

A GUIDE TO USING THE CUMBRIA HISTORIC LANDSCAPE CHARACTERISATION DATABASE FOR CUMBRIA'S PLANNING AUTHORITIES



July 2009

Cumbria County Council

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Acknowledgements

This document was written by Richard Newman (Cumbria County Council), with assistance from Caron Newman (Egerton Lea Consultancy Ltd). It is based on the GIS mapping undertaken by Miles Johnson (Yorkshire Dales National Park Authority and formerly Cumbria County Council), Caron Newman (Egerton Lea Consultancy Ltd) and Bette Hopkins (formerly Cumbria County Council). In addition the following people have made a significant contribution to the Cumbria Historic Landscape Characterisation database: Helena Callaghan (formerly Cumbria County Council), Mick Donn (Lake District National Park Authority), Graham Fairclough (English Heritage), Caroline Hardie (Archaeoenvironment Ltd), John Hodgson (Lake District National Park Authority), Philip Holdsworth (formerly Cumbria County Council), Eleanor Kingston (Lake District National Park Authority), Jo Mackintosh (Cumbria County Council), Jeremy Parsons (Cumbria County Council), and John Robinson (Agilisys).

The document was read and commented upon by Shaun Gorman (Cumbria County Council), Jenny Wain (Cumbria County Council), Jeremy Parsons (Cumbria County Council), Arnie Webster (Cumbria County Council) and Graham Fairclough (English Heritage).

The Cumbria Historic Landscape Characterisation database is derived from the Cumbria and Lake District National Park Historic Landscape Characterisation Project which was funded by English Heritage.

Glossary of key terms

Historic environment is the sum of all the historical aspects of the environment, including archaeological remains, palaeo-environmental remains, historic buildings, the wider historic landscape and places associated with historic events, traditions and significant persons. It overlaps with but is not identical to other terms such as cultural landscape or built environment.

Historic Environment Records are the databases that collate information on the historic environment. They are generally held and maintained by county or unitary authorities and national parks.

Landscape types are a mechanism for classifying a landscape through its particular landscape component parts such as roads, woodland or unenclosed land. They generally do not form large cohesive areas but will repeatedly reoccur within an area the size of a county or district. The nature of the characterisation approach will define the types of components chosen in the classification; human-made or substantially influenced components are chosen for historic characterisation.

Character areas are areas of landscape defined by a specific combination of landscape types that provide it with a definable and distinct character.

Geographical Information System (GIS) is a computer system capable of the capture, management, manipulation, analysis and display of all forms of geographically referenced information. It allows attribute data to be attached to maps and by this means enables spatial analyses of the data to be undertaken.

Green infrastructure is a strategic network of accessible, multifunctional green spaces, or assets, positively managed to deliver a wide range of benefits to existing and future populations. It integrates landscape, biodiversity, the water environment and the historic environment with both natural and managed green space and access corridors.

1. Introduction

- 1.1 This report is a users' guide to the Cumbria County Council historic landscape database, derived as part of the Cumbria and Lake District National Park Historic Landscape Characterisation Project. Historic Landscape Characterisation (HLC) is an aspect of more general landscape characterisation, providing an additional element of 'time depth'. It allows the historical evolution of the landscape to be perceived and understood.
- 1.2 The guide is intended for the use primarily of local authority development control officers, spatial planners and those involved with various aspects of countryside management, outside the two national parks. The Lake District National Park has HLC guidance contained within another report, '*The Cumbria Historic Landscape Characterisation Project. The Lake District National Park*', and the Yorkshire Dales National Park Authority has undertaken its own separate HLC programme. It is hoped that it will remain a useful aid for some time. Consequently, for web-based use it includes a number of internal Cumbria County Council web links, in green and external links in blue, for the rapid and efficient access to more detailed or comparable information. The web links are accessed via a Wikipedia style of endnotes. Two mouse clicks on the endnote number takes you to the endnote web link. One click on the endnote web link whilst pressing control on the keyboard takes you to the relevant page within a website. Two clicks on the endnote web link returns you to your place in this document's text. The initial use of key terms is highlighted

by bold green and these are explained in the glossary above.

- 1.3 The Cumbria and Lake District National Park Historic Landscape Characterisation Project was undertaken by the Historic Environment teams of Cumbria County Council and the Lake District National Park Authority (LDNPA) with assistance from the Yorkshire Dales National Park Authority and consultants from Archaeoenvironment Ltd and the Egerton Lea Consultancy Ltd. The project was funded by English Heritage. The HLC forms part of the Cumbria County Council Historic Environment Record and the Lake District National Park Historic Environment Record.
- 1.4 This guide provides both hints on how to apply the Cumbria and Lake District National Park HLC in a planning context and a brief summary of the HLC project. Topics covered in this guide include:
- a summary of the project and the purpose and uses of HLC
 - the significance of HLC for Cumbria
 - a description of the baseline data
 - a description of the landscape types
 - guidance of the use of historic landscape character areas in planning
 - guidance on querying the database with FAQs
 - advice on historic landscape management policies for management plans and Local Development Frameworks
 - a county based map of historic landscape character areas
 - appended information on the breakdown of the database structure
 - illustrative maps of some character areas showing the distribution of historic landscape types providing a mapped mosaic of the nature of the historic landscape
 - appended descriptions of each individual historic landscape character area.
 - appended information on historic environment legislation, planning policy and guidance, and designated sites.

2. The purpose and nature of Historic Landscape Characterisation

2.1 *Why is it needed?*

- 2.1.1 The need to understand archaeological sites, not in isolation but in terms of wider landscape character, has long been appreciated in England and culminated in English Heritage developing an approach to historic landscape characterisation in the early 1990s.¹ All subsequent English county-based HLCs have been based on this approach which involves systematic recording of historic landscape types, without the attribution of qualitative values.² From this has developed the study of historic landscape character, as part of an holistic analysis of the wider **historic environment**.³ The historic environment is now recognised generally as forming an important component of wider landscape character and the value's that are applied to it by owners, users and land managers. Protecting, managing and enhancing the historic environment have also been recognised as important aspects of local authorities' roles in protecting and enhancing the quality and sustainability of the wider environment.

2.1.2 Like the landscape in general, the historic environment is not static it is ever changing. It is constantly being eroded and added to. Even if it was possible or desirable, which it is not, the purpose of HLC would not be to preserve the landscape as it is today. Its purpose is to assist in the management of change, to ensure that when land use decisions are taken the legacy of the historic environment is fully taken into account. This may lead to the conservation of historic elements within areas of changing land use or historic influences being incorporated into new schemes for development. Making appropriate planning decisions that impact upon the historic environment and the conservation and management of the historic elements of the current landscape, relies on good information and understanding. This is the ultimate aim of the HLC process.

2.2 ***What is it?***

2.2.1 Protecting, managing and enhancing the historic environment must be founded on a sound evidence base. As with other aspects of the environment, such as biodiversity, the historic environment needs to be placed into a geographical context. Unlike these other environmental aspects, however, the historic environment also requires an historical context. HLC provides both of these by allowing the whole of an area to be mapped without gaps and by providing an explanation of the historic origins of landscape features and an analysis of change through time. County-based HLCs in England generally do not characterise urban areas as anything other than urban. Analysis of historic development and character within the urban areas is contained in the complementary County-based historic town or extensive urban surveys, or urban archaeological databases for archaeologically more significant towns and cities like Carlisle. Along with HLC these other datasets all form part of the **Historic Environment Records** for Cumbria. These are the databases used to advise planners on the impacts of policies and planning applications on the historic environment and are maintained by the County Council and the two national parks.⁴

2.2.2 HLC, historic town surveys and urban archaeological databases, together provide a wider landscape view of the historic environment resource.⁵ They allow site based data to be placed in a geographical and historical framework and provide comparability with other landscape-scale environmental datasets such as those relating to biodiversity. Combining such datasets allows an analysis of environmental sensitivity in relation to processes for change and the calculation of a locality's environmental capacity to accommodate change. Both of these are essential if the historic environment is to be given due accord within the spatial planning process and included in sub-regional frameworks, policies and Strategic Environmental Assessments. The comprehensive nature of HLC also enables the development of other uses in relation to countryside management, community-based projects and education.

2.2.3 HLC is not a product it is an approach to categorising the landscape. It was developed primarily to provide better data to underpin planning and land use management decision making. County-based HLCs are part of the HLC toolkit that provides this support. As with any tool it is only useful when applied appropriately. Characterisation can be undertaken at many scales. The English Heritage HLC projects are carried out largely at a county level. The usefulness of the County-based HLCs for informing decision making is primarily at the sub-regional scale of county or district in relation to spatial planning and major strategic developments. A County-based HLC is unlikely to have much relevance at the

level of a parish or settlement, but as an approach HLC can be applied at those scales too.⁶ Applying HLC at a smaller scale allows a greater focus on fewer landscape types enabling the provision of the finer detail required. When combined with other datasets and the details simplified the County-based HLCs are useful at a regional level.

- 2.2.4 In England, the HLC approach is in line with the landscape assessment philosophies inherent in general landscape characterisation, as described and briefly set out in guidelines produced by the Landscape Institute⁷ and the Institute of Environmental Management and Assessment.⁸ HLC sits alongside other landscape characterisation programmes, such as the Countryside Character Programme developed by the Countryside Commission (later the Countryside Agency and now part of Natural England) which developed Character Areas for all of England.⁹ As with the HLC approach, general landscape characterisation does not ascribe value but provides a consistent suite of baseline data.¹⁰ In Cumbria, for areas outside the national parks, a landscape character classification was carried out in 1995 which forms the basis of the Cumbria Landscape Strategy.¹¹ The Lake District National Park published its Landscape Character Assessment in 2008.¹²
- 2.2.5 HLC identifies landscape components such as particular shapes of field or age and broad botanical composition of woodland that can be grouped into **landscape types** such as ancient fields or plantation. The predominance of particular landscape types and their combination with other types in a given locality allows the definition of **character areas**.
- 2.2.6 Most HLC datasets, like Cumbria's, are contained within a **Geographical Information System** (GIS). This allows a variety of maps to be produced depicting different aspects of the historic environment. Overlaying different aspects allows patterns to be recognised. Maps of different landscape types and character areas can be produced at different scales. It is important to remember, however, that the value and usefulness of any HLC project is dependent on scale.

2.3 ***What is its policy context?***

- 2.3.1 Since the national HLC programme began, all the principles of the approach have been endorsed by the European Landscape Convention, also known as the Florence Convention, of 2000. This has been adopted by the UK and became binding on the 1st March 2007.¹³ Under the convention landscape protection is defined as actions taken "*to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human activity*".¹⁴ A Framework for implementing the European Landscape Convention was published by Natural England in collaboration with English Heritage and Defra in October 2007.¹⁵ It is intended to strengthen landscape, planning and management throughout the UK. Within this due weight is given to the historic character and time depth of the landscape and its implications for future planning and landscape management. The North West's Regional Spatial Strategy under Policy EM1 advocates that "*plans, strategies, proposals and schemes should identify, protect, maintain and enhance natural, historic and other distinctive features that contribute to the character of landscapes*". Such plans and strategies should be informed by landscape character assessments produced by local authorities.

- 2.3.2 Landscape issues are embedded into the planning process through guidance given in PPG15 and the sustainability agenda enshrined in PPS1 and PPS7.¹⁶ The need to use a landscape character approach at a regional level is also required to inform strategic planning for renewable energy options in PPS22.

3. Cumbria's landscape and Historic Landscape Characterisation

- 3.1 The Cumbria and Lake District National Park Historic Landscape Characterisation Project began in 2000. The mapping of the Lake District National Park was completed in 2005, and the mapping for the rest of Cumbria in 2008. A report on the work in the Lake District National Park was published in 2007 and this contains much more detailed accounts of the philosophy behind HLC and the project's methodology and is available from the Lake District National Park Authority in digital disk format.
- 3.2 The relative importance of HLC to Cumbria is a reflection of the value of Cumbria's landscape to the county's prosperity and to its inhabitants. Policy makers have consistently referred to Cumbria's landscape as being 'world class'. This attribution has a basis in both the international renown of parts of Cumbria's landscape and the international recognition that Cumbria's landscape has received. Cumbria is the location of one World Heritage Site, part of the Hadrian's Wall portion of the 'Frontiers of the Roman Empire' World Heritage Site¹⁷ and there have been a number of attempts to gain World Heritage Site status for the Lake District. The Lake District National Park currently is being advocated as a World Heritage Site on the basis of the cultural association of its landscape with historically important literary figures who were also key figures in the international conservation movement, such as John Ruskin, William Wordsworth and Beatrix Potter.¹⁸ In addition the North Pennines Area of Outstanding Natural Beauty (AONB) is a European and Global Geopark for the importance of its geological resources and features including historic mining remains.¹⁹
- 3.3 Cumbria has a highly varied landscape as the wide range of character areas testify. Much of it is of an upland character which is why Cumbria has nearly a third of England's surviving common land. At the heart of Cumbria is the Lake District National Park, which is one of a number of landscapes whose perceived value for the conservation of natural beauty, and encouragement of outdoor recreation has led to its designation. The others are the Yorkshire Dales National Park, the Solway Coast AONB, the Arnside/Silverdale AONB and the North Pennines AONB. In addition, both within and without these designated landscapes are numerous sites and areas that are protected because of their archaeological value as Scheduled Monuments. Cumbria has 855 Scheduled Monuments which is nearly two thirds of all the Scheduled Monuments in the North West region. The County also has 117 Conservation Areas and 19 Registered Parks and Gardens (outside the Yorkshire Dales National Park). The historic components of Cumbria's landscape add greatly to its perceived value but much of it is not designated.²⁰
- 3.4 Cumbria's environment is recognised as one of the most biodiverse in England. The County's varied geology, topography, soils and climate ensure that its biodiversity resource is extensive. The importance of biodiversity to Cumbria's environment is partially recognised through the significant portion of the landscape that is internationally designated as a Special Area of Conservation or a Special Protection Area. The County also contains numerous nationally designated Sites of Special Scientific Interest. As with the historic environment, however, many of

the ecological assets and much of the biodiversity resource lie outside the designated areas and these include much of the network of landscape features that are essential for the well being of species and habitats.²¹

- 3.5 A significant portion of Cumbria's landscape has been designated in order to protect various aspects of its environmental value or has had its status recognised through badges like World Heritage Site or European Geopark. There are many reasons why Cumbria's landscape is so highly valued but the purpose of HLC is to understand, define and map character not to add additional values or to highlight and ring fence the most valued areas.

4. The baseline data

- 4.1 For many users the baseline data that underlies the HLC will not need to be consulted. Indeed the full interpretation of the baseline data may require the assistance of an historic environment specialist. Even so, it is essential that this baseline data is robust, sound and consistent in order for the interpretations based upon it, such as the character area definitions, to be considered reliable and authoritative. The need for consistency and robustness underlay the methodological approach to data gathering, especially in relation to the choice of source materials. Consequently the baseline data was gathered by using:

- modern OS 1:25000 maps
- 19th century 1st and 2nd edition OS 6" to 1 mile maps
- late 18th century county maps
- modern OS-adjusted and scaled digital aerial photographs
- Google Earth's satellite imaging

The HLC project systematically mapped present-day and past land use. This succession of land uses can be seen in the present-day landscape, through still-functioning and relict landscape features. This information has been recorded as a series of layers that can be overlain on a modern map base, using a GIS. Within the dataset distinctions are made between data that are directly derived from dated map and photographic evidence and interpretations that are derived or inferred from such evidence. The latter are in part subjective. The data have been grouped into separate layers within the GIS, called 'landscape types', and these are described below, briefly. The detailed structure of the database tables are in Appendix 1.

