NORTHUMBERLAND LANDSCAPE CHARACTER ASSESSMENT

PART B THE CHANGING LANDSCAPE

Prepared for Northumberland
County Council
by
Land Use Consultants

August 2010



28 Stafford Street
Edinburgh EH3 7BD
Tel: 0131 202 1616
edinburgh@landuse.co.uk
registered address:

43 Chalton Street London, NW1 IJD

CONTENTS

I. Introduction	, [
Purpose of Part B: the Changing Landscape	
European Landscape Convention	
Study Area	
Report Structure	
'	
2. Approach and Methodology	, 3
Principles and Guidelines	3
Consultation	5
3. The Changing Landscape	7
Monitoring Landscape Change	
Drivers for Landscape Change Land Management	
Development	
Climate Change	
•	
4. High-Level Principles l	
Overall Aims	
Key Principles	
Land Management	
Development	
Climate Change	١ŏ
5. Landscape Guidelines	2
NCA I: North Northumberland Coastal Plain	23
Landscape Character Type I: Broad River Mouth	26
Landscape Character Type 2: Coastal Incised Valley	
Landscape Character Type 3: Farmed Coastal Plain	
Landscape Character Type 4: Rocky Coastline	
Landscape Character Type 5: Sandy Coastline	
NCA 2: Northumberland Sandstone Hills	
Landscape Character Type 6: Broad Sandstone Valley	
Landscape Character Type 7: Estate Valley	
Landscape Character Type 6. Outcrop Fills and Escarphients	
Landscape Character Type 10: Smooth Moorland	
Landscape Character Type 11: Sandstone Fringe Farming	
NCA 3: Cheviot Fringe	
Landscape Character Type 12: Broad Farmed Vale	
Landscape Character Type 13: Broad Floodplain Valley	
Landscape Character Type 14: Igneous Foothills	
Landscape Character Type 15: Upland Fringe Farmland	
Landscape Character Type 16: Open Rolling Farmland	
Landscape Character Type 17: Upland Fringe Ridges	66

Landscape Character Type 18: Upland Fringe Valley	68
NCA 5: Border Moors and Forests	71
Landscape Character Type 19: Moorland and Forest Mosaic	74
Landscape Character Type 20: Rolling Upland Valleys	77
Landscape Character Type 21: Rolling Uplands	79
NCA 10: North Pennines	81
Landscape Character Type 22: Farmed River Valleys	84
Landscape Character Type 23: Lower Dale	86
Landscape Character Type 24: Middle Dale	88
Landscape Character Type 25: Moorland Ridges	91
Landscape Character Type 26: Upland Farmland and Plantations	93
Landscape Character Type 27: Upper Dale	95
NCA 11: Tyne Gap	99
Landscape Character Type 28: Basin Valley and Fringes	102
Landscape Character Type 29: Broad Wooded Valley	104
Landscape Character Type 30: Glacial trough valley floor	107
Landscape Character Type 31: Glacial trough valley sides	110
Landscape Character Type 32: Parallel Ridges and Commons	
Landscape Character Type 33: Tributary Valley	115
Landscape Character Type 34: Upland Commons and Farmland	117
NCA 12: Mid Northumberland	121
Landscape Character Type 35: Broad Lowland Valley	124
Landscape Character Type 36: Lowland Farmed Moor	126
Landscape Character Type 37: Lowland Farmed Ridges	
Landscape Character Type 38: Lowland Rolling Farmland	130
NCA 13: South East Northumberland Coastal Plain	133
Landscape Character Type 39: Coalfield Farmland	136
Landscape Character Type 40: Broad Bays and Dunes	138
Landscape Character Type 41: Developed Coast	140
Landscape Character Type 42: Urban and Urban Fringe	142
NCA 16: Durham Coalfield Pennine Fringe	145
Landscape Character Type 43: Coalfield Upland Fringe	147
Landscape Character Type 44: Coalfield Valley	149

TABLES

Table 3.1 Countryside Quality Counts	7		
Table 5.1 Guiding principle for each LCT	22		
Table 5.2 Landscape character types and areas in NCA I	23		
Table 5.3 Landscape character types and areas in NCA2	37		
Table 5.4 Landscape character types and areas in NCA3	53		
Table 5.5 Landscape character types and areas in NCA5	71		
Table 5.6 Landscape character types and areas in NCA10	81		
Table 5.7 Landscape character types and areas in NCAII	99		
Table 5.8 Landscape character types and areas in NCA12	121		
Table 5.9 Landscape character types and areas in NCA13	133		
Table 5.10 Landscape character types and areas in NCA16	145		
FIGURES			
Box 2.1: Guiding Principles for the Landscape	5		
Box 4.1: Vision for the Landscape			
Figure I Guiding Principles for the Landscape			
Appendix I	ana Classification		
Appendix I The Landsca	ape Classification		

I. INTRODUCTION

- 1.1. This report comprises Part B of the Landscape Character Assessment for the County of Northumberland, prepared by Land Use Consultants (LUC) on behalf of Northumberland County Council. It is intended to offer guidance on the changing nature of the landscape which will assist in maintaining the key qualities of the Northumberland landscape and associated seascapes.
- 1.2. The content of this document is based on research, analysis, and observation of the landscape in the field, suitable for its purpose as defined below. As with the classification described in Part A of the Northumberland Landscape Character Assessment, it draws on previous work undertaken in the area. The development of this document has not involved extensive consultation with land managers and other interested stakeholders. In the event that this document is used by the Council as the basis for a landscape strategy, the contents of the present document would be updated through further consultation and an agreed adoption process.

PURPOSE OF PART B: THE CHANGING LANDSCAPE

- 1.3. Part B of the Landscape Character Assessment was prepared alongside Part A: The Landscape Classification, and should be read in conjunction with that study. It has been written such that Part B can be an evolving document, and can be updated in future. Part A, on the other hand, will continue to serve as the landscape baseline for the County.
- 1.4. Part B defines key principles and guidelines relating to landscape and land uses. It is not intended to be an 'action plan', but sets out both high-level and more detailed principles for the overall approach to the landscape. These principles will inform the emerging Local Development Framework Core Strategy, and could in future be used as the basis for developing detailed strategies or action plans, at either County-wide or more local scales.
- 1.5. The purpose of Part B is not to encourage absolute preservation of the Northumberland landscape. Rather, it recognises that all landscapes are dynamic, undergoing changes both natural and human-influenced. The document is therefore intended as a guide to the management of changes which may be the result of economic or social pressures, whilst seeking to maintain the inherent properties which are the most valued aspects of the landscape. In some cases, change may be seen as positive, leading to enhancements such as the restoration of brownfield land.
- 1.6. The document sets out guidelines relating to decisions about the landscape, but at the county scale it cannot provide in full the detail required for consideration of specific sites or planning applications. Reference to Parts A and B of the Landscape Character Assessment can inform, but cannot be a substitute for, detailed sitespecific analysis.

EUROPEAN LANDSCAPE CONVENTION

1.7. The European Landscape Convention (ELC) was adopted on 20 October 2000 in Florence, and came into force on 1 March 2004. The ELC is aimed at the protection,

ı

- management and planning of all landscapes, and includes a requirement to assess landscapes, and to integrate landscape into regional and town planning policies.
- 1.8. The ELC is important in that it recognises that *all* landscapes matter, be they outstanding, ordinary, or degraded. It puts emphasis on the whole landscape and all its values, and is forward looking in its approach, recognising the dynamic and changing character of landscape.
- 1.9. The principal aims for the landscape have been summed up in this document using the terminology recommended by the ELC. These terms, **protect**, **manage**, **plan**, are defined in ELC guidance¹ as follows:
 - **Protect** means actions to conserve and maintain the significant or characteristic features of a landscape.
 - **Manage** means action from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes.
 - **Plan** means strong forward-looking action to enhance, restore or create landscapes.
- 1.10. Current landscape character assessment guidance² uses the terms *conserve*, *enhance*, restore, which are widely recognised, and are broadly equivalent to protect, manage and plan. However, since this guidance is currently under review, it was decided to use the ELC terminology for this document.

STUDY AREA

1.11. The study area for the Northumberland Landscape Character Assessment covers the whole County, with the exception of Northumberland National Park, and extends 2km offshore to include the seascape associated with the North Sea coast.

REPORT STRUCTURE

1.12. Section 2 of this report describes the approach to Part B, and sets out the nature of the guidelines which are presented. Section 3 describes the changing landscape, drawing out the key pressures and forces for change which are acting across the county. Section 4 defines high-level principles for the overall approach to landscape in the County. Section 5 sets out the guidelines for each landscape character type (LCT), based on the classification set out in Part A.

¹ Natural England (2009) Guidelines For Implementing The European Landscape Convention, Part 2.

² Countryside Agency and Scottish Natural Heritage (2002) Landscape Character Assessment: Guidance for England and Scotland.

2. APPROACH AND METHODOLOGY

2.1. This document is based on the classification of the landscape set out in the Northumberland Landscape Character Assessment Part A. The classification is included in Appendix 1.

PRINCIPLES AND GUIDELINES

- 2.2. For each of the 44 landscape character types (LCT), the most relevant forces for change are identified, and a list of 'key qualities' has been recorded. Based on these, the 'guiding principle' is defined. A short vision statement then sets the tone for a series of guidelines relating to landscape management and development.
- 2.3. The forces for change, key qualities, principles and guidelines for the management of the landscape have been based on research, analysis, and observation of the landscape in the field. The development of the principles and guidelines has not involved extensive consultation, and would require updating and development in the event that they were to be used as the basis for a landscape strategy.

Forces for change

- 2.4. Landscape is a dynamic assemblage of changing elements, which continues to develop, potentially changing the landscapes described in this document. An overview of ongoing change in the landscape, and examination of key drivers, is included in Section 3.
- 2.5. Based on the landscape descriptions, and the ongoing processes identified within the study area, a list of likely pressures for change was drawn up for each LCT. These are referred to as 'forces for change', and cover:
 - changes in farmland, woodland, forestry and upland management practices;
 - development pressures for housing, industry, and other types; and
 - environmental processes such as erosion and climate change.
- 2.6. This document specifically excludes a range of development types which are currently the subject of County-wide sensitivity studies. These studies are also based on the landscape character assessment, and therefore their findings are not repeated. These development types are:
 - Mineral extraction;
 - Waste landfill; and
 - Renewable energy development, including wind farms.

Key qualities

2.7. In parallel with these forces for change, a list of 'key qualities' was also drawn up for each LCT, detailing those aspects of the landscape which are vulnerable to the forces for change.

Vision statement

2.8. Building upon the landscape descriptions, a 'vision statement' was developed for each LCT. These statements seek to set out a 'vision' for the landscape, with the aim of either protecting the present character, managing ongoing change, or planning the enhancement of less intact landscapes. These statements are firmly grounded in the description and analysis carried out, within the character assessment, for each landscape type.

Guiding principle

- 2.9. The 'guiding principle' seeks to draw together this information at a broader scale, which can usefully inform the development of planning policy at a county level. The guiding principle for each LCT is defined using ELC terminology: protect; manage; plan (see Section 1.5), and divides the landscapes of Northumberland into three broad categories. The guiding principle for each LCT is identified in Table 5.1, and this information is mapped in Figure 1.
- 2.10. An overall approach has been defined for each of the three guiding principles, and these are presented in Box 2.1. These are intended to serve as overall guides, setting the basic tone for how decisions about each landscape are approached.
- 2.11. It is recognised that by assigning a guiding principle to each LCT, variations between character areas within each LCT, and subtler variations within areas, may be overlooked. While the separation of landscapes into three categories at this scale is necessarily broad-brush, these are not intended to be overly rigid, either in terms of 'pigeon-holing' landscapes, or through unnecessarily strict application of the approaches set out below. The guiding principle does not directly equate to the 'sensitivity' of the landscape. It must be made clear that consideration of individual development or management proposals should be based on their own merits, and that the guiding principle should only be used as a general guide.

Guidelines

- 2.12. More detailed guidelines for each LCT suggest potential methods and approaches to future management of the forces for change, in line with the guiding principle. These guidelines are not intended to be prescriptive statements of policy. Rather, they seek to offer advice on the most effective ways of ensuring that ongoing landscape change does not have a detrimental effect on landscape character.
- 2.13. As this document is intended to evolve over time, the guidelines can be enlarged upon and refined in future, or expanded to cover new issues which may arise.
- 2.14. Guidelines have been divided into two topics: landscape management, covering ongoing land use management practices; and development, covering built additions to the landscape.

