town, packed with historic buildings and intimate yards and spaces, and is designated as a Conservation Area; and
- Building materials of Silurian slates, limestone, rubble and dressed stone, together with limewashed render add to the identity of this Landscape Character Type.
Landscape Character Sub-Types

Four Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these Sub-Types are generally typical of the Low Fell Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:

**Sub-Type K1: Forest**
- Expanses of dense semi-natural broadleaf, and coniferous woodland;
- Generally strong sense of enclosure; and
- Rough grassland clearings.

**Sub-Type K2: Parkland**
- Well-managed landscape with a parkland character of single mature native and ornamental trees amongst areas of managed grassland;
- Large country houses or halls and associated estate cottages form the main (often central) built elements; and
- Generally manicured appearance, which contrasts with surrounding more rugged types of landscape.

**Sub-Type K3: Farmland**
- Open, semi-improved pasture on shallow relief, which often consists of ridges and hollows;
- Dry stone walls, built from local limestone or slate;
- Landscape peppered with farmsteads and small vernacular hamlets; and
- Strong recognisable pattern of enclosure.

**Sub-Type K4: Moorland Ridge**
- Series of prominent knolls and ridges;
- Predominant land cover is grassland and moorland (generally open grazing common); and
- Strong pattern of stone walls forming field boundaries.

**CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES**

**Forces for Change**

**Past Landscape Changes**

Observable changes in the past include:
- Improvement of pasture leading to marked difference between enclosed fields and open moor;
- Introduction of a network of small tracks between settlements with the only major change over time being one of surface improvement;
- Large scale tree planting – coniferous woods making up Grizedale Forest, other plantations and individual specimen trees within parkland; and
- Amalgamation of farming businesses and associated selling up of farm assets creating more homogenous landscapes that are less distinct and less typical of the locality.

**Current Landscape Condition**

The overall condition of the Low Fell Landscape Character Type is considered to be good. There is rich biodiversity within the large areas of semi-natural and coniferous woodland (much of which is on ancient woodland sites) and patchwork of rough grassland, semi-improved pasture, small broadleaved and coniferous copses, rock outcrops, heathland, tarns and becks, small wetlands, mires and bracken. The landscape pattern of dry stone walls (with a predominance of local limestone and slate) is strong. Parkland and designed landscapes are generally in good condition though there is a need to plan for
long term replacement of trees. In places, there is evidence of decline of stone walls and occasional loss of hedgerow field boundaries.

**Future Landscape Changes and Opportunities**

In the short term (5 years) it is likely that there will be continued positive changes in the form of improvements in biodiversity within forestry plantations. Where possible, natural regeneration and planting of broadleaves is being introduced to improve species diversity and landscape quality. Ongoing management of key SSSIs and other areas designated for nature conservation purposes. Opening up of key views to facilitate a better understanding and appreciation of the landscape.

Negative changes are likely to include spread of bracken where grazing is lost, increasing traffic on small roads and pressure on sensitive habitats from increased access. Stone walls, hedge banks and pollards are currently being managed under the ESA Scheme and this may be undermined with on-going financial pressures. A590 trunk road upgrading damaging the topography of the landscape and further eroding tranquillity through increased traffic noise.

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

- **Agricultural Change and Land Management** - Significant reduction in Environmentally Sensitive Area payments could lead to some of the important landscape features that make up this distinct landscape being lost or falling into disrepair, such as stone walls, hedge banks and pollards. Neglect of hedges around enclosed land could reduce the potential landscape and wildlife benefits in many places, leading to substitution by fences. Managing the transition between the end of one agri-environment scheme and another is important. Increased farm sizes may increase the demand for new large agricultural buildings and associated development affecting key views. Achieving sustainable grazing levels will be critical to maintaining the higher ground within the Low Fells. Where grazing activity is reduced, it is likely that there will be a spread of bracken. The changing nature and economics of forestry in the long term could impact on significant parts of the Low Fell through increased or decreased timber production. Small-scale coniferous forestation could change the character and nature of the landscape.