- 4.2 The baseline data is available in MapInfo or ArcGIS formats. It can be interrogated to calculate, amongst other things, the percentage land-cover of various landscape types and the degree of landscape change in any given area over the past 150 years.

5. Landscape types

- 5.1 The concept of landscape types has long been used in analysing the nature of Cumbria's landscape and was used in the 1995 *Cumbria Landscape Classification*.²² There are 15 landscape types defined for the Cumbria and Lake District HLC. Each is represented by a separate layer within the GIS. Although these were defined using a similar approach to that employed in the *Cumbria Landscape Classification*, its 13 broad landscape types differ considerably from the Cumbria and Lake District HLC's historic landscape types. The differences reflect

the specific historical nature of the HLC methodology. The landscape types defined within the Cumbria landscape classification are largely topographical and geological,²³ but the historic landscape character types are more related to past human activity.

- 5.2 **Roads.** All roads in current use have been recorded, with the date by which they were known to have been in use. Significant trackways and paths which once formed major local routes have also been recorded in this layer.
- 5.3 **Railways.** Both railways which are in use and disused lines have been recorded, along with the dates when they were first known to have been in use. Not all disused lines have been fully recorded as their routes, and thus their contribution to character, are often partially obscured by later land uses.
- 5.4 **Canals.** At present, there are no canals in use within the county, but disused canals and their dates have been recorded where the route is still discernable within the landscape.
- 5.5 **Built environment.** The built environment layer records areas of non-domestic development, such as industry, airfields, military sites, docks and harbours, power plants and wind farms. In some instances, the original use may have changed, but will still be categorised as built environment, for example a large ironworks site may now be a modern business park and would be recorded as 'manuf/retail' (manufacturing or retail) for both. Where known, the agricultural use is recorded, where subsequent development has not obscured the field pattern, thus this layer may overlie other, often agricultural landscape types.
- 5.6 **Settlement.** Settlement is used to record individual dwellings, hamlets, towns and cities. The layer records only the difference between dispersed (individual) and nucleated settlements, though a basic differentiation is made between phases of growth in larger towns. Each settlement is also dated according to the map sources available.
- 5.7 **Extraction.** Extraction records mining and quarrying industries of various types, and their dates. Extractive industries are only recorded where their surface features are extensive enough to leave a physical impression on the landscape.
- 5.8 **Recreation.** Recreation is a wide field that includes public amenities, as well as holiday sites, golf courses and sports grounds. Where possible, the agricultural use is recorded, where subsequent development has not obscured the field pattern, thus this layer may overlie another, often agricultural landscape type.
- 5.9 **Woodland.** The woodland layer is perhaps the most complex, as some areas of woodland have changed significantly since the beginning of the 19th century. This table records existing areas of woodland as well as areas where woodland has been removed. To provide as comprehensive a view of woodland development as possible, it has been recorded at each stage of available dating: 1770, mid-19th century, late 19th century and 20th century. The woodland layer may overlie other, often agricultural enclosure types.
- 5.10 **Water.** Natural features such as rivers, streams, lakes and tarns have been recorded as they form an important feature of the historic landscape, often providing the focus for settlement or boundaries between landholdings. In addition, other significant water features, such as reservoirs and water-treatment works have

been recorded, with their dates.

- 5.11 **Designed landscapes.** Designed landscapes comprise landscape parks and gardens, urban parks, and cemeteries. In some cases, this landscape type will overlie other, often agricultural landscape types.
- 5.12 **Unenclosed land and unenclosed coast.** Unenclosed land forms a significant portion of the landscape of Cumbria, both inland and along the coast. In particular, Morecambe Bay was an important communications route to the south, and both the coast and the moorland and fells were important resources for grazing and food. These two layers record land cover and, where applicable, any previous land use.
- 5.13 **Planned enclosure.** This layer records fields that were enclosed mainly from the end of the 18th century. These fields were enclosed systematically and tended to be laid out by surveyors, and they form an easily recognisable landscape type. In Cumbria, most enclosure of this type was carried out on areas of common pasture, though it also includes some areas of common arable.
- 5.14 **Former common arable.** Former cultivated common fields are found right across Cumbria, though the fields varied greatly in size. They are relatively easy to recognise by their slightly curving boundaries, regular, or semi-regular shapes, and are sometimes found in groups of long, parallel fields. Many of these fields were enclosed in the late medieval or earlier post medieval periods, and the curving field boundaries fossilise the pattern of ploughing created by horse or oxen-drawn ploughs.
- 5.15 **Ancient enclosures.** Ancient enclosures are fields that were created before the period of planned enclosures, and many are medieval in origin. There are a number of different types (as listed in Appendix 1), but they often represent land holdings belonging to individual farms.
- 5.16 **Deer parks, monastic sites and vaccaries.** These three landscape types record special types of largely medieval land use, which have mostly been superseded by later agricultural or other landscape types. Thus, this layer sits over other landscape types. All three have medieval origins, so the date field has not been used. Where possible the name of the monastic site or deer park has been recorded, with the type of monastic site.

6. Character areas

- 6.1 Unlike many other county-based HLCs the baseline data for the Cumbria HLC was used to define character areas. Character areas should be the main tool used by planners when consulting the Cumbria HLC. Each character area has a character description which both summarises those core landscape components that make a locality distinctive and explains the historical processes behind them (see Appendix 3). This simplified breakdown of the Cumbrian landscape provides the key output of the Cumbria HLC against which to evaluate local distinctiveness and to consider processes for change. Character areas have been proven in general landscape characterisation to be a useful tool for targeting conservation responses whether through land use decision making, resource allocation or schemes.²⁴
- 6.2 The European Landscape Convention states that landscape as a term "*means an area, as perceived by people, whose character is the result of the action and*

*interaction of natural and/or human factors".*²⁵ Individual areas can be characterised by distinctive combinations of landscape types within a given locality. Under general landscape characterisation the Joint Character Areas defined by the Countryside Commission in the 1990s are based on a complex analysis of many different variables, including geology, topography, ecology, land cover, field patterns and settlement patterns amongst others. These were combined and analysed on a national scale to produce character areas for the whole of England. Their size and nature reflects both these variables and the national scale of the mapping. Equally, Cumbria's historic landscape character areas reflect the more specific and restricted nature of its variables and their size reflect the smaller scale of the County-based mapping. Thus there is not necessarily any correlation between Cumbria's historic landscape character areas and the Joint Character Areas. Equally, there is only limited correlation with the Lake District National Parks 'areas of distinctive character'.²⁶ The greater number of variables being considered in the general landscape characterisation of the Lake District ensures that there are more general character areas, 71 instead of 19. The similar scale of the mapping, however, means that in some incidences the areas do correlate as in the Bootle/Ravenglass and Skiddaw/Blencathra areas.

- 6.3 For Cumbria, excluding the Yorkshire Dales National Park, 53 historic character areas were defined. These are of varying size with the largest being the Central Fells, equating to 628 km² and the smallest being Walney Island, equating to 10 km². Irrespective of size each character area can be seen as forming a distinctive local landscape. Character areas were defined for the Lake District in the joint LDNPA and Cumbria County Council report of 2007, *The Cumbria Historic Landscape Characterisation Project. The Lake District National Park*. Those with a boundary co-incident with the national park boundary have been altered when examined from a County perspective as a more complete view of the nature and extent of character areas is obtainable. Put simply character areas only occasionally begin or end exactly at the national park boundary.
- 6.4 The process of defining character areas begins with the mapping of landscape types (see section 5 above and Appendix 1). Following the definition of landscape types, a map was created in which the relationship of the different types was analysed. The combination of enclosure types, woodland and water, settlement, communications and industry etc, onto one map, revealed patterns which suggested discrete character areas based on inherited characteristics formed by historically identifiable past processes, such as medieval colonisation or 18th and 19th century upland enclosure.
- 6.5 These character areas should not be seen as having either fixed or impermeable boundaries. Their edges should be regarded as fuzzy and changeable. Indeed over time they will undoubtedly change as the nature of the local landscape evolves in response to changing social requirements and values.

7. Spatial Planning and Historic Landscape Characterisation in Cumbria

- 7.1 A County-scale HLC is of most use at a sub-regional level and therefore its greatest relevance is to spatial planning. For historic landscape character to be fully taken into account in Area Action Plans etc and in the calculation of county and district-scale site allocations, it is essential that landscape-wide data is available in the same way that it is for the natural environment.²⁷ Such an approach ensures that the provision of historic landscape character data accords with guidance on good

practice in planning.²⁸ At a regional scale this data may be integrated with that from other county-based HLCs and other datasets to form part of a regional landscape characterisation, perhaps as part of the Natural England led regional landscape framework²⁹ Such a regional landscape characterisation should become part of the evidence base for the Single Regional Strategy. The Association of Local Government Archaeological Officers and English Heritage are also considering the development of a regional stand alone HLC.

- 7.2 The HLC will form part of the evidence base to support both regional and sub-regional landscape and historic environment policies. It should be used to inform decisions on land allocations and the development of policies in Area Action Plans and in the emerging Local Development Frameworks. Guidance for possible policy themes based on the HLC are given in section 11.
- 7.3 Using the descriptions for each character area and the identifications of their greatest character sensitivities, it is possible to crudely derive a spatial pattern of the sensitivity of local historic landscapes to particular forces for change. Character areas also facilitate the identification of the most vulnerable aspects of local landscape character, allowing the possibility of the assessment of an area's capacity to absorb a particular type of change. A more robust and refined indication of an area's sensitivity and capacity would require the manipulation, enhancement and interpretation of the existing data by a landscape assessment specialist (see section 8.3). An identification of sensitivity can be combined with a consideration of the implications of the various types of landscape designation that exist across the county or district. A further refinement of the use of the HLC data is to combine it with other environmental datasets, such as biodiversity to assess the capacity of the whole environment to absorb change and by that means to plot total environmental sensitivity within the county or district.
- 7.4 The Cumbria county-based HLC has clear implications for the possible extension of designated landscapes. With regard to the Lake District National Park there is a broad, though seldom precise, coincidence of character area boundaries and the boundaries of the national park (see Appendix 3). In the west and north of the Lake District there are some minor discrepancies and the main distinctions between the areas inside and immediately outside the park are now as much as anything else an historical artefact of their initial inclusion or exclusion in the 1950s. In the south the park boundary appears most arbitrary with regard to historic landscape character with character areas extending well outside the park. The Dunnerdale and Broughton Low Fells character area is the most obvious, though distinctions can be drawn within the character area at a finer resolution. In the east there is an obvious discrepancy with the exclusion from the park of a tongue of the Eastern Lake District Fells character area that extends south-eastwards out of the park. Similarly from an historic landscape viewpoint the exclusion of the Barbon and Middleton Fells character area from within the Yorkshire Dales National Park seems odd, though the Cumbria HLC will need to be compared with the Yorkshire Dales HLC to confirm this. Equally, the inclusion of only half the Howgills within the Yorkshire Dales National Park does not reflect the nature of the landscape. It is also obvious that any consideration of the inclusion within the Yorkshire Dales National Park of the Orton and Ravenstonedale and Orton, Crosby Ravensworth and Great Asby Fells character areas would need to address the issue of their considerable differences in historic landscape character with the existing adjacent areas of the national park.

- 7.5 With regard to the county's AONBs, the Arnside and Beetham character area is a discrete area that mostly fits tidily into the Arnside/Silverdale AONB and is clearly associated in historic landscape terms with the neighbouring parts of Lancashire that are also in the AONB³⁰. The North Pennines AONB's western boundary coincides closely with the boundary of the Pennines historic character area, but this should not surprise as both are primarily derived from topography. The North Pennines AONB also encompasses most but not all of the Stainmore historic character area and the current exclusion of a central tongue of this area, along the corridor of the A66 trunk road, is difficult to justify on historic landscape grounds. The Solway Coast AONB does not encompass entire character areas, rather as a coastal defined designation it is contained within character areas but it is neatly confined within the Solway Plain and Ellen and Marron valleys historic character areas. Nevertheless, in historic environment terms these two character areas, aside from the coastal location, do share the landscape characteristics which are seen as contributing significantly to the underlying merits of the AONB³¹.
- 7.6 In Cumbria, outside the national parks, rather than renewing the general landscape strategy of 1998, it is intended to produce landscape guidance. This guidance on historic landscapes will form a subset of the general guidance and the HLC will be part of the evidence base. At a sub-regional level, HLC should be used to ensure that the general guidance on the development of landscape policies within Local Development Frameworks, masterplans, land management plans and design guides, reflect the need to respect both local distinctiveness, and the historic patterns and attributes of the landscape. Recommendations for actions and policy development at a district and county level are given below. These recommendations address issues that were identified through the HLC process.
- 7.7 Each landscape type can have management guidelines (see the report on *The Cumbria Historic Landscape Characterisation Programme. The Lake District 2007*) and these can be combined as relevant for character areas. Generic recommendations for actions and policy themes that are not area or type specific are detailed below in section 11.

8. Applications for development control and land use management

- 8.1 The historic landscape character area enables an appraisal of the likely impact of proposals involving landscape change. It is important, however, to consider the issue of scale. Many development proposals will not be of sufficient size to have any significant impact at the level of a county-scale character area. For example, small housing developments, when part of an existing settlement nucleation, may have no impact on the overall identity of a character area. The accretive nature of a number of developments through time on an individual settlement, however, may have cumulative effects which alter that settlement's identity and the assessment of this change may require a specific HLC study at the scale of an individual settlement. Such likelihood, however, should be an issue for spatial planners when reviewing the housing and business development land allocations within the Local Development Framework. Details for carrying out higher resolution HLCs as part of master planning and community projects can be found via the English Heritage³² and Natural England³³ websites, in addition a good example of the use of community based landscape characterisation taking account of HLC can be found on Shropshire County Council's website.³⁴ For development control planners, developments that are too small to have a direct impact on the character areas can

be considered to have a neutral impact at an appraisal stage and no further examination will be necessary. Most developments will be of this type.