Box 2.1: Guiding Principles for the Landscape

Protect

The landscapes which have been identified for protection are the most valued landscapes in the county. They include the coastal landscapes and seascapes which comprise the Northumberland Coast AONB, the foothills which form the setting to the Cheviots, and the dales of the North Pennines AONB, as well as other sensitive river valley landscapes.

Protection does not imply preservation, but rather conservation of key landscape qualities. It is recognised that these landscapes are not static, but evolving. They will undergo change in future, but change within these landscapes requires more careful management.

Manage

The landscapes which have been identified for management are agricultural and upland areas, and reflect the working rural landscapes of Northumberland. While they are often highly valued at a local level, these landscapes generally have a greater ability to absorb change, without significant detriment to their innate character.

However, there remains a need to ensure that the character of these landscapes is maintained, and that changes are sympathetic and sustainable. The key qualities of these landscapes may still require a degree of protection, although there is greater scope for planning some change.

Plan

Planning has been identified as the guiding principle for landscapes in the south-east of the county, the forested uplands, and areas of intensive arable farming or former mineral extraction. These landscapes have already been heavily modified by the actions of people, and positive action is required to restore or enhance these areas.

Again, there needs to be recognition of the underlying key qualities of the landscape, albeit that these may have been compromised in the past. Not all change will be beneficial, and management is required to ensure that change is sustainable, and results in a strengthening of landscape character.

CONSULTATION

2.15. Consultation on the Northumberland Landscape Character Assessment was undertaken between November 2009 and January 2010. The draft document at that time included both Part A and Part B. One of the key suggestions arising from the consultation exercise was to split the two parts into separate documents, allowing Part A to form a long-term baseline, and Part B to be a more dynamic document with opportunities for updating. Further details of the consultation exercise can be found in Appendix 2 of Part A.

Landscape Character Assessment: Part B

3. THE CHANGING LANDSCAPE

3.1. This section describes recent and present changes to the landscape, and seeks to identify potential drivers, or forces, for future landscape change.

MONITORING LANDSCAPE CHANGE

- 3.2. Recent change in the English landscape has been monitored and measured through the Countryside Quality Counts (CQC) initiative. This project was undertaken by Natural England, in partnership with Defra and English Heritage, and sought to identify the types of change taking place, and how these were affecting landscape character. Two reports have been published, the first covering the period 1990 to 1998, the second covering the period 1999 to 2003. The reports looked at the nature and extent of change within each National Character Area (NCA).
- 3.3. The first report identified whether changes were consistent or inconsistent with the landscape character of the NCA, as described in the Countryside Character of England. The second report broadened the assessment to consider whether a landscape was stable or changing, and whether the landscape character remained consistent or otherwise. Four outcomes were therefore possible. These are defined in Table 3.1, with the NCAs in the Study Area falling into each category.

Table 3.1 Countryside Quality Counts

	Consistent with vision	Inconsistent with vision
Stable	Maintained	Neglected
	If the character of an area is already strong and largely intact, and the changes observed for the 'key' themes served to sustain it, or simply because the lack of change meant that the important qualities are likely to be retained in the long term. North Northumberland Coastal Plain Mid Northumberland Tyne Gap North Pennines	If the character of an area has been weakened or degraded by past change, and the changes observed in the 'key' themes have not had the effect of restoring the desired qualities that made the area distinct. NCAs have also been described as 'neglected' if significant opportunities to restore or strengthen character remain. Cheviot Fringe South East Northumberland Coastal Plain Durham Coalfield Pennine Fringe
Changing	Enhancing	Diverging
Changing	If the changes in the 'key' themes tended to restore the overall character of an area, or to strengthen it. Northumberland Sandstone Hills Border Moors and Forests	If the change in the 'key' themes appeared to be transforming the character of the area so that either its distinctive qualities are being lost, or significant new patterns are emerging. None

- 3.4. The survey quantified change based on the analysis of seven 'themes', and assessed measurable changes against a 'vision' for each theme. The themes are listed below:
 - Trees and woodland;
 - Boundary features;
 - Agriculture;
 - Settlement and development;
 - Semi-natural habitats;
 - Historic features; and
 - River and coastal.
- 3.5. Weighting was attached to the most important of these themes, based on the key characteristics of each NCA, as set out in the Countryside Character of England descriptions. The assessment of change across the themes allowed a judgement to be made as to whether the landscape character of each NCA was being maintained, enhanced, neglected, or whether a new character was emerging.
- 3.6. In this document, a summary of the results of the CQC surveys is given for each refined NCA. However, it should be noted that the most recent report only covers the period to 2003, and more recent change is therefore not picked up. For the purposes of this study, no attempt has been made to provide a rigorous examination of landscape change since 2003, but the identification of forces for change is intended to incorporate the most significant apparent changes or trends.
- 3.7. The descriptions of key characteristics in the NLCA will serve as a robust baseline for future monitoring of change at the county level. The key characteristics of each LCT can inform the most important themes to be monitored for change.

DRIVERS FOR LANDSCAPE CHANGE

- 3.8. Key forces and drivers for change have been identified through the examination of national, regional and local policy and strategy documents. These are briefly discussed below under the headings of land management, development, and climate change.
- 3.9. As noted in Section 2.5, mineral extraction, waste landfill, and renewable energy development are the subject of County-wide landscape sensitivity studies. Therefore, although these are recognised as forces for change in the landscape, they have not been examined as part of this document.
- 3.10. This Section has drawn on the policies and projections contained in the North East Regional Spatial Strategy (RSS)³. Since the preparation of this Section, the RSS has been revoked.⁴ However, the underlying issues and trends which led to the formulation of the RSS are not considered to have changed significantly, and its provisions therefore offer some guidance on potential change, albeit that it no longer forms part of the development plan.

³ GONE (2008) The North East of England Plan: Regional Spatial Strategy to 2021.

⁴ DCLG (6 July 2010) Guidance for Local Planning Authorities following the revocation of Regional Strategies.

Land Management

Agriculture

- 3.11. Farming has declined in importance within the County's rural economy, generating less income and employing fewer people, and the resulting diversification of farm businesses is a major driver for landscape change. The former RSS recognised that valuable natural and cultural assets depend on particular land management practices, especially those related to agriculture, and it supported the diversification of the rural economy into the tourism, culture, leisure, renewables and environmental technology sectors.
- 3.12. Investment in agri-environment schemes, funded through Environmental Stewardship and the Rural Development Programme for England, may lead to a reversal of trends such as hedgerow removal and intensive land management, in favour of conserving biodiversity. Higher-Level Stewardship (HLS) aims to deliver significant environmental benefits to high-priority 'target areas'. As of May 2010, there are five HLS target areas within the County, as listed below:
 - Hadrian's Wall;
 - Northumberland Coast;
 - North Pennines:
 - Tweed and Till; and
 - Upper Coquet Valley.
- 3.13. Key HLS management activities have been defined for each of these areas, and include the creation and maintenance of important habitats, provision of habitat for specific birds, management of historic features (archaeology, buildings, and landscapes), restoration of field boundaries, riparian management, and improvement of access.
- 3.14. Large parts of the upland areas of the County are classed as 'Less Favoured Areas', ie marginal farmland, as defined by the European Union. From 2010, these areas will be eligible for new agri-environment funding in the form of the Upland ELS scheme, which aims to maintain and improve the biodiversity, natural resources, landscape and historical values of the uplands.

Woodland and forests

3.15. The Regional Forestry Strategy for the North East⁵ notes that around 78% of the Region's woodlands, some 78,000 hectares, are within Northumberland. Much of this is in the ownership of the Forestry Commission, is of relatively recent origin, and is dominated by coniferous plantations. Woodland cover continues to increase, with a trend towards the planting of broadleaf woodland, which brings a wider range of benefits. National forestry policy envisages a significant nationwide increase in woodland and forest cover in the near future, to create a sustainable resource and as a means of tackling climate change.

⁵ Forestry Commission (2005) Trees, Woodlands, Forests and People: The Regional Forest Strategy for the North East of England. Government Office for the North East.

3.16. The Northumberland Native Woodland Project was established in 2003, and aims to survey Ancient Woodland and provide management guidance to conserve this resource. The survey revealed that of the 5,600 hectares of Ancient Woodland in the County, 61% is in an unfavourable, declining, or partially destroyed condition. This decline is considered likely to continue without the introduction of sustainable woodland management practices. ⁶

Biodiversity and geodiversity

- 3.17. The Northumberland Biodiversity Action Plan (BAP)⁷ contains action plans for the following habitats, which will be the focus for intervention and enhancement:
 - Blanket Bog
 - Built Environment
 - Coastal Heathland
 - Gardens & Allotments
 - Lowland Heathland
 - Maritime Cliffs & Slopes
 - Ponds, Lakes & Reservoirs
 - Reedbeds
 - Rocky Shore, Reefs & Islands
 - Saltmarsh & Mudflat
 - Transport Corridors
 - Upland Hay Meadows

- Brownfield Land
- Calaminarian Grassland
- Fen, Marsh & Swamp
- Heather Moorland
- Lowland Meadows & Pastures
- Native Woodland
- Recreational & Amenity Spaces
- Rivers & Streams
- Saline Lagoons
- Sand Dunes
- Trees & Hedges
- · Whin Grassland
- 3.18. The County's SSSIs are being managed in line with the Government's target to have 95% of SSSI areas in 'favourable' or 'recovering' condition by 2010. As of April 2010, 96.7% of the County's 114 SSSIs were in one of these two categories, including 30% 'favourable', and with only 0.3% 'declining'.8

Access

3.19. The Marine and Coastal Access Act 2009 enables the creation of a continuous footpath around England's coastline. Under the Act, Natural England will propose new long-distance footpaths, covering The Act also extends the Countryside and Rights of Way Act 2000, by including provision for open access across most areas of dunes, beach and cliffs, in association with new long-distance footpaths. Natural

⁶ Northumberland Native Woodland Partnership (2007) Northumberland Native Woodland Project: Taking forward the Regional Forest Strategy

⁷ Northumberland Biodiversity Partnership (2007) Northumberland Biodiversity Action Plan.

⁸ Natural England (1 April 2010) SSSI condition summary - Northumberland.

England's coastal access survey notes that 33% of the coast in the North East Region, amounting to 97km, does not have a legally secure path along it at present.9

Development

Settlements and housing

3.20. In recent years, Northumberland has seen a steady increase in its total population, with the greatest increases occurring in the former Alnwick district. However, the County remains one of the least densely populated in England, with a 2009 population of approximately 311,000, over an area of 500,000 hectares. The Annual Monitoring Report for 2008-09¹⁰ shows over 800 homes being built across the County in the year, a reduction from the 1,059 provided in 2007-08. Policy 28 of the former RSS envisages an annual increase in housing provision of 925 homes until 2021. The Northumberland Annual Monitoring Report shows that most new dwellings are being built on previously developed land; between 51% and 95% across the districts. This is well above national and former regional targets, when averaged out. Existing national and local policies on sustainable communities mean that the majority of this new housing is being, and will continue to be, delivered within existing settlements.

Recreational pressures

- 3.21. Tourism is acknowledged as one of the most important sectors in the Northumberland economy, and the Area Tourism Management Plan¹¹ seeks to encourage further growth in visitor numbers. However, the continuing popularity of the area as a tourist destination is likely to have increasing effects on the landscape and seascape. The management plan identifies specific areas for investment and 'destination management', as follows:
 - Market towns (Alnwick, Amble, Berwick-upon-Tweed, Haltwhistle, Hexham, Morpeth, Seahouses, and Wooler);
 - Hadrian's Wall corridor;
 - Kielder Water and Forest Park:
 - South East Northumberland;
 - Northumberland National Park;
 - Northumberland Coast AONB; and
 - North Pennines AONB.
- 3.22. A number of objectives are outlined in the management plan, including specific projects. Potential pressures include increased infrastructure, particularly signage and parking, as well as increased activity leading to footpath erosion and loss of tranquillity in currently remoter areas. The plan notes that all applications for funding will be assessed for their environmental integrity and sustainability.