- **Climate Change** - Climate change may have a variety of potential impacts on the designed landscape (a key feature within this landscape type) and retaining the historical integrity of some landscapes may be difficult to achieve over the long term. Climate change may also affect small valley streams by increasing alien species, with water courses serving to rapidly distribute seed and plant material throughout catchments. It is also possible that climate change will change the temperature of key lakes, increasing eutrophication and putting pressure on niche fish species such as Artic Char;

- **Development** – This Landscape Character Type is adjacent to some of the largest towns within this part of the Lake District and therefore will be directly affected by increasing pressure for residential and other town related developments. Recreational developments and associated pressures such as car parking and transport may erode some of the key attributes found within this landscape type such as the network of minor roads and tracks. Also, increased tourism and growth in holiday development and second homes, will potentially lead to land originally under pasture or part of large estates being sold for development. There will also be continued pressure for access to water for recreational pursuits potentially creating pollution, loss of tranquillity and pressure on sensitive habitats. Increased pressure for new residential development may also lead to a loss of vernacular buildings and loss of local distinctiveness.
Sensitivities and Capacity for Change

The diverse range of ecological habitats within this Landscape Character Type (including rough grassland, heathland, tarns and becks, woodland, wetland, moors, mires and bracken – several of which are designated as SSSI), contribute to overall high ecological sensitivity. Visual sensitivity is also considered to be high, as a result of the strong sense of openness throughout and strong intervisibility with adjacent Landscape Character Types. Coupled with this, a generally rural character predominates throughout, alongside a largely dispersed settlement pattern, including ancient enclosures. Patches of parkland contribute to high cultural sensitivity. Overall, the Low Fell Landscape Character Type is considered to have limited capacity to accommodate new development without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

The overall strategy for this Landscape Character Type, is to conserve and enhance the interface between settlements and their surrounding landscape and support the conservation of key landscape features within the wider landscape. The key landscape elements include, semi-natural woodland, heathland, parkland, stone walls, hedges, hedgebanks and other boundary features.

Specific guidelines include:

Physical Character

- Target agri-environment scheme support for heathland, small woods, parkland, and boundary features which strengthen the landscape pattern within this landscape type;
- Encourage the creation of new native woodland at the edges of existing unsympathetic conifer plantations; and
- Encourage the creation of new woodland along appropriate riverbanks, which complements existing woodland pattern.

Ecological Character

- Encourage the creation of new native woodland to infill between existing woods where this would be of landscape or wildlife benefit;
- Control deer browsing and grazing pressures; and
- Expand and enhance semi natural habitats between designated sites to improve the existing ecological network and increase robustness to climate change.

Cultural and Historic Character

- Conserve the archaeological and historic environment in order to maintain a rich cultural landscape;
- Prepare and plan for the potential impacts of economic change in order to minimise negative landscape impacts within the landscape;
- Ensure incremental change in and around towns conserves the distinctive qualities of the wider landscape; and
- Conserve and enhance yards and spaces in villages;

Aesthetic and Perceptual Character

- Conserve the rural character of the existing road network;
- Protect uncluttered skylines and key views to and from the area from tall, vertical and large-scale developments that may erode the undeveloped character of the area.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:
Sub-Type K1: Forest

Physical Character

- **Enhance** existing patterns of woodland cover and maintain a range of woodland types;
- **Encourage** natural regeneration and replanting with native broadleaves

Ecological Character

- No guidelines recommended.

Cultural and Historic Character

- **Encourage** the retention of smaller, irregular fields and the maintenance of the boundaries and field furniture;
- **Manage** the impacts of large/ frequent recreation events or regular visits in order to reduce the pressure on sensitive landscape characteristics and features.

Aesthetic and Perceptual Character

- No guidelines recommended.

Sub-Type K2: Parkland

Physical Character

- No guidelines recommended.

Ecological Character

- No guidelines recommended.

Cultural and Historic Character

- **Conserve** and **enhance** parkland boundaries and key relict parkland features that provide time depth within the modern landscape;
- **Actively manage** the non-native and exotic species to maintain and sustain their historic character;
- **Conserve** the character of parks and designed landscapes by replacement planting. This should reflect the valance of plant species in the original design. Consideration should be given to complete felling and replacement of features such as avenues which have become over-mature; and
- **Identify** and plan for potential impacts of climate change on designed landscape in order to better understand ability to adapt, for example succession planning for parkland trees.

Aesthetic and Perceptual Character

- No guidelines recommended.

Sub-Type K3: Farmland

Physical Character

- No guidelines recommended.

Ecological Character

- No guidelines recommended.
Cultural and Historic Character

- **Conserve** and **repair** the intact network of limestone and slate walls in order to strengthen and maintain landscape pattern.