- 8.2 Some land use proposals such as the removal of a hedgerow may be individually small but form part of a process of erosion of essential landscape character within a given character area. Proposals to remove field boundaries should be assessed against the impact on overall field pattern legibility and against the likely historic nature of the boundary. There is sufficient information on field boundaries within the County-scale HLC for it to be useful in assessing applications under the Hedgerow Regulations. Land-use changes that may result in the larger scale planning of the fieldscape may require a bespoke HLC study appropriate to the scale of the relevant field system.
- 8.3 Where it is considered that a development or a change in land use management will have an impact on an historic character area, it may be necessary to assess the severity and nature of that impact in order to consider the need for a mitigation strategy to reduce or offset some or all of the effects of the development on historic character. This assessment would need to be carried out by a consultant with specialist knowledge of historic landscape. Such an historic landscape assessment can form part of an archaeological assessment, a wider landscape assessment or an Environmental Impact Assessment. It would be expected that in assessing the impact of proposals on an historic landscape character area, there may be a need to query the HLC's baseline data (see section 9). In order to assess impact it is necessary to know both the scope of the change, and the capacity of the local historic environment to accommodate change. There is relatively little available advice on undertaking this process but some of the most useful is contained in the Department of Transport's guidance on assessing the effect of road schemes on historic landscape character.³⁵
- 8.4 Unlike the Department of Transport's approach, however, the approach of this guidance does not seek to attribute greater or lesser value to one area of landscape over another, as a variety of values can and will be attributed to an area of landscape by its community of users and interests. These will include areas of landscape that have been designated for their beauty, natural merit, agricultural use or heritage worth. They will also include areas that are valued for their resources whether for minerals, as employment zones, or as places for outdoor recreation. Some of these values will require and may have protection for specific sites, areas or uses. Landscapes will also be valued by local communities for providing a sense of place and identity. The purpose of using character areas as a basis for assessing the impact of major development proposals on a landscape is in part to avoid attributing greater merit to one landscape type or combination of landscape types over another. The landscape is everywhere and all of it has a history, areas may be valued to a greater or lesser extent according to a variety of viewpoints. An area's historic landscape character is what it is and it is not helpful to attempt to attribute greater or lesser merit to differing character areas, though different areas may contain features of greater or lesser heritage value as expressed through existing site-based designations. The character area approach enables an assessment of a local landscape's capacity to absorb change without being altered significantly in its character. HLC provides a basis from which to develop capacity and sensitivity analyses but it does not provide such analyses.
- 8.5 In general it is assumed that where historic landscape character has considerable time depth, is rare or particularly evident, developments should be designed to

integrate with it. Where the character is commonplace and modern or indistinct and illegible, developments should seek to enhance it. Integration with and enhancement of the historic landscape should be the aims of any mitigation strategies so that developments do not lead to an overall erosion of pre-existing character.

8.6 The purpose of environmental mitigation is to avoid, reduce, remedy or offset significant adverse effects on the environment arising from a development proposal. As historic landscape characterisation seeks to avoid attributing levels of merit to a landscape it is difficult to express impacts in terms of adverse effects, rather what is being assessed is the severity of the impact upon existing character, irrespective of the esteem attributed to that character. In general two assumptions can be made, firstly there will be change and secondly change should as far as possible either enhance existing character or be integrated within it to have as limited an impact as possible. In line with the Landscape Institute and Institute of Environmental Management and Assessment's guidelines for general landscape assessment, mitigation is considered as both primary and secondary measures forming part of a planning consent.

- primary measures are those that intrinsically comprise part of the development design resulting from an iterative process of project planning
- secondary measures are those that are designed specifically to address any residual unwanted effects that result from the final development proposals.

Primary measures should be integral to the agreed development design and with regard to the historic landscape can be considered to form part of the **green infrastructure** elements of a development design.³⁶ Historic landscape features are clearly multi-functional assets and should be conserved and enhanced as part of a green infrastructure approach to planning.³⁷ Secondary measures are likely to be contained within conditions applied to a planning consent.

8.7 The approach of this guidance document to assessing and mitigating the impacts of development proposals on the historic landscape, focuses on the appropriate management of change rather than on protecting some areas of perceived higher value at the expense of other lesser valued areas (this does not mean that restrictions imposed within existing protected areas can be ignored). It allows change to be managed in a way that is generally beneficial to the landscape as an overall resource and seeks to improve Cumbria's environment whilst not stifling necessary development. Its aim with regard to both development control and spatial planning at a strategic level is to enable the identification of vulnerability and to sustain diversity and distinctiveness.

9. Querying the database

9.1 The GIS data are difficult to query and the nature of the data are often not appreciated as containing significant elements of subjectivity. To use the raw data requires an understanding of the reasoning behind the definition of landscape types before meaningful queries can be made. Details of the landscape types are given in Section 5. Some general guidance on database querying and its potential uses are given in the following frequently asked questions.

- 9.2 **Can the database be used to calculate the dominant landscape type in any given character area?** Yes, but the method is not straightforward, and requires familiarity with GIS applications. Each landscape type is made up of many separate objects (polygons), and it is the area of these combined which will provide the total area covered by that landscape type in a character area. To calculate the total area, all the polygons for a landscape type in a character area will need to be selected, using the appropriate selection tools. The selected polygons should then be copied onto the clipboard, and pasted into the working layer to be combined into one polygon. To calculate the dominant landscape type in a character area, this will have to be done for each landscape type. Warning: some landscape types contain many thousands of polygons and the combining process may take some time.
- 9.3 **Can change through time be estimated and over what duration?** Yes, though this is limited to differences recorded between modern maps and the Ordnance Survey 1st edition maps of the mid-19th century. For enclosures, boundary change between the two periods has been recorded in a database field called 'Boundary' (see Appendix One). Settlement change can be discerned for villages and towns by the 'Date' field of the database. To see changes through time, a landscape layer will need to be mapped thematically against the date field, and will require some familiarity with GIS applications.
- 9.4 **Are those settlements that have experienced most recent growth distinguishable from those that have changed little?** Yes, either through the creation of a themed layer, as described above, or by comparing the settlement landscape type to earlier Ordnance Survey maps, if available in digital format.
- 9.5 **Is the database able to reveal those areas that have the greatest time depth in their farming landscapes?** Yes, but in a manner limited by the historic and modern maps used to date landscape features. For many features, they can only be dated as early as the 1st edition Ordnance survey map. For some, the earliest date will be the late 18th century county maps. Any earlier attribution of date is based on interpretation.
- 9.6 **Does the database enable the identification of areas of greatest legibility for appreciating the historic landscape and the processes that formed it?** Yes, because it identifies landscape types that are clearly derived from specific historical processes. So, for example, in areas that are primarily characterised by enclosed former arable commonfield strips and regular enclosures formed by late 18th and 19th century upland enclosure, the historical processes are quite clear. Such a legible landscape can be seen throughout much of the Solway Plain character area. In other areas, the varying characteristics appear more complex but can still be read as a combination of landscape features developed from a variety of historical processes (a palimpsest). Elsewhere, as for example, in much of the Kendal and Kirkby Lonsdale character area, the legibility of the landscape is more difficult to appreciate using the county-based HLC.
- 9.7 **How can historic landscape character data be combined with other environmental datasets such as biodiversity?** Yes provided that an appropriate variety of datasets are available, historic landscape character data can be overlain with data relating to biodiversity, such as Key Species and Priority Habitat data. This enables links to be made between the characteristics of a landscape and the opportunities they may offer for biodiversity. A variety of applications can be applied to this type of comparison, including the identification of areas for combined

historic landscape character and habitat enhancement, and the calculation of environmental sensitivity.

- 9.8 ***Can the database be used for predictive modelling, for example in predicting the landscape impact of the creation of new woodland?*** Yes, but with limitations imposed by the nature of the data. The impact of the creation of new woodland could be assessed by the calculation of the percentage increase in woodland within a given area. The percentage of new woodland to ancient woodland within the character area could be calculated. Both of these would allow some assessment of impact but other important aspects, such as visual impact assessment, would require considerable enhancement to the existing database.

10. Recommended uses

- Use the county-scale HLC in all county and district wide evaluations of baseline evidence prior to defining any land use strategies or frameworks.
- Where necessary in order to define landscape capacity and vulnerability at a local level undertake more detailed, higher resolution HLCs at the parish, estate or settlement scale.
- Use the county-scale HLC to encourage the active management of historic landscapes in rural areas through Natural England's agri-environment schemes and the Forestry Commission's Woodland Grant schemes.

11. Guidance for historic landscape priorities

General

- Highlight the historic environment and historic landscape character as issues of material consideration in all strategic planning documents.
- Promote the historic landscape and its components as a cultural and educational resource and foster an increased understanding, awareness and enjoyment of the whole historic environment, through educational, visitor-related and community-based environmental initiatives.
- Require the identification of key components that contribute to the core landscape attributes of a character area, such as in some areas, dispersed field barns or limekilns for example, and encourage their retention and conservation within those areas.
- Adopt a green infrastructure approach to planning and through that approach, retain, conserve and enhance historic landscape character.

Farmland and field boundaries

- Encourage the conservation of upland field enclosures especially ring garths and intakes predating the Enclosure Movement.
- Encourage the maintenance of hedgerows as boundaries of still functioning fields through gapping up and the use of appropriate local hedge laying techniques.
- Promote the planting of trees in hedgerows in order to replace overly mature specimens.
- Encourage the retention and maintenance of kest banks.
- Require that new field boundaries laid out as part of land restoration schemes

should reflect the historic arrangement of field division and integrate with the surrounding field pattern.

- Encourage the maintenance of dry stone walls as boundaries of still functioning fields and the use of appropriate stone sources and coursing techniques during their repair.
- Encourage the retention, and if necessary replacement, of in-field trees which may provide evidence of former field boundaries or land use practices.
- Encourage the pollarding of former pollarded trees, and where appropriate unpollarded trees in hedgerow and in-field locations.
- Advocate the retention and enhancement of old orchards and the restoration and creation of orchards around farmsteads in areas where they were once more common.
- Promote the retention of field furniture such as ditches, gateposts, hog holes, sheep folds, stone stiles, ponds and manmade but naturally fed stock drinking areas.
- Promote the protection from ploughing of ridge and furrow and lynchet earthworks where they are an indication of former arable common field farming.
- Advocate the maintenance of commons so they remain open but actively farmed areas.
- Seek to sustain traditional upland farming practices and the viability of upland farming in general.

Moorland

- Promote the conservation of fields in open moorland areas.
- Adapt to climate change by advocating the gripping of dykes in moorland to maintain water levels in sphagnum bog areas and to discourage the drying out of peat.
- Encourage the monitoring of peat erosion.
- Develop strategies in consultation with the fire service to limit the impact of moorland fires.

Former mining and quarrying

- Encourage the conservation of features associated with mineral working.
- Advocate the enhancement of former quarry sites for nature and heritage conservation and complementary recreational purposes.

Woodland

- Advocate the consideration of historic landscape character and its conservation in any proposals for the extension of woodland areas or afforestation.
- Require the use of HLC approaches in the identification of areas suitable for the creation of new native woodlands.
- Encourage the use of locally derived tree species and traditional planting schemes in the design of new plantations that complement and enhance existing historic landscape features.
- Require woodland management plans to identify historic woodland features and to make provision for their conservation.

- Encourage the extension of existing gill or clough woodlands and the planting of new clough woodlands in appropriate places.
- Ensure that the importance of the past use of exotic trees species in ornamental landscapes is appreciated and taken into account in woodland management plans, especially in parkland contexts
- Encourage coppicing and coppice management as a provider of fuel for commercial and community wood fuel heating schemes.

Built environment

- Promote good quality building design for all new developments, which respect and enhance the existing structure and layout of the settlement to which they are attached or integrated within. They should reflect and enhance the historic building styles and materials of the locality.
- Encourage the retention, reuse and adaptation, wherever possible, of former agricultural, industrial and commercial buildings as both a benefit to historic landscape character and to the reduction of carbon costs through unnecessary new build.
- Discourage, except where there is no alternative, housing renewal through the demolition and replacement of housing which contributes to the historic character of an area and instead encourage the refurbishment and appropriate modernisation of existing housing.
- Ensure that the impact of new developments on surrounding existing buildings and structures is fully considered and that their existing historic character is enhanced rather than degraded.
- Ensure that building work to historic structures, including repairs, does not detract from the existing design.

¹ http://www.english-heritage.org.uk/upload/pdf/boudless_horizons.pdf

² For a review of this approach see <http://www.english-heritage.org.uk/upload/pdf/LancashireHLC.pdf>

³ <http://www.english-heritage.org.uk/server/show/nav.1292>

⁴ Cumbria County Council HER <http://www.cumbria.gov.uk/planning-environment/countryside/historic-environment/HER.asp>, Lake District National Park Authority HER <http://www.lake-district.gov.uk/index/understanding/archaeology/archaeologydiscoveryzone/archaeologydher.htm>,

Yorkshire Dales National Park Authority HER <http://www.yorkshiredales.org.uk/historic-environment>

⁵ <http://www.english-heritage.org.uk/server/show/nav.1293>

⁶ Case studies on using the County-based HLC as a basis for more local HLC studies are contained in the LDNPA and Cumbria County Council report on *The Cumbria Historic Landscape Characterisation Project. The Lake District National Park*, available from the LDNPA in digital CD format.

⁷ <http://www.landscapeinstitute.org/>

⁸ <http://www.iema.net/>

⁹ <http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/default.aspx> see also <http://www.landscapecharacter.org.uk/>

¹⁰ See Natural England 2008, *State of the Natural Environment 2008*, <http://www.naturalengland.org.uk/publications/sones/default.aspx>

- ¹¹ <http://www.cumbria.gov.uk/planning-environment/countryside/countryside-landscape/land/CA.asp>
- ¹² Chris Blandford Associates 2008, *Lake District National Park. Landscape Character Assessment and Guidelines*, available from the LDNPA in digital CD format.
- ¹³ <http://www.naturalengland.org.uk/ourwork/landscape/protection/europeanconvention/default.aspx>
- ¹⁴ <http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm>
- ¹⁵ http://www.naturalengland.org.uk/Images/tcm232117_tcm6-8169.pdf
- ¹⁶ <http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpoli>
[cystatements/](http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpoli)
- ¹⁷ <http://www.hadrians-wall.org/page.aspx/About-the-World-Heritage-Site>
- ¹⁸ http://www.lakeswhs.co.uk/international_recognition.html
- ¹⁹ <http://www.northpennines.org.uk>
- ²⁰ Data accurate as of 2007.
- ²¹ <http://www.lakelandwildlife.co.uk/biodiversity/pdfs/Cumbria%20Biodiversity%20Evidence%20Base%20Report.pdf>
- ²² <http://www.cumbria.gov.uk/planning-environment/countryside/countryside-landscape/land/CA.asp>
- ²³ <http://www.cumbria.gov.uk/elibrary/Content/Internet/538/755/1599/2318/2323/38520131637.pdf>
- ²⁴ <http://naturalengland.communisis.com/naturalenglandshop/docs/NE85C2.pdf>
- ²⁵ <http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm>
- ²⁶ Chris Blandford Associates 2008, *Lake District National Park. Landscape Character Assessment and Guidelines*, available from the LDNPA in digital CD format.
- ²⁷ <http://www.lakelandwildlife.co.uk/biodiversity/pdfs/Cumbria%20Biodiversity%20Evidence%20Base%20Report.pdf>
- ²⁸ <http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpoli>
[cystatements/](http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpoli)
- ²⁹ http://www.naturalengland.org.uk/regions/north_west/ourwork/landscapepartnership.aspx
- ³⁰ <http://www.lancashire.gov.uk/corporate/web/view.asp?siteid=4398&pageid=20338&e=e>
- ³¹ See Solway Coast AONB 2004, *Solway Coast Area of Outstanding Natural Beauty Management Plan 2004-2009* (currently under review see <http://www.solwaycoastaonb.org.uk/draftmanplan.php>)
- ³² <http://www.english-heritage.org.uk/server/show/nav.11376>
- ³³ http://www.naturalengland.org.uk/Images/EMRLSS-Final-Report_tcm6-10149.pdf
- ³⁴ <http://www.shropshire.gov.uk/sustainability.nsf/open/3828E27D6BB22100802572A700320A18>
- ³⁵ <http://www.helm.org.uk/upload/pdf/Road-Schemes.pdf>
- ³⁶ For the relationship of green infrastructure to landscape character enhancement see Natural England 2009, *Green Infrastructure Guide*, 21 (pdf not currently available)
- ³⁷ For details on green infrastructure in the North West see <http://www.greeninfrastructurenw.co.uk/html> and see policy EM 3 of the Government Office for the North West 2008, *North West of England Plan: Regional Spatial Strategy to 2021* http://www.nwrpb.org.uk/whatwedo/issues/environment/?page_id=457

APPENDIX 1: CUMBRIA HLC TABLE STRUCTURES

Introduction

Each landscape type has a table of attributes, which provides information about every object (fields, settlements, industries, roads, etc.) in the table. Each row in the table contains information about an object, and each column (or Field) has a different type of information. Section One of this appendix provides details of the attributes that appear in all or many of the tables, with a list of the descriptions appropriate to each one. Section Two details the table structure for each landscape type. Each column (or Field) heading is an attribute of the landscape type, and below it is given a list of the descriptions appropriate to that field. For example, Roads have a field called 'Type'. The attributes used in that field are: 'Road', 'Track' or 'Path'. The numbers in brackets given after each column heading are the number of characters in each field.