Landscape Character Assessment: Part B

⁹ Natural England (2009) Coastal access: an audit of coastal paths in England 2008-09

¹⁰ Northumberland County Council (2009) People and Planning Annual Monitoring Report 2008-2009.

¹¹ Northumberland Tourism (2010) Northumberland Area Tourism Management Plan (ATMaP) 2010-2015.

Other development

3.23. Infrastructure development is likely to focus on the A1 and East Coast Main Line, which run the length of the County. Major economic investment in the County is likely to be focused on regeneration of the south-east, with more limited investment in the market towns. Berwick Eastern Arc, covering Berwick, Tweedmouth and Spital, is the only Area Action Plan under development in 2010, and sets out priorities for local regeneration and development.¹²

Climate Change

- 3.24. Climate change has been acknowledged as one of the principal factors potentially affecting the future of Britain's landscapes. The main information source on likely changes to the climate of the area are contained in the UK Climate Projections, published in 2002 (known as UKCIP02) and 2009 (known as UKCP09).
- 3.25. The 2002 predictions formed the basis for the North East Climate Change Adaptation Study.¹³ Key findings of the adaptation study included the following projected changes:
 - Annual rainfall reductions throughout the region by up to 10%;
 - Increased seasonality of rainfall with increases of up to around 21% in winter and reductions of up to around 37 % in summer;
 - Variability in extreme rainfall events, but an increase of up to around 20% in some areas;
 - Average seasonal temperatures to increase, with a region-wide annual average daily temperature change of just under 2°C;
 - Extreme hot temperatures to increase by around 3°C;
 - Heat-waves are likely to increase in frequency of occurrence;
 - A reduction in the number of frost days;
 - A major reduction in winter snowfall, of around 45 to 83% across the region;
 - There is variability in the projected winter wind climate, but small increases to be felt in some areas:
 - An increase in mean sea levels of around 0.3m; and
 - An increase in sea surge levels of around 0.30m to 0.35m.

Sea level rise

3.26. The implications for the landscape include direct physical impacts, resulting from rising sea levels and increased flooding events. These have the potential to change the pattern of coastal features, such as sandbanks, mudflats and saltmarsh, as well as further eroding dune systems and other fragile coastal landscapes. 'Coastal squeeze', whereby coastal habitat is compressed between the land and the encroaching sea, is recognised as an issue. This generally affects areas adjacent to 'hard' land uses such

¹² Northumberland County Council: Berwick Eastern Arc Area Action Plan.

¹³ SustaiNE (2008) North East Climate Change Adaptation Study.

- as development, but has also been observed adjacent to rising ground, as at Bamburgh. Potential responses to this narrowing of the coastal strip include safeguarding land adjacent to designated nature conservation sites to allow for landward 'habitat migration'. Increased sea surges could lead to greater flood risk, particularly in south-east Northumberland.
- 3.27. The Northumberland Shoreline Management Plan (SMP2)¹⁴ sets out management policies which seek to either hold the line of existing defences, create new defences, or carry out managed realignment of the coastline. In general, the SMP2 aims to protect the main industrial and residential areas, and strategic transport links, although agricultural areas and 'softer' land uses may be lost. At the same time, the SMP2 seeks to avoid or mitigate major effects on key environmental receptors.

Flooding

- 3.28. Inland, flood events have already begun to increase in frequency and severity. Continuation of such changes could result in increased erosion along river corridors, and changing patterns of land use and vegetation in frequently affected areas. Large additional areas of flood risk land are not anticipated, but currently affected areas are likely to be more frequently flooded, as existing defences become increasingly inadequate. National guidance is very strong in requiring the application of exceptions and/or sequential testing when development is proposed on higher-risk sites.
- 3.29. More frequent flooding has already led to the construction of extensive flood defence systems in places, and these are likely to be extended, along with 'managed realignment' of fluvial and coastal features. This policy seeks to allow nature to take its course, assigning areas to floodwater in order to protect other areas, and can be combined with habitat enhancement measures.

Vegetation changes

- 3.30. Changes to woodlands and other specific habitats may occur as a result of changes in temperatures and rainfall. Stresses on certain species and communities may render then more vulnerable to pests and diseases, while other communities may thrive. Migration patterns may also change. Farming and farm management practices will similarly be put under new pressures, leading to potential changes in the rural landscape.
- 3.31. Higher temperatures and reduced rainfall will increase the probability of wildfires occurring and spreading, particularly across grasslands and moorlands. Management practices such as heather burning may be restricted. Increasing storm damage to trees may be a factor, while the land may be further affected by drying and wind erosion. Increases in pests and diseases are predicted in the Adaptation Study, and may affect vegetation as well as livestock.

Mitigation

3.32. To mitigate the effects of climate change, a number of changes may take place in the landscape, as well as offshore. These include an increasing emphasis on renewable energy development, in an effort to avert the most extreme effects of climate change.

¹⁴ Royal Haskoning (2009) Northumberland and North Tyneside SMP2.

- Renewable energy most visibly affects the landscape in the form of wind turbines, although biomass, tidal and solar energy are among many other options which may be taken forward. As noted in Section 2.5, renewable energy developments are the subject of a separate sensitivity study, and are not considered further in this report.
- 3.33. An increasing emphasis on sustainable development is apparent in national guidance and other strategies, which place much importance on the creation of sustainable communities and reducing energy usage. New low-energy building types and materials may become increasingly common within settlements and the wider landscape.

4. HIGH-LEVEL PRINCIPLES

- 4.1. This section sets out some high-level principles to guide the overall planning approach to landscape within Northumberland. This section seeks to set a County-wide vision for landscape, which is fleshed out at a more local level in Section 5. This section has been written to inform the development of the Council's Core Strategy, and contains advice based on the findings of the landscape character assessment.
- 4.2. An understanding of landscape, including townscape and seascape, can be a powerful planning tool, as it forms the context for all development. Recognition that all landscapes matter, as emphasised by the European Landscape Convention, will assist in the successful integration of development with its context, resulting in sustainable, locally distinctive landscapes.

OVERALL AIMS

- 4.3. The overall aim for planning in relation to the landscape of Northumberland will be in line with national planning policy, as set out in PPS7:
 - "The Government's overall aim is to protect the countryside for the sake of its intrinsic character and beauty [and] the diversity of its landscapes [...] so it may be enjoyed by all." ¹⁵
- 4.4. The landscape character assessment illustrates that this diversity is particularly important across Northumberland. The rich heritage of landscape character which the County enjoys is a major asset, contributing to the quality of life of those living within Northumberland. It is also central to the tourist industry, which is grounded in the landscape-focused attractions of the North Sea coast, Kielder Water, Hadrian's Wall, the North Pennines, and Northumberland National Park, as well as many smaller centres.
- 4.5. The diversity of landscape across the County is the result of a range of interacting patterns and processes, including geology and climate, land cover and land use, and cultural influences. Local variation in these patterns and processes has resulted in landscapes which are reflective of their situation, in time and in place. Many of these landscapes remain intact, and are justly valued, in some cases being offered statutory protection.
- 4.6. Other landscapes have been more adversely affected by past activities. However, they retain intrinsic character and individual features of worth, and although less celebrated, these landscapes too are valued by those who experience them. With positive management, the enhancement of these landscapes will allow them to make a greater contribution.
- 4.7. Protection of the landscape resource, including all of its natural and cultural heritage elements, can be balanced against the need for ongoing evolution to meet social and economic requirements. Activities potentially affecting landscape character include housing and commercial developments, transport projects, mineral extraction,

¹⁵ ODPM (2004) Planning Policy Statement 7: Sustainable Development in Rural Areas. p.7

renewable energy schemes, tourist infrastructure, and so on. Integrated management of development will allow these activities to prosper, while maintaining the distinctiveness of landscapes. The key is to seek a sustainable approach to development.

Box 4.1: Vision for the Landscape

An overall vision for Northumberland should aim to achieve, through planning, management and protection, a set of regionally and locally distinctive landscapes, with characteristics which reflect historic patterns and processes, which are appropriate to their present use, and which are resilient to future change.

KEY PRINCIPLES

- 4.8. The following key principles have been developed to ensure that the qualities and key characteristics of Northumberland's landscapes are retained and enhanced. These principles are general in nature and can be applied to the County as a whole. They seek to apply the overall 'vision' outlined above, to the main drivers for landscape change identified in Section 3. More detailed applications of these principles are provided for each LCT in Section 5.
- 4.9. A strategic approach to landscape will enable its various threads to be integrated in a sustainable way. Consideration of the landscape character assessment will enable key local features and qualities to be ascertained. Positive landscape change can then be derived from a range of opportunities, such as development and management proposals, and these opportunities should be capitalised on to gain advantages for the landscape, ensuring that landscape character is maintained or enhanced.

Land Management

Agriculture

- 4.10. Farmland can be actively managed for positive landscape change. Diversification of farm businesses can be achieved in harmony with the conservation of distinctive landscape features with strong character, such as field boundary patterns, or particular relationships between land use and landform. Agri-environment schemes will assist in perpetuating the sustainable management of the land. A less intensive approach to land management, applying positive, locally appropriate approaches to upland, arable and pastoral landscapes, will help to maintain local distinctiveness.
- 4.11. The retention, restoration, or reinstatement of characteristic features, such as hedgerows, trees, or stone walls, will ensure the maintenance of landscape character. Their longer-term management can be associated with the encouragement of traditional crafts such as drystone walling and hedge laying. The interpretation of the historic significance of often overlooked agricultural features, such as medieval field systems, will emphasise their value in the appreciation of landscape history.

Woodlands and forests

4.12. Establishment of new woodlands and forests, particularly native broadleaf woodlands, will have benefits for access, recreation and biodiversity and will support the aims of

- the Northumberland Native Woodland Project. Woodlands can make a positive contribution to most landscapes, if good practice in forest and woodland design is adopted. Good design can be successfully aligned with good silvicultural practice through liaison with the Forestry Commission.
- 4.13. Ongoing management of woodland, particularly ancient woodlands, will ensure these important assets are retained in the landscape. The re-stocking of woodlands and shelterbelts and the replacement of individual trees, will perpetuate their valuable contribution to landscape character. The restructuring of Forestry Commission plantations provides a good model which may be applied to new and existing private forests, diversifying age and species structures, and increasing biodiversity values.

Biodiversity and geodiversity

4.14. Biodiversity and geodiversity make a major contribution to local distinctiveness, for example the characteristic hay meadows of the North Pennines, or the dune systems along the coast. The Northumberland Biodiversity Action Plan is already in place as a powerful tool for enhancing habitat values, and can also be utilised as a means of targeting enhancement of the landscape. Interpretation of biodiversity and geodiversity can lead to greater understanding and appreciation of landscape, encouraging wider support for protection and management initiatives.

Access

4.15. A strategic approach to access provision will ensure that access needs do not conflict with other landscape conservation or management objectives, particularly in potentially fragile areas such as dune systems or historic landscapes. Improvements to public access in the County, and the promotion of the opportunities they represent, will result in greater use of the landscape. Enhanced participation in outdoor recreation can be particularly important in connection with larger settlements and tourist centres. Reflecting local character, both in terms of design and in terms of interpretation, will ensure the diversity and interest of outdoor recreation opportunities. This can be linked with the promotion of a greater appreciation of the County's landscapes and seascapes, particularly where these are currently undervalued.

Development

- 4.16. Generally, the need for ongoing development and change should be balanced with the need to protect and enhance landscapes and townscapes. Positive gains for landscape should be sought in conjunction with all development proposals. Steering development towards the most appropriate locations will assist with the integration of landscape needs with economic and social needs.
- 4.17. Recognising that all landscapes matter is an important first step in ensuring that all development proposals respond to their landscape context. Indeed, development can provide crucial opportunities for landscape enhancement, potentially strengthening key qualities.
- 4.18. Locally appropriate planting schemes can be a successful means of mitigation, integrating all types of development into the landscape. The use of native species in screening, replacement planting, or decorative landscape schemes, will maintain local

- diversity in the landscape. This can be achieved through utilising plants of local provenance where possible, and taking cues from existing native plants and woodlands in the local area.
- 4.19. The importance of views to the Northumberland landscape should be recognised, not only the open views of the seascape, or views from major vantage points, but views to and from settlements and less highly valued landscapes. Skylines can be a characteristic feature of landscape. The settings of significant landscapes and landscape features, such as Northumberland National Park, the AONBs, and Hadrian's Wall, are important, but again, the consideration of local setting and visual amenity will secure benefits for the wider landscape.