Aesthetic and Perceptual Character

- No guidelines recommended.

**Sub-Type K4: Moorland Ridge**

Physical Character

- No guidelines recommended.

Ecological Character

- **Sustain** an appropriate grazing regime in order to manage the mosaic of habitats and contribute to the biodiversity value and perception of naturalness.

Cultural and Historic Character

- No guidelines recommended.

Aesthetic and Perceptual Character

- No guidelines recommended.
TYPE L: LOW FELL FRINGE

CHARACTER ASSESSMENT

Location
The Low Fell Fringe Landscape Character Type is situated at the south eastern edge of the National Park (to the north of Grange-over-Sands and Ulverston) and extends outside the Park to the south. It forms the lower edges of the adjacent Low Fell Landscape Character Type (K) and is bordered to the south by a combination of Coastal Limestone (C) and Coastal Margins (B) Landscape Character Types.

Definitive Attributes

- Forms the sloping topographical transition between High Fells to the north and lower coastal landscapes to the south;
- Underlain by a range of different geology types including siltstones and sandstones;
- Dissected by a series of small valleys;
- Combination of rolling, undulating or plateau farmland; and
- Recognisable landscape pattern of stone walls at field boundaries.

Physical Character

The Low Fell Fringe Landscape Character Type forms transitional landscape between the higher land of the Low Fell to the north and the predominantly lower Coastal Landscape Character Types to the south. The landscape is underlain by a varying geology and exhibits a combination of rolling, undulating or plateau, predominantly pastoral farmland.

The Low Fell Fringe is characterised by rolling, hilly or plateau farmland and moorland. Most farmland has a pattern of large fields, with a strong presence of field boundary and in field trees or clumps of trees. On the higher ground, stone walls are the dominant field boundary, with hedges featuring at the lower levels.

Small valleys with semi-natural woodland are a feature in some parts, with numerous streams and minor rivers dissecting the valleys evident from a distance, by the growth of trees along their banks. Minor roads serve scattered farms and hamlets.

Ecological Character

The ecological character of this Landscape Character Type is dominated by improved or semi-improved pastoral farmland, with much ancient woodland. Where large areas of scrub encroach, these provide cover, refuge and feeding grounds for many species of fauna. In general, this landscape has been depleted by agricultural improvements, however there are still several small ecologically rich sites (designated as SSIs). Many of these are wetlands or woodlands.

Roundsea Woods and Roundsea Mosses are located within this Landscape Character Type. Woodland is exceptionally diverse, lying almost at sea level and dominated by ash and pedunculate oak. To the eastern side of this site, several estuarine raised bogs/ mosses form extensive areas of lowland raised mire, with waterlogged peat-filled hollows scattered amongst them and the adjacent woodland. The importance of Roundsea Wood and Mosses is reflected in its designation as SSSI and SAC. It is also managed as a National Nature Reserve. Outley Mosses are also located within this Landscape Character Type and designated as a SSSI.

Cultural and Historical Character

The character of this area is distinguished by a patchwork of enclosure types and ancient woodland which occurs across the area, but is concentrated in the eastern half, between the Rusland Valley and Lake Windermere. The field boundaries are a mix of stone walls, generally in the more upland and anciently enclosed land, and hedgerows, in the low-lying planned and ancient enclosures. Settlement
Section 4.0 - Landscape Character Types

TYPE L: LOW FELL FRINGE

1. Aerial Photograph showing typical field pattern and the transition between High Fells and lower coastal landscapes © GeoPerspectives

2. Combination of rolling, undulating or plateau farmland with recognisable landscape pattern of stone walls at field boundaries © CBA
comprises a number of small nucleated villages, particularly around Haverthwaite and Backbarrow, where iron and gunpowder industries developed, followed by the construction of the railway and the growth of this area as a key tourist route into the Lake District. Dispersed settlement within the landscape is based on the pattern of former single ancient farms.

Settlement and Building Character

- Settlement pattern is dominated by a series of scattered farmsteads and houses, within a network of minor roads;
- Main settlements of Backbarrow and Haverthwaite/Low Wood, clustered along the Leven Valley, with the influence of past industry still contributing significant features, from individual sites to the associated workers housing; and
- Stone used for buildings reflects the underlying geology, with rubble slatestone, quarry waste, dressed sandstone and limestone, but also the very distinctive yellow Furness brickwork of the railway buildings between Lakeside and Haverthwaite.