Section 1: Fields Common to Several Landscape Types

Land_cover & OS1st_cover (15 characters):

This field is used for agricultural landscape types. It is not included in settlement, built environment, recreation or extraction tables, etc, nor in tables of specialised landscape types, such as deer parks and monastic land, as they usually overlie other landscape types. Woodland has its own land cover attributes.

Crag/cliff
 Developed
 Fell
 Improved
 Improved fell
 Lake/tarn
 Limestone (for limestone pavement)
 Moorland
 Moss & mire
 Mudflats
 Reclaimed land
 Saltmarsh
 Sand dunes
 Sand/shingle
 Scattered trees
 Scrub
 Water
 Woodland

Relict_use (20 characters):

This field is used where a previous, but not current, land use can be determined, particularly where development has not obscured pre-existing field patterns such as recreation sites and areas of built environment. It is also used for agricultural land where an older land use can be determined, such as deer parks, monastic sites, etc. In most cases, the relict use will refer to the name of another landscape type, such as 'ancient enclosure' or 'planned enclosure', which will contain more details of that landscape type. Within the 'ancient enclosure' landscape type, however, a relict use will often be another ancient enclosure type, or have remained the same. For example, a discrete farm may have originated as part of a deer park, which will be the relict use. Likewise, under 'former common arable', an area recorded as just 'former common arable' may be 'fossilised strips' under relict use, showing significant boundary loss from the earliest available map evidence (in this case the OS 1st edition). 'Unknown' is used where subsequent development has obscured previous use, and so it cannot be

determined. So, in addition to relict landscape types relevant to a particular table, the following may also be recorded:

Ancient enclosure
 Built environment
 Canal
 Deer park
 Designed land
 Extraction
 Former common arable
 Monastic
 Planned
 Railway
 Recreation
 Road
 Unenclosed land
 Unknown
 Water
 Woodland

Morphology (2 characters):

Used only for agricultural enclosure types. Enclosure shapes were divided into the following categories:

Code	Interpretation
A1	Rectangular or sub-rectangular enclosures with wavy-edged boundaries
A2	Not used
A3	Rectangular or sub-rectangular enclosures with parallel, curving boundaries
A4	Rectangular or sub rectangular enclosures with regular enclosure boundaries
A5	Not used
A6	Rectangular or sub-rectangular enclosures with ruler straight enclosure boundaries
A7	Rectangular or sub-rectangular enclosures with ruler straight enclosure boundaries in a grid layout
B1	Elongated enclosures with wavy-edged enclosure boundaries
B2	Elongated enclosures with parallel, curving enclosure boundaries
B3	Elongated enclosures with regular enclosure boundaries
B4	Elongated enclosures with ruler straight enclosure boundaries
C1	Irregular enclosures with wavy-edged enclosure boundaries
C2	Not used
C3	Irregular enclosures with regular enclosure boundaries
C4	Irregular enclosures with ruler straight enclosure boundaries
D1	Unenclosed

Date and Change_use (6 characters):

The dates in this field record the date by which a feature is first shown on the available map evidence. The change_use field is used in tables where a features is still recorded as in use or disused. Where a feature is disused, the change_use field will record the first available map evidence where this is recorded. For example, a quarry shown as working on the OS 1st edition map, but not before, will have a date of 'OS 1st'. It is shown as disused in the late 19th century, and so will have a change_use date of OS 2nd.

Code	Interpretation
1770	In existence by c 1770 when large-scale county maps were published
OS 1st	In existence by publication of OS 1 st edition map in mid-19 th century
OS 2nd	In existence by publication of OS 1 st edition map in late 19 th century
Modern	20 th century features post-dating OS 2 nd edition map

Use (7 characters):

This field is used for non-agricultural or woodland features. It records whether a particular features is still in use or disused/disappeared (see Date and Change_use, above).

Boundary (1 character):

Used only in the tables for enclosed agricultural land: Planned Enclosures, Former Common Arable and Ancient Enclosures. Enclosures were assessed for the degree of boundary change from the OS 1st edition maps:

Code	Interpretation
1	No apparent or minor boundary loss/change (default)
2	Significant boundary loss/change
3	Rebuilt - new enclosure pattern established
4	Rebuilt - incorporating remnant boundaries
5	Not applicable

Date_entered (date field):

A numerical date field, showing the original date information was entered.

Entered_by (3 characters):

The initials of the recorder of the original data entries.

Section 2: Tables

Roads:

Type (7)	Date (6)	Use (7)	Change_use (6)	Date_entered	Entered_by
Road	See section 1	See section 1	See section 1	See section 1	See section 1
Track					
Path					

Railways:

Date (6)	Use (7)	Change_use (6)	Date_entered	Entered_by
See section 1	See section 1	See section 1	See section 1	See section 1

Canals:

Date (6)	Use (7)	Change_use (6)	Date_entered	Entered_by
See section 1	See section 1	See section 1	See section 1	See section 1

Built Environment

Built environment includes substantial areas of non-domestic development, and includes non-extractive industries, commercial and military sites. 'Power plant' has been used only for large-scale establishments. Manuf/retail is used for manufacturing, business and commercial features. A recorded continuous manufacturing or retail use does not indicate that the type of use is unchanged. For example, a 19th century ironworks site may now be used for other, modern manufacturing or retail uses.

Type (14)	Date (6)	Use (7)	Change_use (6)	Relict_use (20)	Date_entered	Entered_by
Airfield	See section 1	See section 1	See section 1	See section 1	See section 1	See section 1
Dock/harbour						
Manuf/retail						
Military						
Power plant						
Wind farm						

Settlement

Settlement was recorded originally as either dispersed or nucleated. This has been expanded to three categories, to include small nucleations. Discrete settlements are individual farms (including associated farm buildings), churches or other buildings. Small nucleations are settlements of between two and five properties.

Where a settlement has expanded significantly in the 19th and 20th centuries, phases of expansion have been plotted approximately from the map evidence. The scale at which the mapping was carried out means that phased expansion of a settlement should be used as a guide only.

Where settlements have been abandoned and there is no evidence for them on modern maps, they have not been plotted.

Type (15)	Date (6)	Date_entered	Entered_by
Discrete	See list	See section 1	See section 1
Small nucleated			
Nucleated			

Extraction

This table covers industrial extraction sites. It includes brick-making which, although this is a manufacturing industry, is almost always adjacent to the quarries providing the source material. The 'Material' field relates to the main product of the industry, where known.

Type (15)	Date (6)	Use (7)	Change_use (6)	Relict_use (20)	Material (15)	Date_entered	Entered_by
Mine	See section 1	See section 1	See section 1	See section 1	Brick clay	See section 1	See section 1
Opencast					Coal		
Peat cutting					Copper		
Quarry					Granite		
					Gypsum		
					Iron		
					Lead		
					Limestone		
					Peat		
					Sand/gravel		
					Sandstone		
					Silver		
					Slate		
					Unknown		
					Zinc		

Recreation

This table does not include public parks, which are covered by 'designed landscapes'.

Type (14)	Date (6)	Use (7)	Change_use (6)	Relict_use (20)	Date_entered	Entered_by
Allotment	See section 1	See section 1	See section 1	See section 1	See section 1	See section 1
Attraction						
Caravan site						
Golf course						
Nature reserve						
Playing field						
Race course						
Sports ground						
Zoo						

Woodland

Ancient woodland applies to woodland noted on the county map of 1770, or on the 1st edition OS map where the map indicates that it is not plantation.

The 'Land cover' and 'Type' fields record the current state. Where woodland has been lost (i.e. recorded as 'former wood') but was present on earlier maps, the type of woodland and woodland cover will be recorded in the appropriate fields according to the map dates when it still existed. The land cover will be given as 'non wood' and relict use (as listed in section 1) will be entered in the fields for earlier maps where woodland has been planted at a later date.

Morphology	Date (6)	Type (15)	Land_cover (20)	OS1st_type (20)	OS1st_cover (20)	OS2nd_type (20)	OS2nd_cover (20)	Date_entered	Entered_by
See list	See section 1	Ancient	Deciduous	As 'Type' but also as relict use, section 1	As 'Land cover'	As 'Type' but as also relict use, section 1	As 'Land cover'	See section 1	See section 1
		Former wood	Deciduous steep						
		Plantation	Coniferous						
		Regenerated	Coniferous steep						
		Scattered trees	Mixed						
			Mixed steep						
			Scrub						
			Non wood						

Example: A deciduous woodland plantation is marked on the OS 1st and 2nd edition OS maps, but is open land on modern maps. This would be recorded as:

Morphology	Date	Type	Land_cover	OS1st_cover	OS1st_type	OS2nd_type	OS2nd_cover
A4	Modern	Former wood	Non wood	Deciduous	Plantation	Plantation	Deciduous

Water

The date field applies only to 'Reservoir' and 'Waterwork', as 'River'; and 'Lake, tarn' applies to natural features. Mill leats are recorded as rivers at present.

Type (10)	Date (6)	Date_entered	Entered_by
River	See section 1	See section 1	See section 1
Lake, tarn			
Reservoir			
Waterworks			

Designed Landscapes

Type (15)	Date (6)	Use (7)	Change_use (6)	Relict_use (20)	Date_entered	Entered_by
Cemetery	See section 1	See section 1	See section 1	See section 1	See section 1	See section 1
Ornamental park						
Urban park						

Unenclosed Land and Unenclosed Coast

Occasionally, enclosed land becomes unenclosed land. Where this is the case, these two tables have fields for relict use, and change use to record previous landscape types and the date by which this occurred.

Unenclosed Land

Type: (20)	Relict_use (20)	Change_use (6)	Date_entered	Entered_by
Green [village greens]	See section 1	See section 1	See section 1	See section 1
Fell				
Improved				
Improved fell				
Limestone pavement				
Moorland				
Moss & mire				
Reclaimed land				
Scrub				
Woodland				

Unenclosed Coast

Type: (20)	Relict_use (20)	Change_use (6)	Date_entered	Entered_by
Cliff/crag	See section 1	See section 1	See section 1	See section 1
Improved				
Moss & mire				
Mudflats				
Saltmarsh				
Sand dunes				
Sand/shingle				

Agricultural Land

Agricultural land is divided across a number of attribute tables, according to the broad interpretation categories, 'Planned enclosure', 'Former commonfield' and 'Ancient enclosure'. Following these major divisions are sub-categories of ancient enclosures which had a specialist use, eg monastic, and deer parks. Developed land is only recorded under agricultural land where the field pattern and former use is still discernible, for example caravan sites, or small scale extractive sites which developed within existing field systems. In these cases, land cover is recorded as 'developed', and the 'type' field refers to the agricultural type only.

Planned Enclosure

Morphology	Land_cover (15)	Date (6)	Type (15)	Relict_use (20)	Boundary	OS1st_morph	OS1st_cover (15)	Date_entered	Entered_by
See list	See section 1	See section 1	Parliamentary	See section 1	See list	As Morphology	As Land_cover	See section 1	See section 1
			Private						
			Unknown						

Former Common Arable

Morphology	Land_cover (15)	Date (6)	Type (20)	Relict_type (20)	Boundary	OS1st_morph	OS1st_cover (15)	Date_entered	Entered_by
See list	See section 1	See section 1	Former common arable	See 'Type'	See list	As Morphology	As Land_cover	See section 1	See section 1
			Fossilised strips						

Ancient Enclosures

Morphology	Land_cover (15)	Date (6)	Type (20)	Relict_use (20)	Boundary	OS1st_morph	OS1st_cover (15)	Date_entered	Entered_by
See list	See section 1	See section 1	Ancient closes	See Type	See list	As Morphology	See list	See section 1	See section 1
			Cow pasture						
			Deer park						
			Demesne						
			Discrete farm						
			Intake						
			Meadow						
			Medieval croft						
			Monastic						
			Outfield						
			Reclaimed land						
			Unenclosed land						
			Woodland						

Deer Parks:

Name (20)	Current_use (20)	Date_entered	Entered_by
	Section 1, as Relict_use	See section 1	See section 1

Monastic sites:

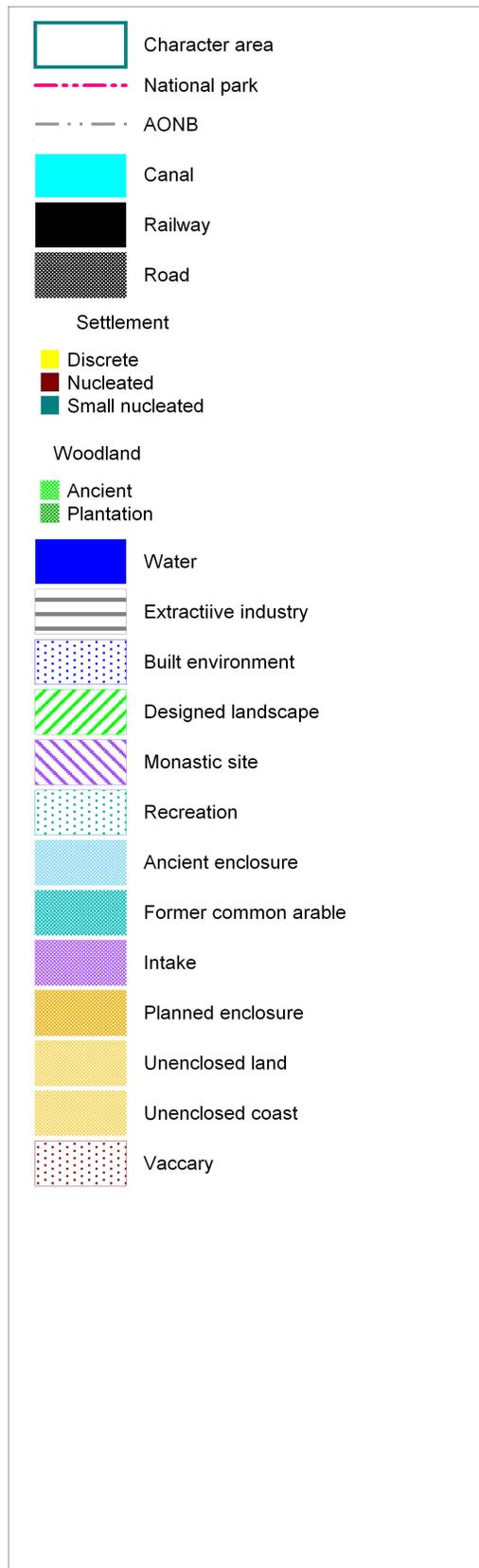
Name	Type (20)	Current_use (20)	Date_entered	Entered_by
See list	Abbey	See Section 1, as Relict_use	See section 1	See section 1
	Grange			
	Nunnery			
	Priory			

Vaccaries:

Current_use (20)	Date_entered	Entered_by
Section 1, as Relict_use	See section 1	See section 1

These three tables are a subset of the other layers.