Settlements and housing

4.20. The distinctive character of settlements and other built heritage across the County is one of the assets of the Northumberland landscape, particularly where these are strongly linked to local conditions. The positive development of townscape, and the maintenance of existing settlement characteristics, in terms of scale, massing, and materials, will result in distinctive features being reinforced. The use of traditional materials and vernacular features may also present a means of preserving crafts and skills. Important relationships between settlement and landscape, in terms of their visual setting and historic development, can also contribute to character and distinctiveness. Settlement boundaries are an important aspect of setting, and good settlement boundaries will clearly demarcate settlement and countryside, while ensuring compatibility between the two.

Recreational pressure

4.21. Landscape and seascape are character are fundamental to the tourist 'offer' of many parts of Northumberland. The expansion of visitor infrastructure can form an important aspect of integrated approaches to sustainable land use. Striking a balance between the provision of adequate facilities and infrastructure, and the conservation of landscape qualities, is therefore paramount. Applying this balance to smaller scale attractions and features, such as estate landscapes and historic buildings, as well as to the County's principal attractions, will ensure that the integrity of the wider landscape is maintained. The landscape character assessment can be utilised as a means to gauge the appropriateness of recreational proposals such as footpath provision, signage, or other recreational infrastructure in rural areas.

Climate Change

- 4.22. Land management may have to adapt to new pressures arising from climate change. At the extreme, and looking at the very long term, this may result in a new landscape character emerging in some locations, moving away from the descriptions in the landscape character assessment. While such changes are hard to predict, an integrated and sustainable approach to landscape will help to ensure that character is resilient in the medium term, and that any new characteristics will form part of a recognisable, locally distinctive pattern.
- 4.23. A strategic approach to land and coastal management responses to climate change will require joined-up effort, potentially reaching beyond Northumberland. The successful integration of mitigation measures, such as flood or coastal defences, with

coastal access, recreational, and natural heritage interests, will contribute to sustainable aims. Such features can be designed to give positive benefits for the landscape and seascape, as well as for biodiversity and access. The landscape character assessment can be employed as a tool to ensure the compatibility of proposed measures, and that they reflect local distinctiveness.

5. LANDSCAPE GUIDELINES

- 5.1. This section contains guidelines for the landscape of Northumberland, based on the landscape classification detailed in Part A of the character assessment. The classification is set out in Appendix I. For context, the introductory sections relating to each national character area (NCA) and landscape character type (LCT) are repeated from Part A.
- 5.2. For each NCA, recent changes identified through the Countryside Quality Counts initiative is summarised. Climate change is also considered at the NCA level in order to avoid excessive repetition at the LCT level. An outline of the likely future effects of climate change is given, considering:
 - Direct changes as a result of climate change (e.g. coastal flooding and erosion);
 - Impacts from action to mitigate climate change (e.g. renewable energy development); and
 - Planned and unplanned adaptation to the effects of climate change (e.g. changing agricultural practices).
- 5.3. Impacts on the landscape arising from climate change are explored through the following topic headings:
 - Sea-level rise (for coastal areas);
 - Freshwater systems;
 - Habitats and biodiversity;
 - Agriculture;
 - Woodland and forests;
 - Recreation and tourism activity;
 - Settlements;
 - Infrastructure: and
 - Historic environment.
- 5.4. For each LCT, key qualities, forces for change, vision statement, guiding principle and guidelines are given, as explained in Section 2.
- 5.5. An overview of the guiding principle for each LCT is presented in Table 5.1. Figure 1 illustrates the pattern of the three principles across the study area.

Table 5.1 Guiding principle for each LCT

Landscape character type (LCT)		Guiding principle
I	Broad River Mouth	Protect
2	Coastal Incised Valley	Manage
3	Farmed Coastal Plain	Manage
4	Rocky Coastline	Protect
5	Sandy Coastline	Protect
6	Broad Sandstone Valley	Manage
7	Estate Valley	Protect
8	Outcrop Hills and Escarpments	Manage
9	Sandstone Upland Valleys	Protect
10	Smooth Moorland	Manage
Ш	Sandstone Fringe Farmland	Manage
12	Broad Farmed Vale	Plan
13	Broad Floodplain Valley	Manage
14	Igneous Foothills	Protect
15	Upland Fringe Farmland	Manage
16	Open Rolling Farmland	Manage
17	Upland Fringe Ridges	Manage
18	Upland Fringe Valley	Manage
19	Moorland and Forest Mosaic	Plan
20	Rolling Upland Valleys	Manage
21	Rolling Uplands	Protect
22	Farmed River Valleys	Manage
23	Lower Dale	Protect
24	Middle Dale	Protect

Landscape character type (LCT)		Guiding principle
25	Moorland Ridges	Protect
26	Upland Farmland and Plantations	Plan
27	Upper Dale	Protect
28	Basin Valley and Fringes	Protect
29	Broad Wooded Valley	Protect
30	Glacial Trough Valley Floor	Manage
31	Glacial Trough Valley Sides	Manage
32	Parallel Ridges and Commons	Protect
33	Tributary Valley	Manage
34	Upland Commons and Farmland	Manage
35	Broad Lowland Valley	Manage
36	Lowland Farmed Moor	Plan
37	Lowland Farmed Ridges	Plan
38	Lowland Rolling Farmland	Manage
39	Coalfield Farmland	Plan
40	Broad Bays and Dunes	Manage
41	Developed Coast	Plan
42	Urban and Urban Fringe	Plan
43	Coalfield Upland Fringe	Manage
44	Coalfield Valley	Manage

NCA I: NORTH NORTHUMBERLAND COASTAL PLAIN

- 5.6. This area occupies a broad band along the North Sea coast of the study area, stretching from the Anglo-Scottish border in the north, to the mouth of the River Coquet in the south. It takes in the Northumberland Coast AONB, which includes Holy Island and the Farne Islands, and is also a Heritage Coast. Large parts of the NCA are designated for nature conservation interests. Berwick upon Tweed is located to the north, with Alnwick and Amble towards the south.
- 5.7. This NCA, as refined for this classification, contains five landscape character types and 12 landscape character areas, as set out in Table 5.2.

Table 5.2 Landscape character types and areas in NCA I

Landscape character type (LCT)		Landscape character area	
I	Broad River Mouth	la	Tweed River Mouth
2	Coastal Incised Valley	2a	Lower Aln
		2b	Lower Coquet
3	Farmed Coastal Plain	3a	Haggerston
		3b	Lucker
		3c	Rock
4	Rocky Coastline	4 a	North Tweed Coast
		4 b	Farne Islands Coast
		4c	Craster Coast
5	Sandy Coastline	5a	Holy Island Coast
		5b	Beadnell and Embleton Bays
		5c	Aln and Coquet Estuaries

Landscape change

- 5.8. The Countryside Quality Counts (CQC) survey reports that between 1990 and 1998, this landscape underwent marked changes inconsistent with character. ¹⁶ These included changes to agriculture and development which were considered to be inconsistent with the key characteristics of the area, and which were only partly offset by small consistent changes in woodlands.
- 5.9. Between 1998 and 2003, CQC states that the character of this area was maintained.¹⁷ The character of the agricultural landscape remained weakened, while patterns of trees and woodland, and settlement and development, were more or less maintained. Coastal features had been targeted by Countryside Stewardship agreements, and were being enhanced. The overall character of the area was judged to be stable,

 $^{^{16}\} http: \underline{//countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA001.htm}$

¹⁷ http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|ca|D=1

although scope for future enhancement was noted, especially in relation to the agricultural landscape and boundary features.

Climate change

Sea-level rise

- 5.10. Sandy beaches and areas composed of sediments and mud are particularly vulnerable to changing patterns of erosion and deposition as a result of changes in sea level and storm surges. Beaches and dunes may migrate inland and soft cliffs will recede. Saltmarsh which experiences regular inundation may be particularly at risk from flooding and erosion. There will be an increased risk and frequency of flooding in low lying coastal areas. The island of Lindisfarne may experience issues with reduced accessibility resulting from sea level rise and migration of sand dunes. Important coastal habitats may become subject to coastal squeeze.
- 5.11. Responses to sea-level rise may include larger or more extensive sea defences, which may take a number of forms. Alternatively, managed realignment may be the preferred policy, whereby certain areas are allowed to flood, with the flooded area becoming a buffer zone protecting areas further inland.

Freshwater systems

5.12. The Rivers Aln, Coquet and Tweed, as well as numerous smaller watercourses, meander across the coastal plain to the sea. Changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent flooding, changing patterns of erosion and deposition, and alterations in river courses. The human responses to climate change may have more significant impacts on the landscape. These are likely to include the implementation of measures to slow the speed of run-off, perhaps by promoting woodland expansion or the restoration of natural flood plains. Engineered flood defences may be constructed in towns and villages in the larger catchments such as Berwick upon Tweed. There may also be more frequent flooding of presently undefended areas, with increased occurrence in areas prone to flood risk.

Habitats and biodiversity

5.13. The coastal edge is important for its rich natural heritage with a number of Special Areas of Conservation (SAC) and Ramsar sites. Key features include marine areas, sea inlets, tidal rivers, estuarine mudflats and sand flats, sand dunes and beaches. Changes in coastal erosion and sea-level rise may affect the extent and quality of coastal habitats.

Agriculture

5.14. The intensively farmed coastal plain supports a range of arable and pastoral production. As a result of climate change there may be opportunities for alternative crops, or intensification of farming in current productive areas. New food or energy crops and farming techniques may alter the appearance of the landscape. There may be a requirement for new farm buildings, and demand for irrigation infrastructure and on-farm storage of water for irrigation. There may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management.

Woodland and forests

5.15. This is a sparsely wooded landscape. Adaptation to climate change within agricultural landscapes may result in changes to the pattern of woodland, with a potential increase in the development of woodland networks and shelterbelts to provide habitat connectivity, and shelter and shade for livestock. This may be offset by possible loss of individual trees due to stress resulting from drought and flooding. Over time, dominant woodland species may change, and new patterns of diseases and pests may affect native woodland cover.

Recreation

5.16. Increased flooding and erosion of coastal areas may affect coastal recreation resources such as paths, beaches and dunes. Drier summers may see a rise in the popularity of Northumberland's beaches, although unpredictable weather patterns may increase demand for wet weather attractions. There may be greater pressure on green infrastructure within settlements in response to increasing temperatures. There may also be increased erosion of public footpaths and cycleways as a result of changes in winter rainfall and storm events, and increased use during summer months.

Settlements

5.17. Within settlements there may also be an increased risk of flooding as drainage systems within urban areas reach capacity, and increased damage to the fabric of buildings. New developments are likely to incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management.

Infrastructure

5.18. The coastal plain forms the main transport corridor in north Northumberland, and there may be changes in the management of the road and rail infrastructure in the area, to address issues of flooding and stability.

Historic environment

5.19. The coastal landscape has a rich cultural heritage, comprising built heritage and estate landscapes. The increase in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also impact on the historic landscape structure including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress. Historic bridges in downstream locations may be at risk from extreme flood events.

Landscape Character Type I: Broad River Mouth

Introduction

- 5.20. This is a lowland, coastal landscape forming the hinterland to Berwick upon Tweed, with the River Tweed sweeping round to the coastal edge. The railway and road bridges form a distinctive landmark feature as they cross the river.
- 5.21. This LCT is represented by one character area; *I a Tweed River Mouth.*

Forces for Change

- Potential increase in flooding and introduction of flood management measures around the tidal river mouth.
- Urban expansion, including redevelopment of Spital Point.
- Redevelopment within the historic town, potentially introducing new forms and materials.
- Commercial and industrial development, particularly urban fringe development around Tweedmouth.