Landscape Character Sub-Types

There are no Sub-Types within the Low Fell Fringe Landscape Character Type.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- Continued use and management of ancient woodland;
- Development of industries such as iron smelting;
- Settlement around industrial workings;
- Construction of the railway and expansion of the tourism industry; and
- Construction of the A590 High and Low Newton Bypass.

Current Landscape Condition

The overall condition of the Low Fell Fringe Landscape Character Type is considered to be good. Full hedgerows or intact stone walls often frame fields, and pockets of woodland, scrub and mosses enrich the ecology and visual interest of this Landscape Character Type. 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

In the short term (5 years) it is likely that there will be continued positive changes in the form of continuing management of ancient woodlands and increasing focus on biodiversity. An increasing recognition of the cultural landscape and an integration of tourism with sustainable management of the landscape (local foods/traditional breeds/working woodlands).

Negative changes are likely to include increasing pressure from traffic and large numbers of people in the small villages and rural lanes. Other associated pressures such as increasing air and water pollution would result in a deteriorating quality of environment. A590 trunk road upgrading damaging the topography of the landscape and further eroding tranquillity through increased traffic noise.

Longer-term changes (20+ years) will be dependent on prevailing incentives and policies and it is therefore challenging to be prescriptive. The Lake District National Park Management Plan will provide a key tool in managing change and ensuring a positive future for the area. Potential longer-term changes and key opportunities within Landscape Character Type L: Low Fell Fringe are outlined below:
Agricultural Change and Land Management - Being a predominantly pastoral landscape lying between High Fell and Lowland, this area is vulnerable to significant changes in agriculture eroding its distinct characteristics. The impact of the amalgamation of farming businesses and associated selling up of farm assets may not be immediately obvious in these transition zones. However, the effect may be to create more homogenous landscapes that are less distinct and less typical of the locality, with a loss of key landscape features.

Climate Change - The small valleys of this landscape type with their numerous streams and minor rivers could be widely affected by increases in alien species as a result of climate change. The water courses will serve to rapidly distribute seed and plant material throughout catchments and could be a significant challenge to manage.

Development - With a trend towards increased farm size, there may be an increased demand for new large agricultural buildings and associated development that could have significant local impacts. These new buildings and changes in traditional building use into residential or tourist related infrastructure could affect key views. There is likely to be continued pressure for access to water for recreational pursuits creating pollution and loss of tranquillity. Communication developments could also lead to increased visual clutter from mobile phone masts and inappropriately designed transport schemes. Increased pressure for further road upgrading and infrastructure such as signage, lighting and safety barriers.

Sensitivities and Capacity for change

Patches of semi-improved pasture, small river valleys and ancient deciduous woodlands contribute to a generally moderate ecological sensitivity within the Low Fell Fringe Landscape Character Type. A recognisable pattern of stone walls at field boundaries and small nucleated settlements contribute to cultural sensitivity within the Type. Overall, intervisiblity with adjacent Landscape Character Types is strong. The Low Fell Fringe Landscape Character Type is judged to have limited to moderate capacity to accommodate change without compromising key characteristics.

GUIDELINES FOR MANAGING LANDSCAPE CHANGE

The overall management strategy for this Landscape Character Type, is to mitigate the effect of the changing rural economy through the conservation and enhancement of natural and cultural landscape through the retention and active management of positive landscape attributes. These are the traditional farm buildings, boundary features, rural road network and ancient woodland and other nature conservation assets.

Specific guidelines include:

Physical Character

- No guidelines recommended.

Ecological Character

- Encourage habitat linkage to increase robustness to climate change; and
- Manage water courses to prevent the spread of alien species in order to retain species diversity and landscape character.

Cultural and Historic Character

- Provide appropriate support for rural businesses planning on diversifying or changing the scale of their operation, in order to minimise the potential impacts on the key landscape characteristics within this landscape type;
• **Target** agri-environment scheme support for traditional farm building conservation, boundary features such as hedgerows and stone walls and nature conservation areas such as small ancient woodlands; and

• **Ensure** new significant developments retain the distinct landscape and vernacular building characteristics of this area.