APPENDIX 2: LEGEND FOR CHARACTER AREAS MAPS



APPENDIX 3: CHARACTER AREA DESCRIPTIONS

The aim in defining these character areas was to use the HLC landscape types alone, and to ignore other factors such as topography and personal knowledge. The process, however, is subjective and although the general extent of each character area was based on the relationship between the landscape types, subjective elements are implicit in the fine adjustments made to their boundaries. Following definition, additional information for the character descriptions was sourced from digital air photographs and satellite coverage as well as from the Cumbria and Lake District Historic Environment Records. In total, 53 character areas were defined, and these are described below. The character areas do not correspond to administrative and political boundaries and for ease of reference these are provided in figure 1 and can be compared to the distribution of character areas in figure 2. Only those character areas or parts of character areas which lie outside the Lake District National Park are illustrated and the key to the colour coding on the maps is in appendix 2. The figures are for illustrative purposes only and any attempted analysis should be based on the supplied digital data.

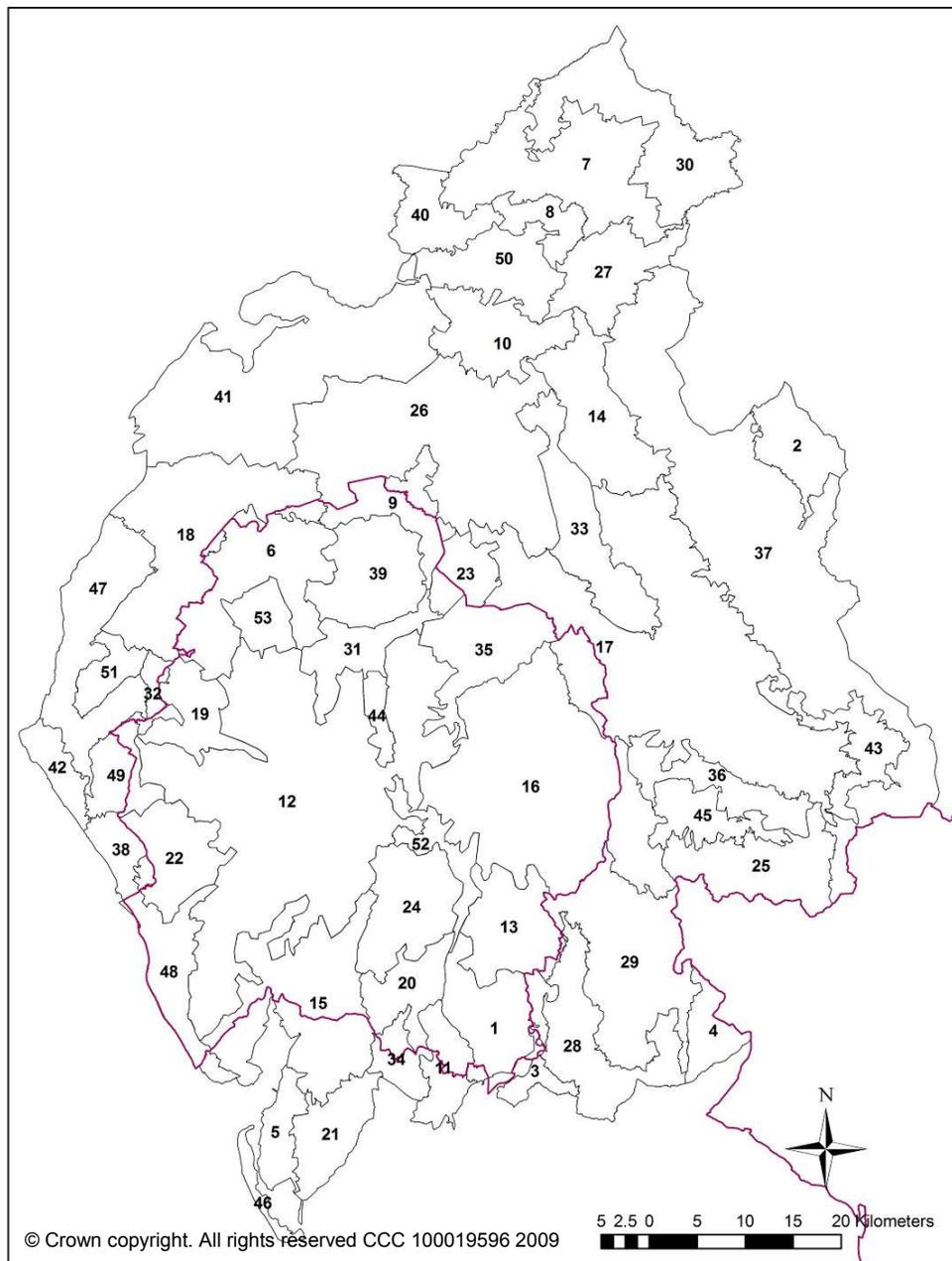


Figure 1 Numbered character areas (pink lines are the national park boundaries).

Key to Character Areas

No	Name	Sq Km
1	Allithwaite and Witherslack Low Fells	98.34
2	Alston Moor	55.63
3	Arnside and Beetham	17.03
4	Barbon and Middleton Fells	38.19
5	Barrow and Kirkby in Furness	39.6
6	Bassenthwaite and Lorton Valley	146.9
7	Bewcastle and Netherby	190.4
8	Bolton Fell	37.43
9	Caldbeck and Caldew Valleys	64.71
10	Carlisle	78.39
11	Cartmel Peninsula	49.46
12	Central Fells	628.4
13	Crosthwaite and Underbarrow Low Fells	93.01
14	Cumwhitton and Kirkoswald	123
15	Dunnerdale and Broughton Low Fells	209.4
16	Eastern Lake District Fells	394.4
17	Eden Valley	531.6
18	Ellen and Marron Valleys	213.6
19	Ennerdale	59.62
20	Furness Fells	57.01
21	Furness Peninsula	66.19
22	Gosforth and Muncaster Lowlands	81.65
23	Greystoke	43.2
24	Grizedale Forest	102.4
25	Howgills	108.6
26	Inglewood	343.2
27	Irthing Valley	86.57
28	Kendal and Kirkby Lonsdale	118.5
29	Kendal Low Fells	190
30	Kershope and Spadeadam Forests	60.4
31	Keswick and Derwent Water	62
32	Lamplugh and Ehe Valley n	19.1
33	Lazonby Ridge	110.8
34	Leven Estuary	26.56
35	Matterdale and Ullswater	97.91
36	Orton Fells	70.26
37	Pennines	568.4
38	Sellafield	30.62
39	Skiddaw Range	105.1
40	Solway Moss	60.02
41	Solway Plain	349
42	St Bees	34.45
43	Stainmore	57.3
44	Thirlmere	19.46
45	Upper Lune Valley	55.13
46	Walney Island	9.926
47	West Cumberland Plain	143.6
48	West Cumbrian Coastal Plain	76.71
49	Western Lake District Fell Edge	50.06
50	Westlinton	87.93
51	Whillimoor and Dean Commons	32.23
52	Windermere and Rothay and Brathay Valleys	40.97
53	Wythop and Thornthwaite Forest	37

1. Allithwaite and Witherslack Low Fells

The area of low fells around Allithwaite and Witherslack lie to the south of the Crosthwaite and Underbarrow Low Fells. Most of this character area is within the Lake District National Park but its eastern boundary extends outside the park to include, Brigsteer, Sizergh and the lower Lyth valley and its south-western corner which includes Eggerslack Wood and Holme Island also lies outside the park. The settlement pattern is predominantly dispersed but there are a number of nucleations of varying size, though lacking the regularity of many nucleations elsewhere in Cumbria. Settlement is mostly in the areas of ancient enclosure, but there are a few later farms in the areas of the drained mosslands. Overall the settlement pattern appears quite traditional with 37% of all settlements being in existence by 1770. The landscape is dominated by large areas of planned enclosure, much of which is covered by large blocks of plantation woodland. This planned enclosure includes both former common waste in the low fells, and the reclaimed wetlands around the Kent Estuary. Smaller areas of anciently enclosed land follow the long narrow valleys, running north-south, and there is an extensive area of former common arable fields in the south, in the lowland below Newton Fell. Field boundaries are mixed; stone walls and hedges, but there is probably a predominance of hedgerows in the anciently enclosed land around the planned enclosures of the reclaimed mosslands. Stone walls tend to be restricted to the planned enclosures of the low fells, and the anciently enclosed land lying next to it.

Legacy: A mixed pattern of modern and older settlements and field enclosure with moderate legibility of landscape elements of medieval origin.

Landscape designation and status: Majority of area within the Lake District National Park, registered park at Sizergh Castle.

Planning authorities: LDNPA and South Lakeland District Council

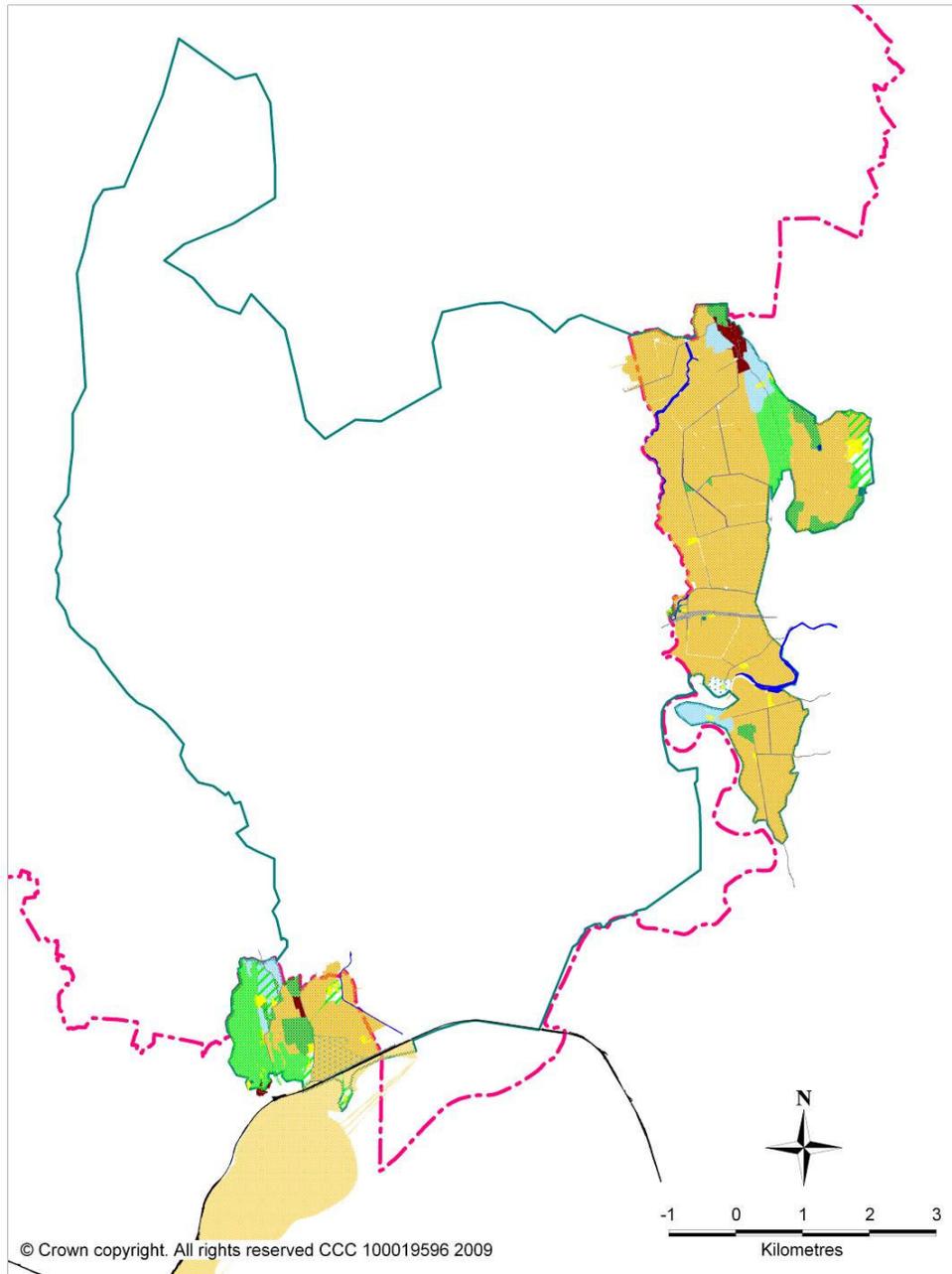


Figure 2 Allithwaite and Witherslack Low Fells character area

2. Alston Moor

The character of this area is dominated by the valleys of the rivers South Tyne and Nent which flow to either side of Flinty Fell. They in particular distinguish the area from the surrounding Pennines character area. Not only is settlement more intensive, though almost wholly concentrated in the valleys, but the valleys exert an influence on the surrounding uplands, all of which are enclosed with large planned enclosures of 19th century date. The settled valleys probably also account for the far greater degree of plantation woodlands in the character area in comparison to the Pennines. Whilst distinct within Cumbria from the neighbouring Pennines character area, many similarities are shared with neighbouring parts of County Durham such as West and East Allendale and Weardale.

Alston is a small town and a nucleated settlement of medieval date, as reflected by the only evidence of former commonfields in the area being associated with it. The remainder of the settlement pattern, however, is mixed with 56% of the settlements post-dating 1770. Most of these are either discrete settlements. Alston and Garrigill were the only nucleations in existence before 1770 but there are now 12 nucleations or small nucleations. Some previously existing discrete settlements such as Blagill or the dispersed farms and cottages at Nenthead grew and coalesced into nucleations during the 19th and 20th centuries. The growth in both discrete and nucleated settlement reflect an intensification of the settlement pattern within the valleys and not a settlement of newly enclosed land. Settlement intensification related to the increased industrialisation of the exploitation of local mineral resources, primarily lead, which have locally had a marked impact on the landscape. Together these characteristics form the 'miner/farmer' landscapes that are a noted feature of this part of the northern Pennines.

Planned enclosures dominate the uplands whilst, aside from around Alston, the valleys are dominated by ancient enclosures. Nearly all woodland is plantation (largely coniferous) of relatively recent origin and largely occurring within the planned enclosures. There are only tiny fragments of ancient gill woodland within the valleys.

Legacy: Largely modern settlement and enclosure pattern, moderate legibility of landscape elements of medieval origin, strong survival of industrial features.

Landscape designation and status: Wholly within the North Pennines AONB and the North Pennines European and Global Geopark.