Key Qualities

- Dynamic seascape environment.
- Large scale, open landscape character, despite the extent of the settlement.
- Historic railway and road bridges are particularly significant visual features within the landscape.
- Historic core of Berwick upon Tweed, with its characteristic settlement form rising up the steep slope from the river, presenting a 'stepped' appearance of largely traditional buildings.
- Pockets of woodland on the steeper slopes above the river edge and within the landscape contribute to the natural character of the river corridor.
- Opening out of the estuary at Spital Point, with wide seascape views to the south.

Guiding principle

Protect

Vision statement

This landscape has a number of important features, notably the river valley and the relationship of the historic built features with the landscape and seascape. The pattern and structure of the surrounding farmland has been partially eroded through loss of field boundaries. The vision for this landscape is therefore the protection of views to important features and management of the urban setting.

Land Management Guidelines

5.22. Encourage tree and hedgerow planting to reinforce and repair the landscape pattern of the field boundaries.

- 5.23. Seek opportunities for additional riparian planting to enhance the river corridor, to help protect river banks against erosion, and potentially to mitigate the effects of new flood defences.
- 5.24. Manage coastal defences in line with the aims of the Northumberland Shoreline Management Plan, ensuring that these do not conflict extensively with the landscape objectives of the area.
- 5.25. Seek improvement of recreational access along the coast, where necessary combining with management to prevent increased erosion and effects on biodiversity. Respond to the requirements of the Marine and Coastal Access Act.
- 5.26. Promote the maintenance and enhancement of the key qualities of the landscape and seascape, to ensure that landscape character is retained or strengthened.

Development Guidelines

- 5.27. Seek to retain the characteristic stepped appearance and settlement grain of the old town, and maintain key views to the bridges. Seek to maintain the characteristic setting of the town within the Tweed river mouth.
- 5.28. New housing development or industrial development should be designed and sited such that it fits with the landform, and should be steered away from skylines and sightlines for key views.
- 5.29. Seek opportunities to improve landscape structure and to influence development siting and form, so as to achieve a consistently distinctive and cohesive settlement edge.
- 5.30. Ensure that any development of the Spittal Point area has regard to the character of the open seascape and views along the coastal strip.
- 5.31. Seek to influence future development beyond this LCT such as to reduce potential effects on the setting of this area, including consideration of views and skylines.

Management Plans

5.32. Further guidance is contained in the Northumberland Coast AONB & Berwickshire and North Northumberland Coast EMS Management Plan, Northumberland Shoreline Management Plan (SMP2), and the emerging Berwick Eastern Arc Area Action Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 2: Coastal Incised Valley

Introduction

- 5.33. This landscape comprises the lower sections of two river valleys, the Coquet and the Aln, as they flow through the coastal plain to the North Sea. The valleys are relatively shallow, but sharply incised in places, and emerge close together on the coast.
- 5.34. This LCT is represented by two character areas; 2a Lower Aln and 2b Lower Coquet.

Forces for Change

- Potential loss or degradation of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, and subsequent change in enclosure patterns.
- Changes to traditional farmsteads, including development of large, utilitarian farm buildings which do not reflect local vernacular, and conversion of older farm buildings to residential or tourist uses.
- Decline in, or alteration to, management of semi-natural woodland and habitat.
- Modern development on settlement edges, which may not reflect the local vernacular or existing settlement edges and patterns, leading to increased urban fringe, and loss of cohesiveness of settlement character.
- Development on flood plains which may lead to increased flood risk, and thus increased need for flood defences.
- Reopening of Aln Valley Railway and associated terminus development.

Key Qualities

- Meandering rivers with wooded sides and flat pastoral haughs.
- Open nature of Aln valley, with linear views between steep wooded slopes to north and south.
- Estate influences, particularly those of the Alnwick Castle designed landscape.
- Picturesque views along the narrow, occasionally gorge-like, River Coquet, taking in semi-natural woodland and rocky outcrops.
- Extensive visible historical features within the valley settings.

Guiding principle

Manage

Vision statement

This landscape is generally well maintained, and the approach should therefore be to encourage the ongoing custodianship, and to manage the pressures for expansion of Alnwick. New development should be guided to less sensitive locations, while maintenance should focus on the existing habitats such as riparian woodlands, hedgerows and flood plain meadows.

Land Management Guidelines

- 5.35. Encourage provision of improved footpaths and interpretation along the river corridors to increase its appeal as a recreational resource. The economic and social benefits brought by increased recreational usage, both by residents and by tourists, could provide income streams to subsidise landscape management.
- 5.36. Encourage improved management and planting of deciduous woodlands which presently receive little active management. Encourage continuing appropriate management of existing hedgerows, hedgerow trees, riparian meadows and walls.
- 5.37. Explore the possibilities for soft engineering solutions for flood management measures on the haughs, as an alternative to hard flood defences within towns.
- 5.38. Promote the maintenance and enhancement of the key qualities of the landscape and seascape, to ensure that landscape character is retained or strengthened.

Development Guidelines

- 5.39. Seek to influence expansion of existing settlements to meet the demand for rural housing by steering development to the most appropriate locations, and seeking a net gain for landscape quality for instance by securing funding for long term woodland management through planning agreements.
- 5.40. Take up opportunities to enhance or establish strong settlement boundaries through planting carried out in conjunction with new development.
- 5.41. Steer development away from open floodplains to maintain their open character, and reduce potential flood risk.
- 5.42. Encourage appropriate expansion of tourist infrastructure, including accommodation, including conversions or well-designed new build developments which respect local character.
- 5.43. Seek to encourage the sensitive siting of new farm buildings, particularly with regard to historic buildings and features.
- 5.44. Work with the promoters of the proposed Aln Valley Railway to ensure new buildings and infrastructure provides a good fit with the landscape.

Management Plans

5.45. Further guidance is contained in the Northumberland Coast AONB & Berwickshire and North Northumberland Coast EMS Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 3: Farmed Coastal Plain

Introduction

- 5.46. A band of farmland running along the north-east Northumberland coast, the Farmed Coastal Plain varies in width from the narrow strip between Haggerston and Belford, to the broader areas around Rock and Lucker. It is a gently rolling landscape of mainly arable farmland, well settled, and with a coastal influence. This LCT includes the landward edge of the Northumberland Coast AONB.
- 5.47. This LCT is represented by three character areas; 3a Haggerston, 3b Lucker and 3c Rock.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Lack of management of semi-natural woodland, parkland trees and roadside trees or avenues.
- Changes to traditional farmsteads, including development of large, utilitarian farm buildings which do not reflect local vernacular, and conversion of older farm buildings to residential or tourist uses.
- Increasing incentives for restoration and de-intensification and farm diversification through agri-environment schemes.

Key Qualities

- Farmsteads of traditional vernacular architecture, with brick industrial farm chimneys.
- Shelterbelts of mature beech and pine.
- Estate landscapes and associated semi-natural and plantation woodland.
- Coastal character, with views to the sea and coastal features and landmarks.

Guiding principle

Manage

Vision statement

The principal aims of landscape planning policies and initiatives should be to encourage improved custodianship of a landscape that has declined in quality as a result of agricultural intensification. The areas of this LCT are located between the AI and the popular coastal strip, and have scope to accommodate on-farm tourism.

Land Management Guidelines

- 5.48. Encourage restoration and improved management of traditional boundary features, particularly hedgerows and walls. Encourage widening of field margins and incorporation of buffer strips managed primarily for nature conservation along watercourses.
- 5.49. Promote improved management of other woodlands and habitats, including through uptake of appropriate agri-environment schemes.

Landscape Character Assessment: Part B

- 5.50. The distinctive mature beech and pine shelterbelts found in this area generally consist of single age stock which will have a finite lifespan. Give consideration to promotion of re-planting so that a succession can be achieved.
- 5.51. Intensive farming methods have reduced the opportunities for wildlife to co-exist with agriculture. Encourage land managers to increase widths of field margins and to incorporate buffer strips managed primarily for nature conservation along watercourses.
- 5.52. Promote the maintenance and enhancement of the key qualities of the landscape and seascape, to ensure that landscape character is retained or strengthened.

- 5.53. Encourage appropriate expansion of tourist infrastructure, including accommodation, including conversions or well-designed new build developments which respect local character which respect local character.
- 5.54. Carefully consider the landscape and key coastal views when looking into siting and design of campsites, car parks and caravan parks.
- 5.55. Seek to encourage the sensitive siting of new farm buildings, particularly with regard to historic buildings and features.

Management Plans

5.56. Further guidance is contained in the Northumberland Coast AONB & Berwickshire and North Northumberland Coast EMS Management Plan and the Northumberland Coast HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 4: Rocky Coastline

Introduction

- 5.57. The Rocky Coastline comprises the rocky sections of the coastal strip, including prominent headlands, cliffs, and the Farne Islands. It falls largely within the Northumberland Coast AONB.
- 5.58. This LCT is represented by three character areas; 4a North Tweed Coast, 4b Farne Islands Coast and 4c Craster Coast.

Forces for Change

- Coastal erosion, exacerbated by future sea-level rise, which may lead to loss of property and/or habitats. Responses may include introduction of erosion control and/or managed realignment measures.
- Human-influenced erosion of dune systems.
- Erosion of significant historic buildings such as Dunstanburgh Castle.
- Increasing tourist activity in traditional coastal villages, following the decline in local fishing activities.
- Increasing tourist infrastructure such as caravan parks, car parking, golf courses.
- Development within or around villages potentially altering their character.
- Lack of management of remnant semi-natural coastal woodlands.
- Requirement to allow greater coastal access following implementation of the Marine and Coastal Access Act 2009.

Key Qualities

- Dynamic seascape environment.
- Exposed coastal location, with dramatic views along the coast and out to sea.
- Prominent natural and cultural coastal features including castles and the Farne Islands.
- Traditional cores of former fishing villages, often with distinctive pantiled roofs.
- Extensively accessible landscape with much tourist-oriented development.

Guiding principle

Protect

Vision statement

The principal aims of landscape planning policies and initiatives should be to arrest the erosion of character and loss of condition of landscape elements where this has occurred, and in so doing raise the general quality of the landscape. The coastal landscape and adjacent seascape is a key element of Northumberland's tourist economy, and requires a degree of protection.

Land Management Guidelines

- 5.59. Promote improved management of woodlands and coastal habitats, including through uptake of appropriate agri-environment schemes. Encourage environmental management of marginal agricultural land, for instance on the seaward side of the Howick estate, to extend the influence of maritime habitats and attractiveness of the area for tourism.
- 5.60. Seek improvement of recreational access along the coast, including where this can be combined with management to prevent increased erosion and effects on biodiversity. Respond to the requirements of the Marine and Coastal Access Act.
- 5.61. Manage coastal defences and potential realignment processes in line with the aims of the Northumberland Shoreline Management Plan, ensuring that these do not conflict extensively with landscape objectives. Erosion control measures should be carried out in a sympathetic manner to avoid damage to the integrity of the coastal landforms.
- 5.62. Encourage a strategic approach to the co-ordination of recreational infrastructure would benefit the landscape, encouraging the appropriate siting of car parks and other facilities.
- 5.63. Seek to protect visible historic features where these contribute to the landscape. Promote the maintenance and enhancement of the key qualities of the landscape and seascape, to ensure that landscape character is retained or strengthened.

Development Guidelines

- 5.64. Seek to protect key views along the coast and to seaward, avoiding inappropriate development along the coast which would affect the visual characteristics of this landscape, and which could affect the potential of the area for tourism.
- 5.65. Seek to minimise effects upon the landscape, and consider key views, in siting and design of new or expanded tourist infrastructure, such as roads, car parking, caravan parks or signage.
- 5.66. Ensure that development within or beside coastal villages respects local vernacular forms and materials, particularly the distinctive roofscape.
- 5.67. Seek to influence future development beyond areas of this LCT, such as to reduce potential effects on the setting of the landscape and seascape, including consideration of views and skylines.

Management Plans

5.68. Further guidance is contained in the Northumberland Coast AONB & Berwickshire and North Northumberland Coast EMS Management Plan, Northumberland Shoreline Management Plan (SMP2) and the Northumberland Coast HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 5: Sandy Coastline

Introduction

- 5.69. Occurring between areas of *Rocky Coastline* (LCT 4), the *Sandy Coastline* comprises a low-lying coastal strip, with sandy beaches and dunes, as well as extensive tidal sands and estuaries. This is a popular tourist area, and includes the historically significant Holy Island. It falls entirely within the Northumberland Coast AONB.
- 5.70. This LCT is represented by three character areas; 5a Holy Island Coast, 5b Beadnell and Embleton Bays, and 5c Aln and Coquet Estuaries.