**Aesthetic and Perceptual Character**

• **Conserve** the rural character of the existing road network.
TYPE M: LOWLAND VALLEY

CHARACTER ASSESSMENT

Location

The Lowland Valley Landscape Character Type encompasses a series of river valleys (including the Lyth, Winster, Windermere, Rusland and Crake), which cut through the Low Fell (Type K) in the south eastern corner of the Lake District National Park.

Definitive Attributes

- Broad U-shaped valleys, containing either a river or lake on the valley floor;
- Valleys cut through adjacent Low Fell Landscape Character Type;
- Underlying geology varies, but predominantly consists of mudstones and siltstones from the Silurian Age;
- Mixed landcover of pastoral grazing land and woodland (predominantly broadleaved) adjacent to the rivers or lakes;
- Parkland is a key feature (exhibiting mature landscape structure) along dale sides and around lakeshores; and
- Pattern of stone walls and hedgerows delineating field boundaries.

Physical Character

The Lowland Valleys cut through surrounding Low Fell and contain either a main river or lake within their floodplains or valley bottoms. Similarly to the adjacent Low Fell Landscape Character Type (K), the underlying geology of these valleys predominantly consists of siltstones and sandstones from the Silurian Age.

The topography varies from flat shallow valley bottoms to classic U-shaped glaciated valley sides, which provide a relatively strong sense of enclosure.

Land cover is mixed, but predominantly pastoral with plantations, scrub and other woodland often present. Woodland tends to be broadleaved with some coppice and mixed plantations. Hedges, replaced in areas by fences, form most field boundaries with frequent hedgerow trees and occasional stone walls. Parkland with mature open-grown trees is also a key feature within several of the Lowland Valleys.

Ecological Character

The ecological character of this Landscape Character Type is dominated by the habitats associated with the numerous rivers, streams and lakes. Situated in a glacial valley between Windermere and Coniston Water, Esthwaite Lake, a nutrient-rich (mesotrophic) lake is one of the best examples of its kind in England and Wales. The complex of associated open water, fen and grassland communities support a characteristically rich flora. The lake supports a rich assemblage of pondweed species and is designated SSSI. The site was designated as the only known locality in England and Wales for the slender niad, although this has not been recorded since 1982. The nationally scarce elongated sedge has also been recorded here.

In addition to its botanical interest Esthwaite Water is of local importance for breeding birds. Great crested grebe, teal, tufted duck, red breasted merganser, pochard and sedge warbler all breed regularly and for this reason the lake is designated as a Ramsar Site.

Rusland Moss NNR, at the head of the Rusland Valley forms the northern part of one of the few remaining raised mires (peat bogs) in the country. Sphagnum (bog) mosses dominate the uncut areas of the moss, with purple moor grass in the cut areas and fen and carr woodland at the edges. Lake Windermere provides a valuable ecological habitat for Arctic Char. Considerable ecological interest is
Section 4.0 – Landscape Character Types

TYPE M: LOWLAND VALLEY

1. Underlying geology varies, but predominantly consists of Mudstones and Siltstones © NTPL/Paul Harris

2. Aerial Photograph showing typical field pattern © GeoPerspectives

3. Broad valleys, containing a river or lake on the valley floor © NTPL/Paul Harris
provided by hydroseres – which display a range of plant communities from underwater plants to reedy fringes to wet woodland to dry oak woods.

Dodgson Wood, located above the eastern shores of Coniston Water, supports a rich and diverse composition of woodland types. Low Wray Bay and Nichols Moss are also both designated as SSSIs. Low Wray Bay is the type site for the Windermere Interstadial (a warmer interlude during a period of cold climate) and Nichols Moss is a raised peat bog, which is surrounded by dense Scots Pine and birch woodland.

**Cultural and Historical Character**

This Landscape Character Type includes the relatively extensive formal lakeshore landscapes of managed grassland, broadleaf woodland and parkland, as well as some farmland and sheltered valley landscapes.

The Rusland Valley down to the Leven Estuary consists of planned enclosure land, with some intakes. There are also a number of large 18th and 19th century villas and country houses within the valleys, many with extensive landscaped gardens. The area is well wooded, and many of the trees are exotic species, introduced for their perceived landscape value. An ancient open field system is however still present at the southern end of Coniston Lake.

There are a number of single ancient farms within the area, which form the basis of the dispersed settlement pattern, which is evident in the landscape today.