Planning authority: Eden District Council

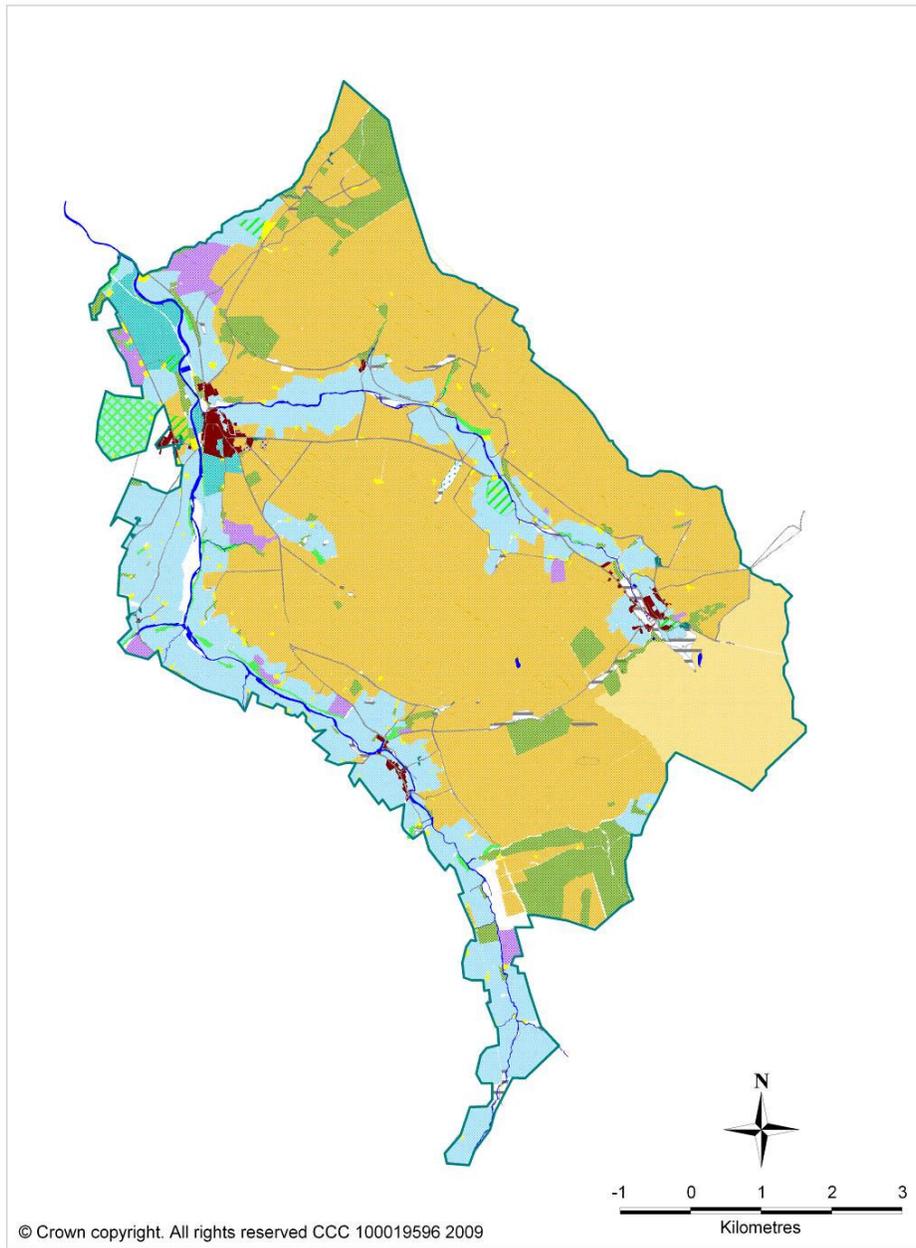


Figure 3 Alston Moor character area

3. Arnside and Beetham

This small character area lies almost wholly within the Cumbrian part of the Arnside/Silverdale AONB and unsurprisingly shares a similar character with the neighbouring Lancashire portion of the AONB. It is dominated by large areas of woodland and sprawling nucleated settlements of largely 19th and 20th century date, with 97.5% of the nucleated settlement area being modern. Aside from the modern nucleated settlement areas of Arnside, Storth, Sandside and Slackhead, the majority of the settlement pattern is dispersed though only 8% of these settlements were in existence by 1770. The field pattern is dominated by ancient enclosures, some of which include enclosures on former mossland. There is some planned enclosure of low limestone fells but these are largely overlain by more recent woodland. Field boundaries are mixed consisting of both dry-stoned walls and hedgerows especially on the former mosslands. The woodland is a mixture of ancient woodland and more recent plantations with the majority of both being deciduous. Limestone quarries are a notable feature as are limekilns.

Legacy: Largely 19th century landscape, weak legibility of landscape elements of medieval origin, strong survival of limestone-based industrial features.

Landscape designation and status: Largely within the Arnside/Silverdale AONB.

Planning authority: South Lakeland District Council.

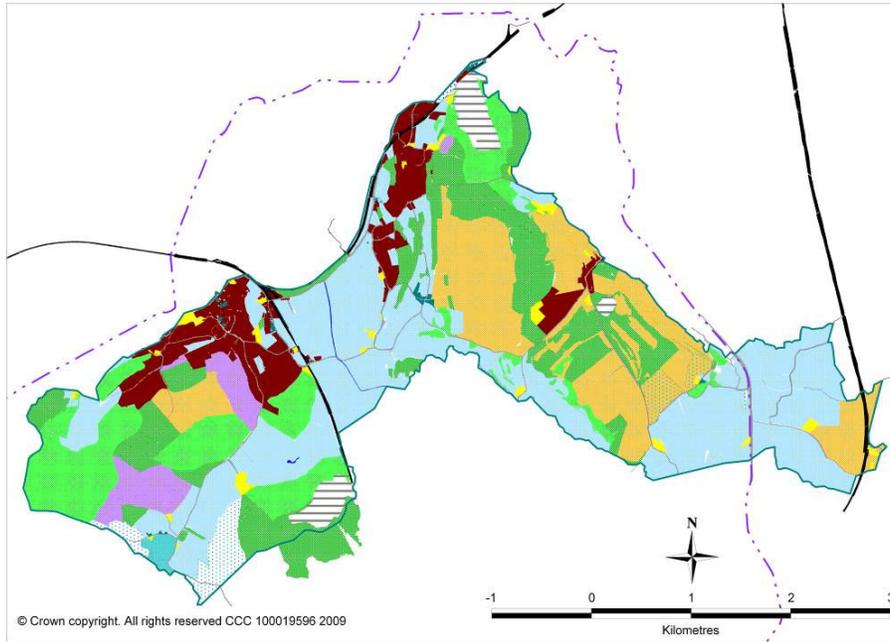


Figure 4 Arnside and Beetham character area

4. Barbon and Middleton Fells

An area of Pennine upland to the immediate east of the River Lune as it flows south from Sedbergh towards Kirkby Lonsdale. In character it is clearly part of the Yorkshire Dales, though it is currently excluded from the national park. The majority of the character area is dominated by unenclosed upland but in the south the fells are enclosed with planned enclosures and share this characteristic with the neighbouring Leck Fell area of Lancashire. Prehistoric archaeological remains commonly survive as earthworks within the area of planned enclosures. The settlement pattern consists of four discrete settlements at the foot of the uplands along a spring line. All of these settlements pre-date 1770. Overall there is very little woodland, though ancient gill woodlands are quite common in the valleys flowing out of the Pennines towards the Lune.

Legacy: Strong legibility of landscape elements of medieval origin, strong survival of medieval and earlier archaeological features.

Landscape designation and status: None.

Planning authority: South Lakeland District Council

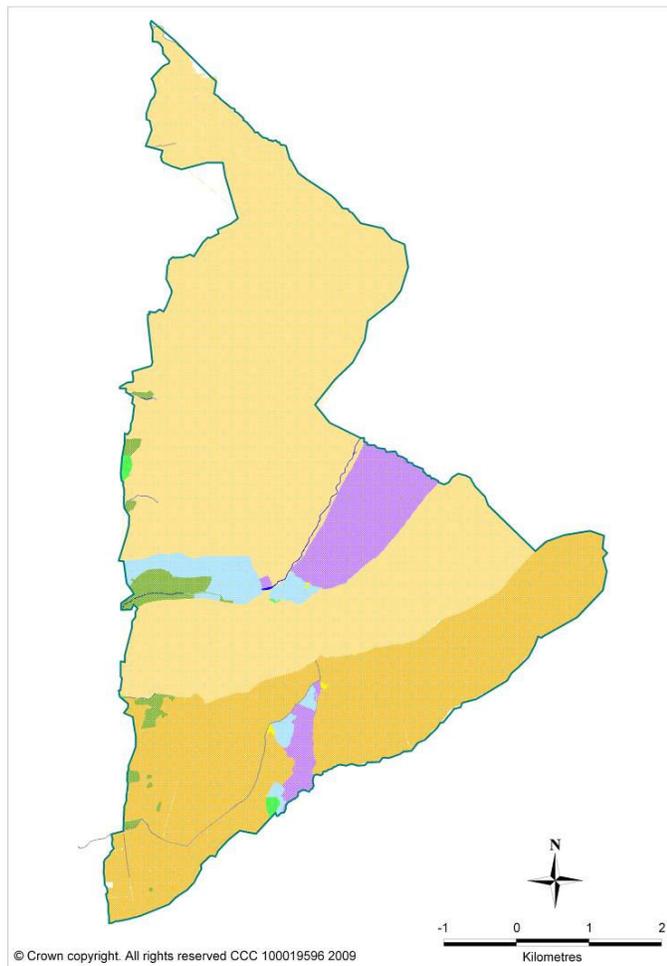


Figure 5 Barbon and Middleton fells character area

5. Barrow and Kirkby in Furness

This character area is one of the most severely influenced by current and past industry and urbanisation within Cumbria. It extends from Barrow Docks in the south to Bank House Moor in the north and encompasses much of the western portion of the modern Barrow district administrative area. The settlement pattern is dominated by the late 19th century industrial town of Barrow and the 19th and 20th century industrial inspired settlement expansion of Askham and Ireleth. Before the later 19th century the settlement pattern was dominated by nucleated settlements of largely medieval origin. Of these 76% were in existence by 1770. Much of the area surrounding Barrow consists of industrial infrastructure such as the docks, which transformed the relationship between the mainland and Barrow Island, and modern industrial parks. Windfarms often have a dominating presence in both views inland and out to sea. The legacy of past industry is particularly prevalent with a swathe of landscape south of Askham having been formed by iron mining, including water filled collapsed mines. What little survives of the pre-19th century farming landscape is largely characterised by ancient enclosures, though there is an extensive area of former common arable field associated with Ireleth. Woodland is very sparse largely consisting of small pockets of ancient woodland.

Legacy: Largely 19th and 20th century landscape, weak legibility of landscape elements of medieval origin, moderate survival of 19th century industrial features.

Landscape designation and status: None.

Planning authority: Barrow Borough Council

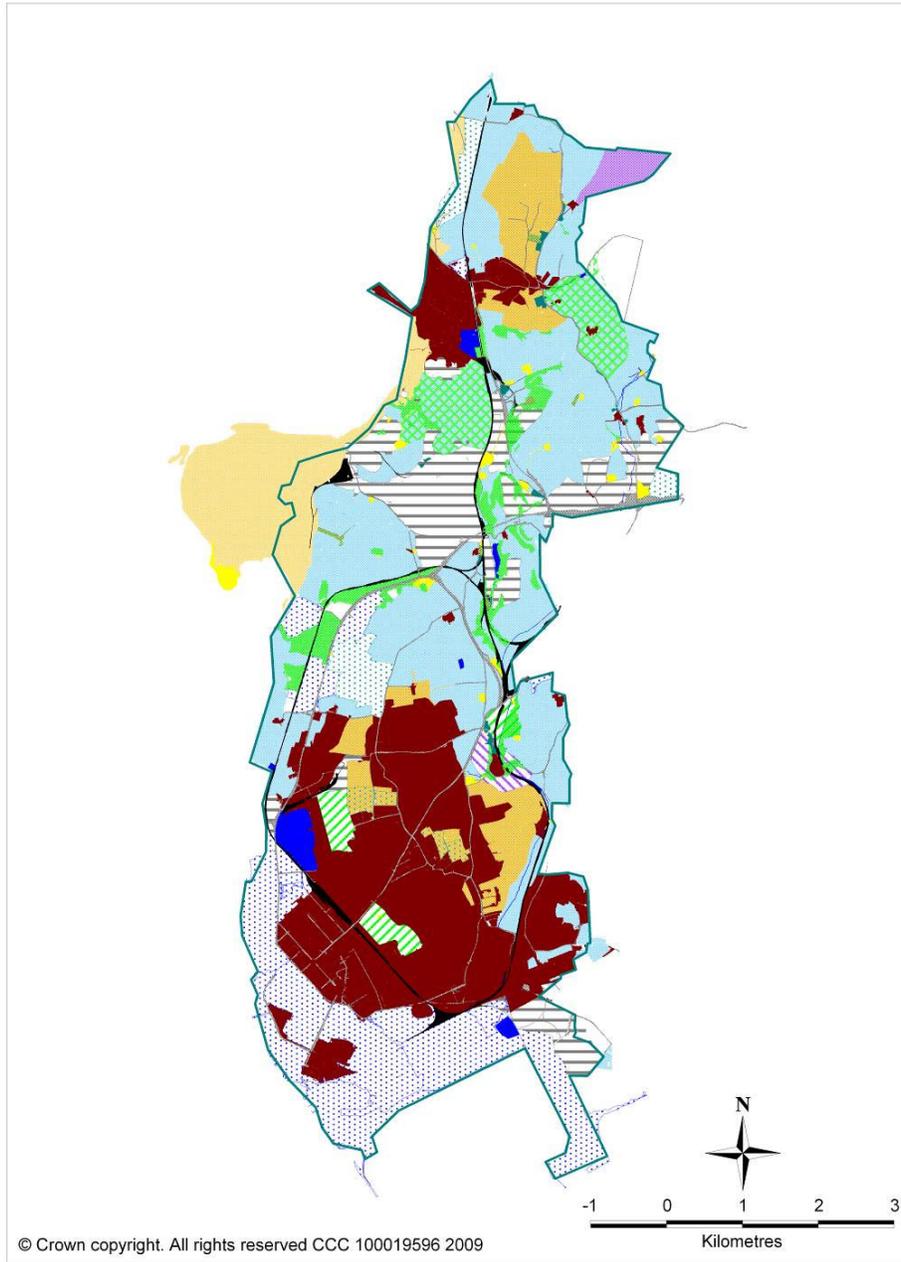


Figure 6 Barrow and Kirkby-in-Furness character area

6. Bassenthwaite and Lorton Valley

The Bassenthwaite and Lorton Valley character area occupies the valleys of Bassenthwaite Lake, the River Derwent and River Cocker, and some of the surrounding low fells. It is largely contained within the Lake District National Park, except around Bothel Craggs. The land is mostly low-lying, but with low fells at the northern and southern ends. The settlement pattern is mostly dispersed, with some small hamlets, and the area is distinguished by several country houses and ornamental parks, such as Armathwaite Hall, Higham Hall and Isel Hall, to the east of Cockermouth. Nucleated settlements in the north of the area, such as Blindcrake and Sunderland, historically belong with similar settlements in the Ellen and Marron Valleys, but the creation of the park in the 1950s has led to them avoiding the late 20th century development experienced by settlements such as Gilcrux or Tallentire.