Forces for Change

- Coastal erosion, exacerbated by future sea-level rise, which may lead to loss of property and/or habitats.
- Human-influenced erosion of dune systems.
- Introduction of erosion control measures and/or managed realignment measures.
- Increased tourist/recreational infrastructure, including car parks, golf courses, signage, etc, leading to loss of tranquillity.
- Requirement to allow greater coastal access following implementation of the Marine and Coastal Access Act 2009.

Key Qualities

- Dynamic seascape environment.
- Sweeping views across the seascape and along the coastline.
- Prominence of historic features as landmarks.
- Traditional cores of former fishing villages, often with distinctive pantiled roofs.
- Extensively accessible landscape with much tourist-oriented development.
- Intact sand dune and saltmarsh habitats.

Guiding principle

Protect

Vision statement

The principal aims for this landscape should be to conserve and enhance the key qualities of the landscape and adjacent seascape, and make their ongoing custodianship sustainable. The landscape should be managed to integrate conservation of the natural and cultural heritage resource, with sensitive development of infrastructure for tourism, and good freedom of access and preservation of the open sea and coastal views.

Land Management Guidelines

5.71. Promote improved management of woodlands and habitats, including through uptake of appropriate agri-environment schemes. Seek to facilitate the retention, restoration and reinstatement of historic field boundaries, such as species-rich hedgerows, and the reintroduction of less intensive agriculture.

- 5.72. Seek to protect intact dune systems, saltmarsh and other vulnerable habitats from the effects of access and recreational activities.
- 5.73. Seek improvement of recreational access along the coast, including where this can be combined with management to prevent increased erosion and effects on biodiversity. Respond to the requirements of the Marine and Coastal Access Act.
- 5.74. Seek to protect medieval field patterns through improving awareness and interpretation of the cultural significance of everyday landscape features, e.g. reversed-S field boundaries, and ridge and furrow earthworks.
- 5.75. Manage coastal defences, and potential managed realignment to protect habitats from coastal squeeze, in line with the aims of the Northumberland Shoreline Management Plan. Promote the use of sympathetic coastal defences, which do not conflict with the naturalistic character of the seascape.
- 5.76. Promote the maintenance and enhancement of the key qualities of the landscape and seascape, to ensure that landscape character is retained or strengthened.

- 5.77. Seek to protect key views along the coast and to seaward, avoiding inappropriate development along the coast which would affect the visual characteristics of this landscape, and which could affect the potential of the area for tourism.
- 5.78. Seek to minimise effects upon the landscape, and consider key views, in siting and design of new or expanded tourist infrastructure, such as roads, car parking, caravan parks or signage.
- 5.79. Ensure that development within or beside coastal villages respects local vernacular forms and materials, particularly the distinctive roofscape. Inappropriate development at settlement edges should also be discouraged.
- 5.80. Seek to influence future development beyond areas of this LCT, such as to reduce potential effects on the setting of the landscape and seascape, including consideration of views and skylines.

Management Plans

5.81. Further guidance is contained in the Northumberland Coast AONB & Berwickshire and North Northumberland Coast EMS Management Plan, Northumberland Shoreline Management Plan (SMP2) and the Northumberland Coast HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 2: NORTHUMBERLAND SANDSTONE HILLS

- 5.82. The Northumberland Sandstone Hills extend in a wide north-south arc across Northumberland, separating the farmland of the Cheviot Fringe and the uplands to the west, from the agricultural lowlands and coastal plain to the east. This is a plateau landscape, covered mainly by moorland and improved pasture, with several areas of distinctive rocky hills, which are often more prominent from the west due to their geological formation.
- 5.83. This NCA, as refined for this classification, contains six landscape character types and 15 landscape character areas, as set out in Table 5.3.

Table 5.3 Landscape character types and areas in NCA2

Landscape character type (LCT)		Landscape character area	
6	Broad Sandstone Valley	6 a	Whittingham Vale
7	Estate Valley	7a	Hulne Park
8	Outcrop Hills and Escarpments	8a	Doddington Ridge
	Outcrop Hills and Escarpments	8b	Kyloe and Chillingham Hills
	Outcrop Hills and Escarpments	8c	Charlton Ridge
	Outcrop Hills and Escarpments	8 d	Beanley Moor
	Outcrop Hills and Escarpments	8e	Rothbury Forest
	Outcrop Hills and Escarpments	8f	Harwood Forest
	Outcrop Hills and Escarpments	8g	Sweethope and Blackdown
9	Sandstone Upland Valleys	9a	Coquetdale
10	Smooth Moorland	10a	Rosebrough Moor
	Smooth Moorland	10b	Alnwick Moor
11	Sandstone Fringe Farmland	lla	Belford Hills
	Sandstone Fringe Farmland	IIb	Buteland and Colt Crag
	Sandstone Fringe Farmland	Hc	Hetton

Landscape change

- 5.84. The Countryside Quality Counts (CQC) survey reports that between 1990 and 1998, this landscape underwent *limited or small changes consistent with character*. ¹⁸ Although development pressure was a feature, the areas affected were small relative to the size of the NCA. The main changes were to woodlands and agriculture, and were mostly consistent with the existing character area description.
- 5.85. Between 1998 and 2003, CQC states that the character of this area was enhanced. 19 Changes in semi-natural woodland and agriculture appeared to have strengthened the character of this area. Woodland cover remained stable, and appropriate management was acting to enhance overall quality through restocking of woodland, and the expansion of semi-natural woodland habitats.

Climate change

Freshwater systems

5.86. The moorland areas of the sandstone ridge include areas of wet peat, an important carbon sink, as well as mires, loughs and small reservoirs. The NCA does not contain large river systems. Changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent localised flood events.

Habitats and biodiversity

5.87. Impacts on natural and semi-natural habitats include the increased risk of fire damage to the upland forests and moorland during hotter, drier summer months. Changes in agriculture may result in intensification of agriculture and changes in crop types., with associated impacts for biodiversity.

Agriculture

5.88. Agriculture could experience a range of changes which may be driven by a range of wider economic influences. There may be opportunities for new crops or intensification of farming in current productive areas. New food and energy crops may alter the appearance of the landscape. There may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management. Arable cultivation may extend into lowland pastoral areas. The ploughing of pasture areas could affect field patterns and rig and furrow, which are characteristic of Northumberland's pastoral landscapes.

Woodland and forests

5.89. The area of woodland may expand in order to contribute to carbon sequestration and flood management strategies. Productive forests may experience changes in species composition in response to changing climate and the impacts of pest and disease. Within more agricultural landscapes there are likely to be changes in the pattern of woodland with a possible increase in the development of woodland networks and shelterbelts to provide habitat connectivity and shelter and shade for livestock, but possible loss of individual trees due to stress resulting from drought

 $^{{}^{18}\,\}underline{http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA002.htm}$

¹⁹ http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|ca|D=2

and flooding. Over time, dominant woodland species may change, and new patterns of diseases and pests may affect native woodland cover.

Recreation and tourism activity

5.90. Rothbury forms a gateway to Northumberland National Park, and recreational pressure may increase with warmer and drier summer weather. There may be increased flooding and erosion of public footpaths as a result of changes in winter rainfall and storm events, and increased use during summer months.

Settlements

5.91. Settlement is sparse, with scattered farmsteads, hamlets and the local service centre of Rothbury. There is an increased risk of flooding from drainage systems within urban areas, and increased damage to the fabric of buildings. New developments will incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management.

Infrastructure

5.92. There may be changes in the management of road infrastructure to address issues of flooding and stability.

Historic environment

5.93. Increases in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also impact on the historic landscape structure including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress.

Landscape Character Type 6: Broad Sandstone Valley

Introduction

- 5.94. This landscape comprises the broad valley of the River Aln and tributaries, as it passes through the sandstone hills.
- 5.95. This LCT is represented by one character area; 6a Whittingham Vale.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Decline in, or alteration to, management of semi-natural woodland, parkland trees and roadside trees or avenues.
- Road upgrading or widening, and associated infrastructure such as signage and lighting.
- New development within traditional villages, either as infill or as extension to existing settlements.

Key Qualities

- Strong enclosure pattern.
- Extensive historic features such as ridge and furrow.
- Enclosed, bowl-like western valley.
- Small, steep-sided valleys of tributaries, such as the Edlingham Burn.

Guiding principle

Manage

Vision statement

The underlying aim here should be to conserve the existing diversity of land use and at the same time reverse the current decline in landscape quality. There is scope for improved management and new planting of native woodlands. This area is well placed to accommodate visitors to the popular tourist destinations of Alnwick and the Northumberland National Park.

- 5.96. Encourage landowners to improve management of existing hedgerows and woodlands through agri-environment funding schemes.
- 5.97. Encourage restoration and improved management of hedgerows and existing woodlands in sympathy with the local conditions, using suitable native species and local techniques where relevant e.g. hedge laying.
- 5.98. New woodlands should be designed with reference to the appropriate native woodland zone and the national vegetation classification.
- 5.99. In parallel with the restoration of landscape features, farmers should be encouraged to increase widths of field margins and to incorporate buffer strips managed primarily for nature conservation, particularly along water courses.

5.100. Watercourses could be naturalised through introduction of lower intensity land uses such as unmanaged grassland and woodland.

Development Guidelines

- 5.101. Encourage appropriate expansion of tourist infrastructure, including accommodation, including conversions or well-designed new build developments which respect local character.
- 5.102. Development within or beside traditional villages should respect local vernacular forms and materials. Other development should be carefully sited with regard to the valley landform.
- 5.103. Seek to protect significant areas of ridge and furrow, and promote awareness of the value of such features.

Management Plans

5.104. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 7: Estate Valley

Introduction

- 5.105. Incised valley, dominated by the extensive parkland in the ownership of the Duke of Northumberland, including Hulne Park, and the distinctive landscape around Alnwick Castle. The area broadly coincides with the Hulne Park registered designed landscape, although this extends beyond the area slightly to the south and west, and more extensively into the *Coastal Incised Valley* (LCT 2) to the east.
- 5.106. This LCT is represented by one character area; 7a Hulne Park.

Forces for Change

- Pressures arising from potential increased recreational usage and tourist numbers, should the landscape change from a private parkland to a tourist resource.
- Potentially changing estate management regimes due to diversification or climate change.
- Forestry management, including the establishment new forestry plantations.

Key Qualities

- Designed landscape of national value, with extensive parkland and estate woodland, providing the setting for a number of prominent historic buildings.
- Enclosed wooded valley.
- Forms a key part of the setting of Alnwick, particularly when approached from the north-west.

Guiding principle

Protect

Vision statement

This area is a registered garden and designed landscape. The aim for this area must therefore be conservation. Change within this landscape should be carefully managed. Given the nature of the land ownership, large-scale change would appear unlikely.

- 5.107. Changes to the large-scale forestry plantations should be undertaken with consideration for the historic woodland pattern, and the parkland setting of historic buildings.
- 5.108. Encourage continued good management of the landscape through agri-environmental practices.
- 5.109. Seek to ensure that any moves to increase recreational usage shall have regard to the historic landscape. Seek opportunities to secure conservation and restoration measures for historic buildings and landscape.

- 5.110. Any development of a large-scale nature would be likely to have an adverse effect on the coherent nature of this landscape, and could intrude into views from and to historic features.
- 5.111. There may be scope to redevelop existing buildings and structures for new uses, providing this is done with respect for the traditional forms prevalent in the park and the wider area.

Management Plans

5.112. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 8: Outcrop Hills and Escarpments

Introduction

- 5.113. These hills form a distinctive chain of rocky uplands, running the length of the Northumberland Sandstone Hills (NCA 2), from the Kyloe Hills in the north, to Great Wanney Crag in the south. Their distinctive form and rich semi-natural vegetation patterns contrast with the surrounding more intensively-farmed landscape.
- 5.114. This LCT is represented by seven character areas; 8a Doddington Ridge, 8b Kyloe and Chillingham Hills, 8c Charlton Ridge, 8d Beanley Moor, 8e Rothbury Forest, 8f Harwood Forest and 8g Sweethope and Blackdown.