**Development, Settlement and Building Character**

- Although grouped within one Landscape Character Type, these linear valleys contrast with each other in terms of historical development, as well as the character of buildings and settlements;
- Includes the largest urban area in the Lake District, with Windermere and Bowness on Windermere, as well as the large village of Coniston;
- Building materials include rubble and limewashed render, Silurian slates, green slate, smooth stucco render, neatly laid quarry waste and dressed sandstone detailing. Victorian buildings display quality timberwork, especially with ornate, fretted bargeboards;
- Coniston Water and Lake Windermere were major transport routeways for bulky products in the pre-railway period, which influenced the lakeshore settlements and prosperity of the area. Post-railway, both settlements experienced significant Victorian expansion, related to local industries and tourism;
- Bowness on Windermere, originally a compact settlement grouped around a large medieval church, is a designated Conservation Area. In contrast, Windermere was a creation of railway tourism after the mid-19th century;
- Victorian architecture, with confident use of local imported materials, not only dominates the urban settlements, but also adds significantly to the valleys and lakeshore character;
- Outside the main settlements, the pattern is predominantly dispersed, consisting of isolated farmsteads, houses, small groups and hamlets; and
- The north west shoreline and in particular the eastern shoreline of Lake Windermere has a very distinctive character, with numerous grand houses, set within well matured landscaped and wooded grounds. Contains very fine nationally important exemplars of Georgian, Regency, Classical Revival, Victorian Gothic and Arts and Crafts architecture.

**Landscape Character Sub-Types**

Four Sub-Types have been identified within the overall Landscape Character Type. The attributes that define the character of these Sub-Types are generally typical of the Lowland Valley Landscape Character Type. Specific characteristics that are unique to these Sub-Types are:
Sub-Type M1: Valley Floor with Lake

- Wide, predominantly flat valley floor and floodplain; and
- Landscape is dominated by lake.

Sub-Type M2: Valley Floor with River Floodplain

- Wide, predominantly flat valley floor and floodplain; and
- Broad or narrow river dominates landscape unless screened by trees.

Sub-Type M3: Enclosed Valley Side

- Sloping landscape forming the lower valley sides; and
- Visible network of walls of hedgerows delineate field boundaries.

Sub-Type M4: Open Valley Side

- Sloping to higher plateau-shaped topography, where lower valley sides meet adjacent Low Fell Landscape Character Types; and
- General absence of boundaries dividing fields.

CURRENT AND FUTURE LANDSCAPE CHANGES AND OPPORTUNITIES

Forces for Change

Past Landscape Changes

Observable changes in the past include:
- Glacial activity that created distinct valley form;
- Development of a wide range of aquatic habitats and species associated with the streams, rivers and lakes;
- Deterioration of water quality in Esthwaite Lake;
- Loss of reedbeds on Windermere, increased algal blooms on Windermere;
- Deterioration of lakeshore vegetation associated with increased access and development;
- Spread of development through valleys associated with cotton and tourism industry in the 19th century;
- Managed and formal landscapes have developed along many lakeshores associated with large houses and estates; and
- Marked change in the type of recreational use of Windermere and increased use through the winter months.

Current Landscape Condition

The overall condition of the Lowland Valley Landscape Character Type is considered to be good, with its high water quality (within numerous rivers, streams and lakes) and rich biodiversity in woodland and other habitats. The largely intact, strong pattern of hedgerows and stone walls delineating field boundaries and mature, well maintained parkland landscapes further contribute to the predominantly good condition of landscapes within this Landscape Character Type. Occasionally there is evidence of decline in the management of stone walls and hedgerows.

Future Landscape Changes and Opportunities

In the short term (5 years) it is likely that there will be continued positive changes in the form of stricter controls managing recreation in and around the major lakes. A relatively buoyant economy leading to a regeneration of key buildings and recreational facilities following a significant period of decline. The
introduction of the Water Framework Directive should begin to have an impact on the quality of water within the main catchments.

Negative changes are likely to include increased pressure for new residential buildings and energy and communication developments. There is also likely to be a continuing pressure for access to water for recreational pursuits.

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

- **Agricultural Change and Land Management** - The greatest change within this Landscape Character Type is likely to come from changing land use. With increased tourism and a growth in holiday developments and second homes, land originally under pasture may be sold for development. Large estates may be divided up into lots and sold off gradually reducing the unity of land management within the landscape and threatening the integrity of parkland landscapes. The Water Framework Directive should have a significant long term impact on improving the quality of water resources and their management within this Landscape Character Type.