The field systems are based around a number of former common fields, which tend to be larger than those found elsewhere in the Lake District, and these are surrounded by areas of ancient enclosure. Apart from a small number of intakes, the remainder is largely made up of planned enclosures. The planned enclosures are in the areas of former common waste, for example Setmurthy Common and the low fells such as Binsey and Mosser Fell, but they also include the privately planned enclosure of extensive parks, such as that belonging to Isel Hall. Hedgerows dominate the field boundaries, with some stone walls around planned enclosures on the higher ground. There are also some stone walls around the former enclosed open field south of Low Lorton in the Lorton Valley. They occur in one block within the former open field, suggesting that they were enclosed in a systematic manner at the same time. The area is not well wooded, though more so than many other character areas in west Cumbria. There are only a few fragmentary areas of ancient woodland. Plantation woodland is largely confined to areas of planned enclosure, particularly Setmurthy Common, and around Isel Hall, where they reflect the ornamental nature of the landscape in this area.

Legacy: A mixed pattern of modern and older enclosures but with a more traditional settlement pattern, strong legibility of landscape elements of medieval origin.

Landscape designation and status: Mainly within the Lake District National Park.

Planning authority: LDNPA and Allerdale Borough Council.

7. Bewcastle and Netherby

A large character area which stretches eastward from the Scottish border. Historically, much of the eastern half was in the area known as the Bewcastle Wastes, whilst that part adjacent to the Scottish border once formed part of the area known as the Debateable Lands. Its settlement pattern is highly dispersed, consisting almost exclusively of small nucleations and discrete settlements. There is only one genuinely nucleated settlement with pre-1770 origins, and that is Kirkcambbeck. There is little point historically in distinguishing between small nucleations and discrete settlements in this area, as during the past 250 years one type has evolved into the other, with individual farms becoming small nucleations and small nucleations shrinking to become individual farms. Forty-six per cent of small nucleations and discrete settlements pre-date 1770. Of the remainder, the vast majority date to the 19th century with only 8% being modern.

Many, though by no means all, of the 19th century settlements are situated within the post-1770 areas of planned enclosure. This equates to 36% of the total of the character area, whereas 61% can be considered to be formed from ancient enclosures. The ancient enclosures include large areas of medieval and early medieval intakes, but the majority relates to discrete farms of medieval or early post medieval origin. There are no former common arable fields. There are a number of ornamental parks within the area, of which the most significant is Netherby Park. This began as a medieval deer park, and along with Askerton medieval deer park has had a considerable influence on the local landscape. The Netherby Park estate contains much of the plantation woodland within the character area. The only other significant area of plantation is along the Show Burn. Ancient woodland is concentrated as gill woodland along the Black and White Lyne rivers, and as hanger woodland along the valley of the River Esk. The character area has clearly had a complex history, characterised by border conflict, but retains considerable time depth and many elements that can be dated to the Middle Ages.

Legacy: Largely a traditional landscape but with a significant element of late 18th century and 19th century re-planning relating to agricultural improvement and the creation of ornamental landscapes, moderate legibility of landscape elements of medieval origin.

Landscape designation and status: Includes part of the Hadrian's Wall World Heritage Site and its setting.

Planning authority: Carlisle City Council.

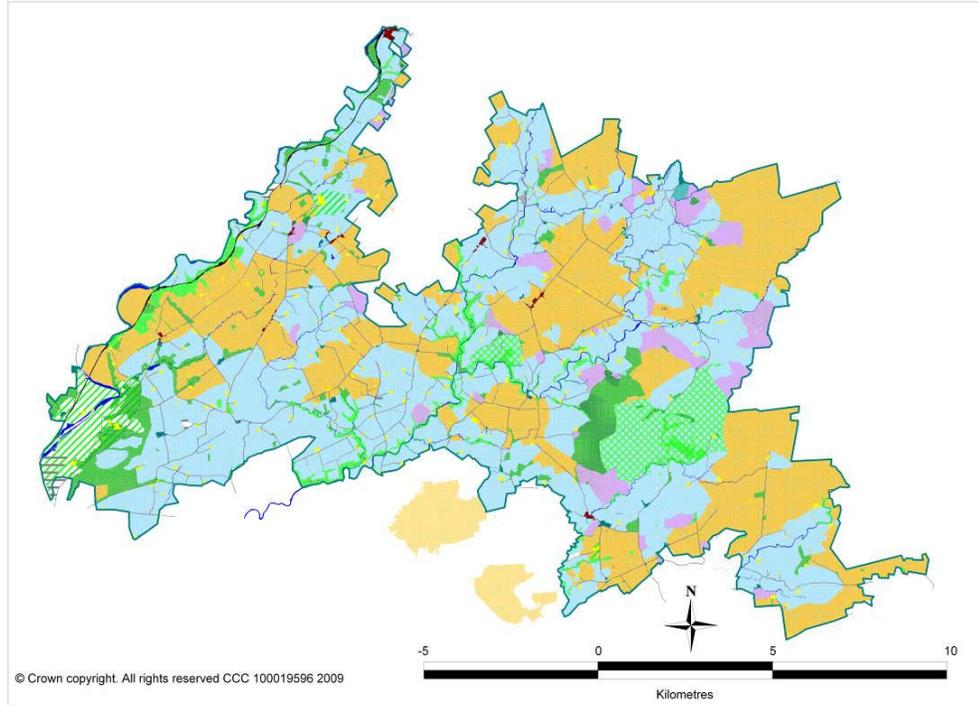


Figure 7 Bewcastle and Netherby character area

8. Bolton Fell

A small character area to the north of the Westlinton character area, and the immediate east of the Solway Moss character area. It is in a gently rolling landscape, rising towards the low hill of Bolton Fell. A substantial part of the character area is former mossland and there are surviving areas of unenclosed low fell and moss. It is sparsely populated and there are few settlements. The only sizeable nucleation is Boltonfellend, which is of 19th century origin. Of the remaining small nucleations and discrete settlements, only 20% are of pre-1770 origin, and most date to the 19th century. This late derivation of the settlement pattern relates to the overwhelmingly planned nature of the field system, reflecting a post-1770 reorganisation and planning of the landscape. The pre-1770 settlements are mainly in the west of the character area, where they are also associated with small, planned, regular fields. Woodland mainly consists of shelter belts of relatively recent origin, although there is some ancient gill woodland along the River Lyne and its tributary streams.

Legacy: A largely 19th century landscape, moderate legibility of landscape elements of medieval origin.

Landscape designation and status: None.

Planning authority: Carlisle City Council.

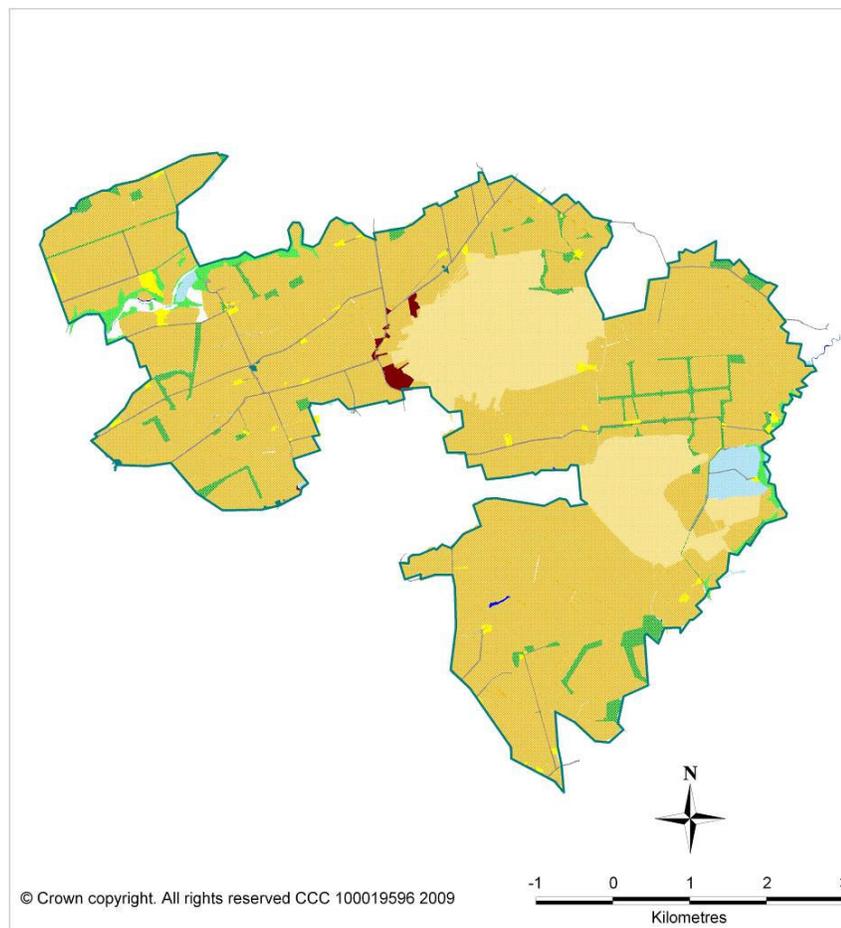


Figure 8 Bolton Fell character area

9. Caldbeck and Caldew Valleys

Lying at the northernmost point of the National Park, the Caldbeck and Caldew Valleys is a long, narrow strip north of the Skiddaw Range. Its landscape is dominated by a central block of former common arable field systems belonging to Caldbeck, Heskett Newmarket and Southernby. These are surrounded by areas of ancient enclosures. Caldbeck and Heskett Newmarket are the only significant nucleated settlements, with the remaining settlements consisting largely of either very small nucleations or discrete farms. Southernby appears to be a shrunken former nucleated settlement. The dispersed settlements have names characteristic of woodland edge and woodland assarts of medieval date. The medieval origins of these discrete settlements are also suggested by their known date. In Allerdale, outside the National Park, every one pre-dates 1770, though in Eden, outside the National Park, only 61% pre-date 1770. Nevertheless, the overall impression is of a surviving medieval settlement pattern and fieldscape.

Around the discrete settlements are areas of ancient enclosures. In some areas adjacent to the ancient enclosures are intakes, some of which had a farm established within them. Next to the National Park boundary are areas of unenclosed common at Aughtertree Fell, Ellerbeck Common and Faulds Brow. It would appear that the boundary between the open common and the planned enclosures to the north defined the National Park boundary, and now defines the northern edge of this character area. There are only a few small areas of planned enclosures, on the edges of the former open fields around Caldbeck and Heskett Newmarket. This area has almost no woodland, despite its origins as a heavily wooded area on the borders of the Forest of Inglewood. There is a small area of plantation on the south eastern boundary, and some ancient gill woodland along Stock Ghyll and the River Caldew. The field boundaries are almost all hedgerows, however, and contain large numbers of standard trees.

Legacy: A pre-modern landscape in which most settlements and enclosures originated before the late 18th century, strong legibility of landscape elements of medieval origin.

Landscape designation and status: Largely within the Lake District National Park.

Planning authority: LDNPA and Eden District Council

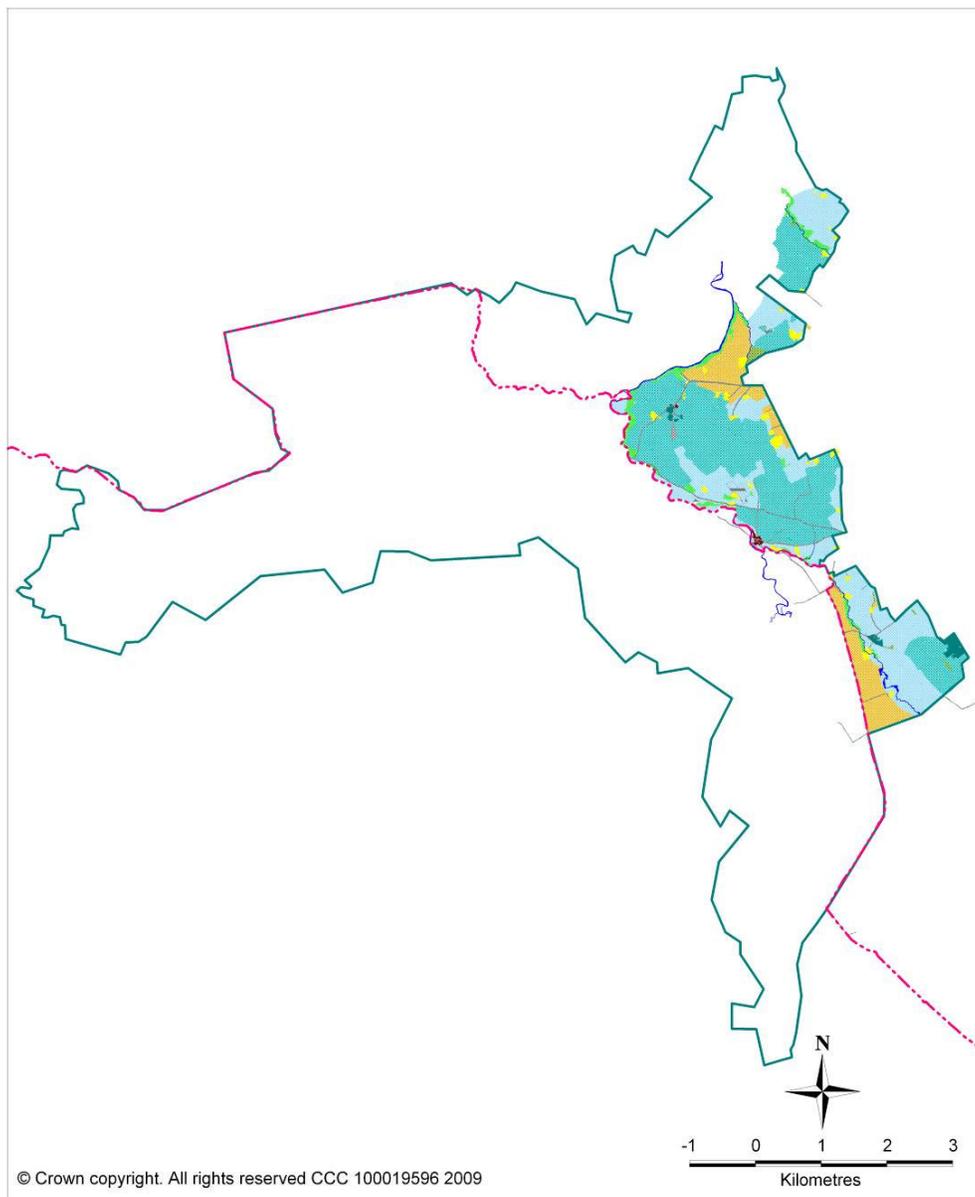


Figure 9 Caldbeck and Caldew Valleys character area (outside the Lake District National Park)

10. Carlisle

The area is dominated by the city of Carlisle with urban development including municipal parks and cemeteries, and industrial estates. Nevertheless, the whole is a cohesive character area because the urban extent of Carlisle overlies an historic landscape that is the same in the urbanised west as in the less urbanised areas to the east. Moreover, the less urbanised parts of the character area are still influenced by Carlisle and have many suburban features. The settlement pattern is highly nucleated, and whilst many of these settlements originated in the medieval period, 75% of the nucleated settlement area is modern. Seventy four per cent of the discrete settlements and small nucleations originated after 1770. A key influence on 19th century and modern settlement and industrial development and location were the railways. This is especially so to the north of Carlisle, where early 20th century military sites have been converted into modern industrial estates. The influence of the railway has been re-emphasised by the development of the M6 motorway.

The urbanised and suburbanised character of the area is reflected in the large number of ornamental parks (both private and municipal). Overall, the character of the area dates mainly to the 19th and 20th centuries, although the surviving field pattern still reflects its medieval origins, particularly former common arable fields, which are large. There is very little woodland, with some plantation blocks in areas of planned enclosure and within landscape parks. Ancient woodland is restricted to small areas of river valleys, such as along the River Eden at Corby.