Forces for Change

- Decline in management of stone walls, and potential loss, leading to erosion of landscape pattern.
- New coniferous plantations, and ongoing felling and restocking or restructuring of existing plantations.
- Construction of new access tracks in forestry and across moorland.
- Changes in moorland management regimes, including potential overgrazing, as well as changing patterns of heather burning and bracken management.
- Communication masts and other vertical features.

Key Qualities

- Distinctive scarp hills with rocky outcrops.
- Relationship with the Cheviots, across the Cheviot fringe landscapes.
- Open, relatively remote, character.
- Areas of uninterrupted, sweeping moorland.
- Historic features, particularly concentrations of settlements, cup and ring marked rocks, etc.

Guiding principle

Manage

Vision statement

The hills are a distinctive feature of the Northumberland landscape, and have valuable landscape features which remain in good condition. The approach for this landscape should be to manage development, while maintaining the distinctive landform and moorland areas.

- 5.115. Where restructuring of forestry takes place, encourage softer plantation outlines with shapes designed to integrate with local topography. Encourage greater diversity of species, including broadleaves, where this coincides with good silvicultural practice.
- 5.116. Seek to preserve the open situation of craggy outcrops and visually significant archaeological sites so that these are not visually masked by woodland.

- 5.117. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect.
- 5.118. Retention of unimproved wet pastures on lower slopes and the protection of buried archaeology and earthworks should be encouraged in order to retain the visual diversity and time-depth of this landscape.
- 5.119. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape, particularly where it is associated with historic sites.
- 5.120. Manage heather moorland and sustain and enhance biodiversity through appropriate stocking densities and burning regimes. Encourage the regeneration and expansion of areas of heather moorland in order to reinforce the distinctive rich colours and textures found in this landscape. Conserve areas of peat bog and wet flushes through the avoidance of gripping. Restore damaged bogs and flushes by blocking grips and drains.
- 5.121. Conservation of historic sites and their settings should be encouraged particularly where they act as local focal points and reinforce local distinctiveness. Access to key features should be sensitively managed to reduce erosion of the landscape and archaeology.

- 5.122. The north- and west-facing scarp ridge is particularly sensitive to any skyline structures because of its importance in views, especially those from Northumberland National Park.
- 5.123. Development associated with recreation provision should be sensitively designed and located, and should respect the surrounding landscape context.

Management Plans

5.124. Further guidance is contained in the Tweed and Till and Upper Coquet Valley HLS Target Area Statements, and Natural England's Vision for the Uplands. Particular guidance on forestry may be obtained from the Forestry Commission. Management and development in this area should have regard to the Northumberland National park Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 9: Sandstone Upland Valleys

Introduction

- 5.125. This landscape character type comprises the valley of the River Coquet, as it flows alongside and through the Northumberland Sandstone Hills. The valley is strongly influenced by the sandstone context to the south and east, and by the lower-lying land of the Upland Fringe Farmland LCT to the north. This LCT extends into the Northumberland National Park.
- 5.126. This LCT is represented by one character area; 9a Coquetdale.

Forces for Change

- Decline in important semi-natural woodland habitats.
- New conifer plantations on upper valley sides.
- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Decline in management of stone walls, and potential loss, leading to erosion of landscape pattern.
- Development pressures for housing and tourist infrastructure, particularly around Rothbury.

Key Qualities

- Variety of intimate and more open areas along the valley.
- Vegetation associated with the underlying sandstone geology of the valley sides.
- Pattern of historic villages, and in particular the setting of Rothbury within the wooded gorge of the Coquet.
- Prominence of historic features.
- Strong landscape patterns.

Guiding principle

Protect

Vision statement

Disturbance to the key qualities and landscape pattern has occurred in places through loss of field boundaries, sand and gravel extraction and built development. The overall approach should be to conserve and restore the landscape.

Land Management Guidelines

5.127. Promote improved management of semi-natural woodland on wooded bluffs and along burns, including through uptake of HLS and other agri-environment schemes, in order to diversify the age structure of the woodlands and retain characteristic patterns of woodland in the landscape. Appropriate protection from overgrazing is paramount.

- 5.128. Coniferous shelterbelts on the upper valley slopes are uncharacteristic, and opportunities should be sought to soften the impact of these woodlands by replanting with native species or by linking the woodlands to those within the tributary valleys.
- 5.129. Retention of unimproved and wet pastures on the valley sides and some areas of valley floor will assist in retaining visual diversity.
- 5.130. Creation of margins and buffers adjacent to watercourses would be beneficial where arable land or intensive grazing impinges on the water's edge. Similarly the replanting of hawthorn hedges on the valley floor, where field amalgamation or hedgerow loss has occurred, is desirable.
- 5.131. Conservation of historic sites and structures, which act as local focal points and reinforce local distinctiveness in the valley, is important. Access and views to these key features should also be retained. Where collections of associated historical landscape features occur care should be taken to consider the management and conservation of the group value.

- 5.132. New development which does not respect the existing character may be visually intrusive, resulting in abrupt urban edges or altering the character of existing settlements. Roofing materials in particular are prominent. Approach routes, key views and gateways to settlements are most sensitive to development.
- 5.133. Recreational development, such as golf courses, caravan parks and playing fields, on the edges of settlements may extend urbanising influences or uncharacteristic landscape patterns into open countryside.
- 5.134. Restoration of sand and gravel extraction areas should seek to introduce characteristic alder woodland.

Management Plans

5.135. Further guidance is contained in the Upper Coquet Valley HLS Target Area Statement. Management and development in this area should have regard to the Northumberland National park Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 10: Smooth Moorland

Introduction

- 5.136. This landscape occurs on the broad dip slope which lies to the east of the prominent scarp of the Northumberland Sandstone Hills. It is closely associated with the Outcrop Hills and Escarpments (LCT 8), which form the western edge of both areas of Smooth Moorland.
- 5.137. This LCT is represented by two character areas; 10a Rosebrough Moor and 10b Alnwick Moor.

Forces for Change

- Urban fringe effects around Alnwick, including equestrian land uses, affecting the upland character.
- Decline in management of stone walls, and potential loss, leading to erosion of landscape pattern.
- New coniferous plantations, and restructuring of existing plantations.
- Moorland management regimes, including heather burning and bracken management.
- Communication masts and other vertical features.

Key Qualities

- Open, sweeping, expanses of heather moorland.
- Relationship with the scarp slope to the west.
- Views west to the Cheviots, and east to the coast.
- Remote character with few roads and very sparse settlement.

Guiding principle

Manage

Vision statement

The key qualities of this landscape have been affected by a number of influences, including a lack of landscape and field boundary management, unsympathetic blocky coniferous plantations, and development associated with the edge of Alnwick. Future management of this moorland and marginal agricultural land could become more directed towards environmental conservation and landscape improvement.

- 5.138. Promote environmental management of moorland through uptake of HLS and other agri-environment schemes. Encourage enhancement of habitat value, and aim to reduce encroachment of single-species stands of bracken.
- 5.139. Felling and restructuring of coniferous plantations may present opportunities to soften the edges of larger plantations. Seek to retain semi-natural Scots pine copses.
- 5.140. Ensure that proposed new plantations accord with the aims of relevant forestry policy, and seek to retain the open nature of views.

- 5.141. Increase awareness of the landscape implications of equestrian use, encourage the retention and management of existing hedgerow boundaries and discourage the unnecessary subdivision of enclosures with post and rail or wire fencing.
- 5.142. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.

5.143. Development around the edge of Alnwick may erode the upland characteristics of this landscape. Opportunities should be sought to establish improved settlement edge conditions as part of any new development.

Management Plans

5.144. Further guidance is contained in the Tweed and Till HLS Target Area Statement, and Natural England's Vision for the Uplands. Particular guidance on forestry may be obtained from the Forestry Commission. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 11: Sandstone Fringe Farming

Introduction

- 5.145. This landscape character type is associated with the Outcrop Hills and Escarpments (LCT 8), occurring at either end of the chain of the Northumberland Sandstone Hills. This is a transitional landscape between the sandstone hills and the more intensively farmed and settled lowland areas, and is a marginal area for farmland both economically and geographically.
- 5.146. This LCT is represented by three character areas; 11a Belford Hills, 11b Buteland and Colt Crag, and 11c Hetton.

Forces for Change

- New coniferous shelterbelts and plantations may interrupt the natural flow of landform, creating geometric blocks on the skyline or impinging on burn valleys.
- Ongoing felling and management of existing coniferous plantations.
- Decline in, or alteration to, management of semi-natural woodland and habitat.
- Improvements to pastures, or conversion to arable, may reduce species diversity and alter the muted hues and textures found in this landscape.
- Decline in of management of stone walls, hedgerows and hedgerow trees, and potential loss, leading to erosion of landscape pattern.

Key Qualities

- Distinctive, regular enclosure pattern of stone walls and hedges.
- Smooth rounded skylines with extensive views and a sense of remoteness.
- Wet/rushy pasture and areas of grass and heather moorland providing important habitats for breeding birds.
- Reservoirs providing water and recreational resources as well as supporting wildfowl.
- Prominent rocky outcrops of the Whin Sill.
- Isolated vernacular farmsteads and important historical features including Romano-British farmsteads, prehistoric settlement and henges and deserted medieval villages.

Guiding principle

Manage

Vision statement

This landscape has a strong identity and many valuable landscape features which remain in good condition. Although there has been some change such the planting of coniferous plantation and the decline in pastures, the landscape retains a consistent character. The overall approach for this area is to sensitively manage the landscape of the area.

Land Management Guidelines

- 5.147. Felling and restructuring of coniferous plantations may present opportunities to soften the edges of larger plantations.
- 5.148. Ensure that proposed new plantations accord with the aims of relevant forestry policy, and seek to retain the open nature of views.
- 5.149. Seek to preserve the open situation of craggy outcrops and visually significant archaeological sites so that these are not visually masked by woodland.
- 5.150. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect, particularly along gills and ravines.
- 5.151. Retention of unimproved wet and acidic grasslands and protection of buried archaeology and earthworks should be encouraged in order to retain the visual diversity and time-depth of this landscape.
- 5.152. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape, particularly areas associated with historic sites.
- 5.153. Manage heather and grass moorland and sustain and enhance biodiversity through appropriate stocking densities and burning regimes. Encourage the regeneration and expansion of heather moorland in order to reinforce the distinctive rich colours and textures found in this landscape.
- 5.154. Conservation of historic sites and their settings and areas of earthworks should be encouraged particularly where they act as local focal points and create strong landscape patterns and textures.
- 5.155. Seek to enhance field boundaries through hedgerow and tree planting, maintaining existing structure and pattern within the landscape.

Development Guidelines

- 5.156. The open character of this landscape means that any new large-scale development may be highly visible, although coniferous plantations could play a role in integrating such development into the landscape.
- 5.157. Seek restoration of former quarry sites through the development of naturalistic profiles using restoration blasting. Opportunities should be considered for improving access to some rock exposures which are of geological or visual interest.

Management Plans

5.158. Further guidance is contained in the Tweed and Till HLS Target Area Statement, and Natural England's Vision for the Uplands. Particular guidance on forestry may be obtained from the Forestry Commission. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 3: CHEVIOT FRINGE

- 5.159. The Cheviot Fringe is a landscape of broad valleys and rolling farmland. It occupies a belt of lowland wrapping round the Cheviot Hills, and separating them from the Northumberland Sandstone Hills to the east. Further north the area broadens out towards the coast, and merging with the drumlin farmland of the Scottish Merse across the River Tweed.
- 5.160. This NCA, as refined for this classification, contains seven landscape character types and 15 landscape character areas, as set out in Table 5.4.