- **Climate Change** - Climate change is already having a marked effect on the temperature of key lakes with measurements taken over the last sixteen years showing an average rise of four degrees. Temperature rise will increase eutrophication and put pressure on niche fish species such as Arctic Char.

- **Development** - Similar to changes in land use and management, development pressures may lead to a loss of vernacular buildings and reduction in use of local building materials. Communication developments may lead to increased visual clutter from mobile phone masts and inappropriately designed transport schemes.

**Sensitivities and Capacity for Change**

Ecological sensitivity within this Landscape Character Type is considered to be relatively high overall, resulting from a series of valuable habitats associated with the numerous rivers, streams and lakes. Cultural and historical sensitivity is also relatively high, resulting from the formal and designed lakeshore landscapes and single ancient farms. This Landscape Character Type is judged to have high visual sensitivity on account of the strong intervisibility with surrounding Low Fell and Low Fell Fringe Landscape Character Types. Overall, the Lowland Valley Landscape Character Type is considered to have limited to moderate capacity to accommodate change without compromising key characteristics.

**GUIDELINES FOR MANAGING LANDSCAPE CHANGE**

The overall strategy for this Landscape Character Type is to conserve and enhance the wide variety of distinct landscape attributes through development control. Water quality and sustainable water and land use management should be a key priority.

Specific guidelines include:

**Physical Character**

- **Ensure** effective catchment management to sustain water quality; and
- **Encourage** the creation of new woodland along appropriate riverbanks, which complements the existing woodland pattern.
Ecological Character

- **Restore** and **enhance** wetland habitats;
- **Target** agri-environment scheme support for management of broadleaved woodland, wetland, pasture and meadow habitats and parkland;
- **Encourage** habitat linkage to increase robustness to climate change; and
- **Encourage** the creation of new orchards in the Lyth and Kent valleys.

Cultural and Historic Character

- **Encourage** use of local materials and vernacular styles in developments to strengthen local character including simple rubble and limewashed render, Silurian slatestones, green slate, smooth stucco render, neatly laid quarry waste and dressed sandstone detailing and fretted timber bargeboards.
- **Ensure** new significant developments retain the distinct landscape characteristics of this area;
- **Conserve** and **enhance** the distinct pattern of stone walls and hedgerows delineating field boundaries in order to maintain landscape structure; and
- **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;

Aesthetic and Perceptual Character

- No guidelines recommended.

In addition to the above, guidelines for managing landscape change within specific Sub-Types include:

**Sub-Type M1: Valley Floor with Lake**

*Physical Character*

- **Protect** water courses and lakes from diffuse and point source pollution to prevent damage of aquatic habitats and reduction of recreational and aesthetic enjoyment of the water environment;

*Ecological Character*

- No guidelines recommended.

*Cultural and Historic Character*

- **Encourage** sympathetic management of property adjacent to lakeshore to ensure conservation of distinctive local character and lakeshore vegetation.

*Aesthetic and Perceptual Character*

- No guidelines recommended.

**Sub-Type M2: Valley Floor with River Floodplain**

*Physical Character*

- No guidelines recommended.

*Ecological Character*

- No guidelines recommended.
Cultural and Historic Character

- **Protect** and **conserve** vernacular bridges (especially packhorse bridges) in order to retain key historic features within the landscape.

Aesthetic and Perceptual Character

- No guidelines recommended.

**Sub-Type M3: Enclosed Valley Side**

Physical Character

- No guidelines recommended.

Ecological Character

- **Encourage** sensitive management and restoration of wood pasture habitat.

Cultural and Historic Character

- **Encourage** new development that reflects the scattered settlement pattern, use of vernacular building styles and locally appropriate building materials;
- **Conserve** and **enhance** boundary features; and
- **Prevent** woodland establishment on historically important enclosed valley sides.

Aesthetic and Perceptual Character

- No guidelines recommended.

**Sub-Type M: Open Valley Side**

Physical Character

- **Encourage** the creation of native woodland on valley sides and lower fells.

Ecological Character

- No guidelines recommended.

Cultural and Historic Character

- **Control** development on open valley side encouraging scattered settlement pattern, use of vernacular building styles and locally appropriate building materials.

Aesthetic and Perceptual Character

- No guidelines recommended.