Legacy: A largely 19th and 20th century landscape., moderate legibility of landscape elements of medieval origin, moderate survival of 19th century industrial features.

Landscape designation and status: Includes part of the Hadrian's Wall World Heritage Site and its setting, registered park at Dalston Road Cemetery.

Planning authority: Carlisle City Council

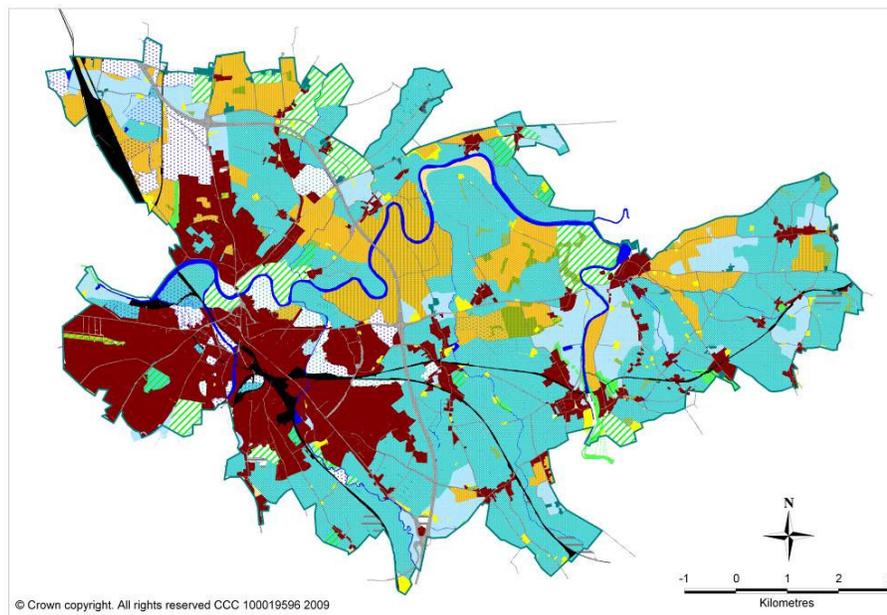


Figure 10 Carlisle character area

11. Cartmel Peninsula

This character area is bisected by the Lake District National Park boundary, though from the viewpoint of historic landscape character there is little difference between the areas within and without the park beyond a greater degree of 19th and 20th century development in the area outside the park. The settlement pattern is dominated by small and large nucleations, with small clusters of farms being especially common. The degree and size of nucleation has increased since the 19th century with the growth of Cartmel, Flookborough, Cark and Allithwaite and the development of new nucleations at Grange, Kents Bank and Ravenstown. Of the larger nucleations, 80% of the developed area dates to after 1770, though the rate of nucleated settlement expansion outside the national park is twice that within it. The area within the national park retains to a greater extent the pre-19th century settlement character of the whole area. Discrete settlements occur both within areas of ancient enclosure and areas of former common arable. There is little evidence that planned enclosure of fell or coastal moor led to an increase in discrete settlements. Even so, only 20% percent of small nucleations and discrete settlements were in existence by 1770.

The field pattern is dominated by former common arable field associated with the nucleated settlement pattern. These fields are generally bounded with hedges Throughout the character area but especially in the west are areas of ancient enclosure, generally surrounded by a mixture of hedges and dry-stoned walls. The area is quite well wooded with a mixture of small ancient woodlands and plantations.

Legacy: A mixed pattern of modern and older settlements and field enclosure with moderate legibility of landscape elements of medieval origin.

Landscape designation and status: Partially within Lake District National Park.

Planning authorities: LDNPA and South Lakeland District Council.

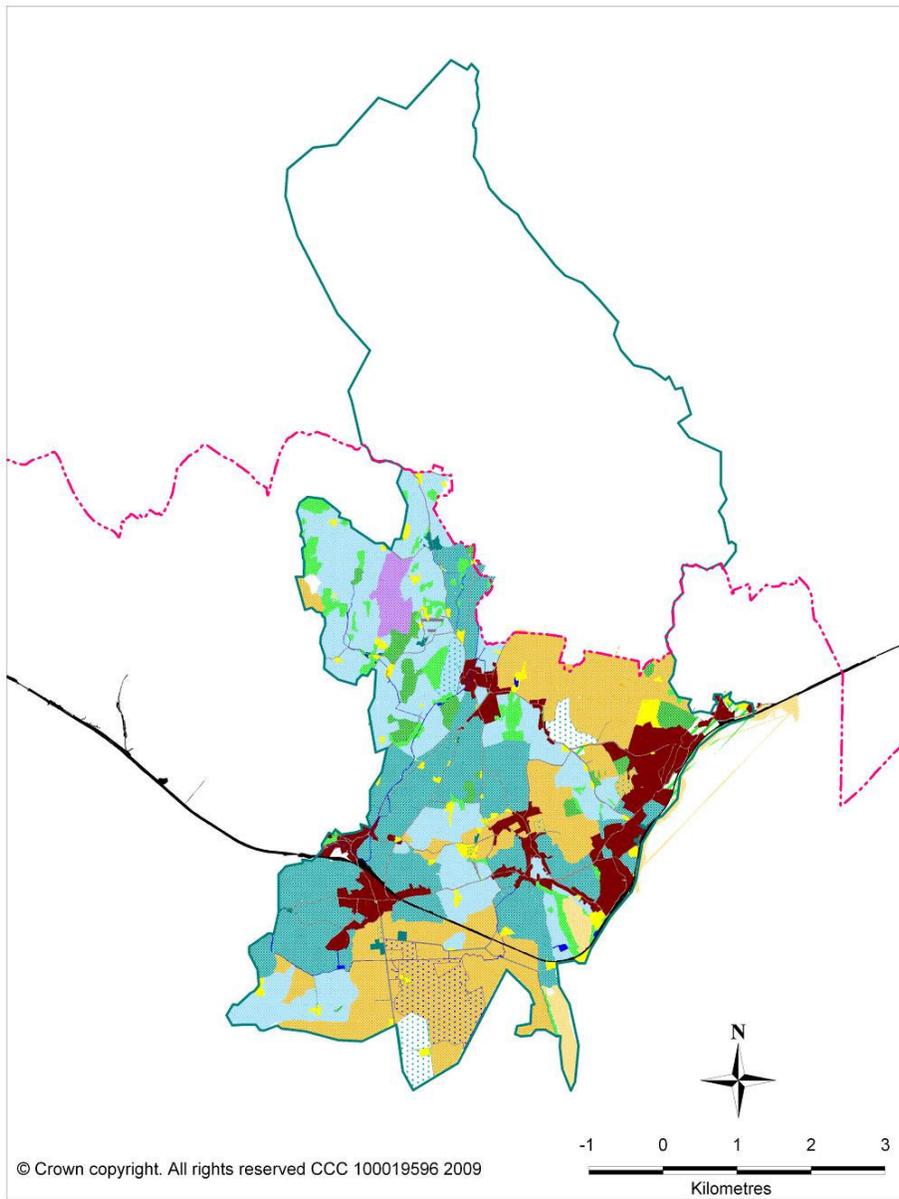


Figure 11 Cartmel Peninsula character area (outside the Lake District National Park)

12. Central Fells

The largest character area in Cumbria is the Central Fells, covering the open, unenclosed moorland and fells of the central Lake District massif. It is contained wholly within the Lake District National Park. This area is dominated by unenclosed land, and along with the large water bodies, is seen as one of the key features of the Lake District. As with the Eastern Fells, the area is punctuated by a number of narrow valleys, such as Eskdale, the Langdales, Buttermere and Wasdale. The valleys are dominated by dispersed settlements spread along the valley sides of which the majority were in existence by 1770. The settlements are associated with ancient closes along the valley bottom and areas of ancient woodland at the base of the fell slopes. From the late medieval period, the 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. Common arable fields were usually small in these valleys, and were enclosed at an early date, apart from a small portion in Great Langdale where part of the field survived as commonable until the nineteenth century. Other than the scattered remains of industry, which generally do not have an impact at a landscape-scale, the landscape of the Central fells strongly reflects land use developments of medieval and early post-medieval date.

Legacy: A largely uninhabited upland landscape of mainly pre-modern origins in which most settlements and enclosures originated before the late 18th century, strong legibility of landscape elements of medieval origin, strong survival of archaeological features of all periods.

Landscape designation and status: Wholly within the Lake District National Park.

Planning authority: LDNPA

13. Crosthwaite and Underbarrow Low Fells

This area lies in the south-east quadrant of the Lake District National Park, between Kendal and Lake Windermere. Its eastern edge extends a little beyond the park boundary and includes Helsington Barrows. The western boundary is defined by the urban areas of Bowness and Windermere. This area is characterised by a patchwork of enclosure types with a largely dispersed settlement pattern. The only nucleated settlement of any significant size is Staveley, which grew in the nineteenth century as a result of industrial expansion. The field systems comprise blocks of ancient enclosures, amongst extensive areas of former common waste, which was enclosed systematically in the late 18th and 19th centuries. Field boundaries are mixed in this area, with stone walls dominating areas of planned enclosure of the common waste, and hedgerows on the more anciently enclosed land. Small patches of plantation woodland are scattered across areas of both ancient and planned enclosures, whilst there are a number of small tarns in the areas of former common waste. There is only one significant area of ancient woodland, on the lower slopes leading up to Scout Scar, north of Brigsteer, and the relative lack of woodland in comparison to the Allithwaite and Witherslack Low fells is the main distinguishing feature between the two otherwise similar character areas.

Legacy: A mixed pattern of modern and older settlements and field enclosure with moderate legibility of landscape elements of medieval origin

Landscape designation and status: Majority of area within the Lake District National Park.

Planning authority: LDNPA and South Lakeland District Council

14. Cumwhitton and Kirkoswald

The character area stretches from Hayton in the north to Kirkoswald in the south, and is sandwiched between the Pennine escarpment and the Eden valley. It is a generally hilly area, bisected by two tributaries of the River Eden, the Raven Beck, Cairn Beck and the Croglin Water. The geomorphology of this character area strongly influences the settlement and field pattern. Traditional settlements occur in two bands either side of a central area of low hills, dominated by Gateshaw and Lawsons Hills. Many of the settlements are nucleated, all of which pre-date 1770 and are medieval in origin. Over 50% of the discrete settlements also pre-date 1770, as well. Nevertheless, the dispersion within the settlement pattern increased during the 19th century, with new farms established in previously unenclosed areas.

Planned enclosures dominate in areas of former unenclosed low fells. Elsewhere, ancient enclosures cluster around discrete settlements, especially in the valley of the Croglin Water and the Raven Beck. Close to the Eden Valley, the field pattern is a mix of ancient enclosures and small former common arable fields, reflecting the mixed settlement pattern of discrete ancient farms and medieval nucleated settlements. Some of these settlements, both discrete and nucleated, appear to have originated as medieval assarts, such as Armathwaite and Moorthwaite. Along the Pennine edge, the fieldscape is dominated by small former common arable fields, surrounding small, planned nucleated settlements of medieval origin, such as Cumrew, Newbiggin and Croglin. The medieval legacy within the landscape is further emphasised by the legible influence of five former medieval deer parks. The area is quite well-wooded, with around a third of all woodland being ancient. This is clustered especially in the valleys of the Eden, Raven Beck and Croglin Water.

This character area has a strong underlying medieval influence to its structure and nature. As well as influencing the settlement and field patterns, it is evident through the numerous medieval archaeological remains, including a number of castles.

Legacy: A pre-modern landscape in which most settlements and enclosures originated before the late 18th century, strong legibility of landscape elements of medieval origin, strong survival of medieval and earlier archaeological features.

Landscape designation and status: Eastern edge within the North Pennines AONB and European Geopark, registered park and garden at Corby Castle.

Planning authorities: Carlisle City Council and Eden District Council

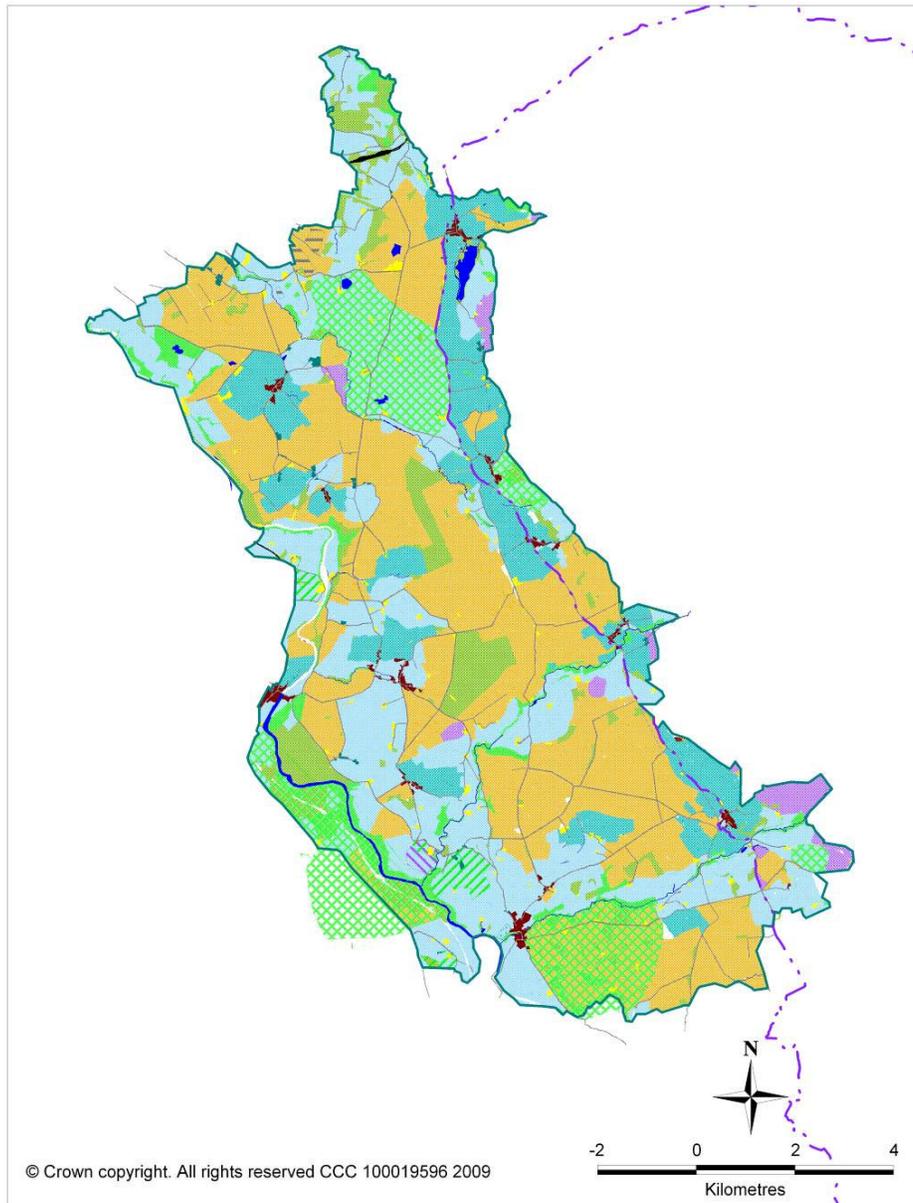


Figure 12 Cumwhitton and Kirkoswald character area