Table 5.4 Landscape character types and areas in NCA3

Landscape	character type (LCT)	Landscape	character area
13	Broad Farmed Vale	13a	Breamish Vale
14	Broad Floodplain Valley	14a	Till and Glen Valleys
15	Igneous Foothills	15a	Moneylaws and Coldside
	Igneous Foothills	15b	Wooler Foothills
	Igneous Foothills	15c	Old Fawdon
16	Upland Fringe Farmland	16a	Lilburn and Roddam
	Upland Fringe Farmland	16b	Upper Coquet
17	Open Rolling Farmland	17a	Halidon
	Open Rolling Farmland	17b	Duddo and Lowick
	Open Rolling Farmland	17c	East Learmouth
18	Upland Fringe Ridges	18a	Horse Rigg
19	Upland Fringe Valley	19a	Bowmont Valley
	Upland Fringe Valley	19b	Wooler Vale
	Upland Fringe Valley	19c	Upper Breamish
	Upland Fringe Valley	19d	Upper Aln

Landscape change

- 5.161. The Countryside Quality Counts (CQC) survey of landscape change reports that between 1990 and 1998, this landscape underwent some changes inconsistent with character. ²⁰ Although changes in woodland and settlement were consistent with character area descriptions, these were offset by marked inconsistent changes in agriculture, namely loss of rough pastures.
- 5.162. Between 1998 and 2003, CQC states that the character of this area was slightly neglected. ²¹ The overall character of the area was generally considered to be stable, although in a weakened form. There was limited built development, and the characteristics of existing woodland cover were maintained.

Climate change

Freshwater systems

5.163. This NCA includes a number of larger rivers including the Tweed, Till, Glen and Breamish. These rivers drain from the uplands of the Cheviots, and changes in rainfall patterns are likely to result in more frequent flood events, changing patterns of erosion and deposition and changes in river courses. The human responses to climate change may have more significant impacts on the landscape. This is likely to include the implementation of measures to slow the speed of run-off with woodland expansion and the restoration of natural flood plains. Engineered flood defences may be constructed in certain locations.

Habitats and biodiversity

5.164. Changes in agricultural practices may affect the habitat value of farmland, while changes to the river systems may alter the natural heritage values of the Tweed catchment SAC.

Agriculture

5.165. There may be opportunities for new crops or an intensification of farming in currently productive areas. New food and energy crops may alter the appearance of the landscape. New types of farm buildings may be required, and demand for irrigation infrastructure and on-farm storage of water for irrigation could increase. There may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management. The ploughing of pasture areas could affect field patterns and rig and furrow, which are characteristic of Northumberland's pastoral landscapes.

Woodland and forests

5.166. Impacts of climate change within the Cheviot Fringe may include an increase in the development of woodland networks and shelterbelts to provide habitat connectivity and shelter and shade for live stock. There may be continued loss of individual field trees as a result of drought and flooding stress. Over time, dominant woodland species may change, and new patterns of diseases and pests may affect native woodland cover.

http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA003.htm

http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|ca|D=3

Recreation and tourism activity

5.167. Changing weather patterns may affect recreation patterns, with increased demand for wet weather attractions. Fire risk from increased temperatures and reduced summer rainfall may increase, in areas of parkland and moorland.

Settlements

5.168. This NCA has a dispersed settlement pattern. Development pressure may increase as existing settlements are constrained by flooding. The style of new development is likely to incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management.

Infrastructure

5.169. There may be changes in the management of road infrastructure to address issues of flooding and stability.

Historic environment

5.170. Increases in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also impact on the historic landscape structure including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress.

Landscape Character Type 12: Broad Farmed Vale

Introduction

- 5.171. This landscape is a broad area of gently rolling farmland, defined by higher ground at the edges. The River Breamish flows through, becoming the Till after it merges with the Lilburn Burn, although there is not a distinct valley landform.
- 5.172. This LCT is represented by one character area; 12a Breamish Vale.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Planting of new coniferous shelterbelts may further emphasise the utilitarian nature of the landscape.
- Development pressure for recreational infrastructure around Chillingham Castle, including signs.
- Changing estate management regimes may lead to changes in coverage and composition of parkland and woodlands.

Key Qualities

- Historic estates provide historical interest, recreational resources, and tree cover within this otherwise open landscape.
- Dramatic views of the scarp slopes to the east, and views west to the Cheviots.

Guiding principle

Plan

Vision statement

Outside the large country estates, this landscape has declined, with hedgerows and hedgerow trees missing or sparse. The approach should therefore be to plan for enhancements of the landscape, improving the setting of the estate parklands.

- 5.173. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.174. Encourage a greater uptake of woodland grants to introduce new native broadleaf woodlands, enhancing the landscape and improving biodiversity. Woodland could relate particularly well to the river course.
- 5.175. Seek to encourage species diversity in any proposed coniferous plantations or shelterbelts.
- 5.176. Encourage ongoing custodianship of estate woodlands and parklands, to retain these valuable landscape assets.

- 5.177. Development within Chatton and Chillingham which is sympathetic in style, and reflects local vernacular building types, will integrate most successfully with the existing village patterns.
- 5.178. Tourist infrastructure which improves the viability of local visitor attractions should be encouraged, while being sited to minimise impacts on the designed landscapes which are the main attraction of this area. Seek to avoid an over-provision of signage.
- 5.179. Seek to encourage the sensitive siting of new farm buildings, particularly with regard to historic buildings and features.

Management Plans

5.180. Further guidance is contained in the Tweed and Till HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 13: Broad Floodplain Valley

Introduction

- 5.181. Broad, open valleys, defined higher ground at the edges, and a flat alluvial floodplain, with meandering rivers.
- 5.182. This LCT is represented by one character area; 13a Till and Glen Valleys.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Decline in, or alteration to, management of semi-natural woodland, parkland trees and roadside trees or avenues.
- Development of flood-water storage or management schemes.
- Felling of existing woodland or new woodland planting.

Key Qualities

- Expansive, flat valley landscape with extensive views.
- Dramatic contrast with the Cheviot Hills to the west and sandstone hills to the east.
- Intensively farmed landscape, with geometric pattern including woodland blocks in parts.
- Traditional villages and farmsteads.

Guiding principle

Manage

Vision statement

This area has a strong visual unity and continuity of character contributed by the large scale of the landscape. There has been some loss of hedgerows and field trees, and the effects of past gravel extraction have had a negative impact on the pattern of field boundaries which provide visual interest across the flat landscape. The approach should be to manage the landscape to retain and enhance the structure.

- 5.183. Planting of field trees and replacement hedgerows would restore the pattern of field boundaries, which is so distinctive within the valley landscape.
- 5.184. Encourage a greater uptake of woodland grants to bring semi-natural riparian woodlands back into active management where they have suffered from neglect, and to create new stretches of woodland to enhance the visual prominence of the river course.
- 5.185. Seek to encourage species diversity in any proposed coniferous plantations or shelterbelts.
- 5.186. Seek to ensure that flood management schemes are designed with regard to environmental best good practice.

5.187. Protect the overall openness of the valley, particularly the views towards the hills to east and west.

Development Management Guidelines

- 5.188. Seek to ensure that new development reflects the existing settlement pattern, with development concentrated on higher land at the edge of the river floodplain.
- 5.189. Development within or beside existing villages and hamlets should respect local vernacular forms and materials.

Management Plans

5.190. Further guidance is contained in the Tweed and Till HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 14: Igneous Foothills

Introduction

- 5.191. Rounded, outlying foothills of the Cheviot range, with a mix of upland and lowland land uses and characteristics.
- 5.192. This LCT is represented by three character areas; 14a Moneylaws and Coldside, 14b Wooler Foothills and 14c Old Fawdon.

Forces for Change

- Decline in management of stone walls, and potential loss, leading to erosion of landscape pattern.
- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Changes in moorland management regimes, including potential overgrazing and the spread of bracken.
- Potential new development at the settlement edge of Wooler.
- Development pressures associated with tourism likely to be greater just outside the Northumberland National Park.

Key Qualities

- Visual relationship to the Cheviot Hills, and to the lower hills to the east.
- Open, rounded hills.
- Distinctive rectilinear pattern of hedgerow trees on lower slopes.
- Extensive evidence of historical settlement.

Guiding principle

Protect

Vision statement

The visual importance of this area within views from across northern Northumberland suggests that it is a landscape to be protected. It forms an important part of the setting of Northumberland National Park, both in distant views, and along access routes such as the Harthope valley which leads to the ascent of The Cheviot. The mixed land use is generally in good condition.

- 5.193. Promote improved management of semi-natural woodland on wooded bluffs and along burns, including through uptake of HLS and other agri-environment schemes, in order to reinforce these characteristic vegetation patterns.
- 5.194. Management of Scots pine and mixed shelterbelts should be encouraged to ensure longevity, and design of any new shelterbelt planting should fit with the landscape to reinforce the existing enclosure pattern.

- 5.195. Encourage the planting and replacement of hedges and hedgerow trees, and of stone walls, where they are characteristic features. Encourage less close trimming of hedges and retention of hedgerow trees in order to retain and strengthen the historic field enclosure pattern.
- 5.196. Seek to reduce encroachment of single-species stands of bracken to maintain the open grass moorland of the summits and steeper slopes.

- 5.197. New built development around Wooler should reflect local buildings styles and materials, with particular consideration given to roofing materials.
- 5.198. Take opportunities to strengthen the settlement edge as part of any future development proposals.
- 5.199. Seek to steer tourism-related development (such as caravan parks and recreational grounds) away from locations which are visually prominent, particularly when viewed from surrounding higher land and where they extend an urbanising influence into open countryside.
- 5.200. Protect the open nature of these hills and their relationship with the Cheviots. Discourage development which may affect views from within or towards the Northumberland National Park.

Management Plans

5.201. Management and development in this area should have regard to the Northumberland National Park Management Plan, and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 15: Upland Fringe Farmland

Introduction

- 5.202. Undulating farmland at the fringes of the higher ground of the Cheviots, and characterised by dispersed woodland plantations and sparse settlement.
- 5.203. This LCT is represented by two character areas; *15a Lilburn and Roddam* and *15b Upper Coquet*.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Conversion of pasture to arable farmland.
- Decline in, or alteration to, management of semi-natural woodland, parkland trees and roadside trees or avenues.
- New woodlands and shelterbelts which do not reflect existing woodland patterns.
- Redevelopment and extension of historic villages.

Key Qualities

- Strong estate influence through presence of historic buildings, parkland trees and estate woodland.
- Rural character with dispersed and historic settlement pattern.
- Views contained within rolling landform.

Guiding principle

Manage

Vision statement

The landscape qualities of this area result from the combination of landform and landcover. The approach for this landscape should be to conserve the intimate character contributed by the juxtaposition of landform, estate woodland and parkland trees and historic buildings. The landscape features are generally in good condition, with evidence of woodland management and replacement planting.

- 5.204. Promote improved management of plantation woodland, including through uptake of HLS and other agri-environment schemes, in order to reinforce characteristic vegetation patterns. Seek to maintain the diverse species mix and age structure.
- 5.205. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.206. Encourage ongoing custodianship of estate woodlands and parklands, to retain these valuable landscape assets.

- 5.207. Development which is sympathetic in style, and reflects local vernacular building types, will integrate most successfully with the existing village patterns.
- 5.208. Large scale or extensive built development is likely to conflict with the smaller-scale landscape character.
- 5.209. New development within historic estates should be steered away from locations that are visually sensitive when viewed from the wider landscape, and should have regard to the layout of any designed landscapes, and the settings of listed buildings.

Management Plans

5.210. Further guidance is contained in the Tweed and Till HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 16: Open Rolling Farmland

Introduction

- 5.211. These landscapes are areas of gently rolling arable farmland, with scattered villages and occasional estates.
- 5.212. This LCT is represented by three character areas; 16a Halidon, 16b Duddo and Lowick and 16c East Learmouth.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Development of large, utilitarian farm buildings which do not reflect local vernacular
- Conversion of farm buildings to residential use.
- New woodlands and shelterbelts which do not reflect existing woodland patterns.
- Development of flood relief schemes.

Key Qualities

- Open, consistent farmland character, with areas of more intimate character associated with the river valleys, estate landscapes and villages.
- Incised and wooded river valleys.
- Historic villages with distinctive character.
- Open skylines, and extensive distant views to the Cheviots in places.

Guiding principle

Manage

Vision statement

This is an extensive and open agricultural landscape, with a consistency of character which is a positive feature of the landscape. The wooded valleys and estate woodlands are positive features within the landscape, providing local interest. Landscape features are typically well maintained, although there has been some loss of hedgerows.

- 5.213. Promote improved management of semi-natural woodland along incised river valleys, including through uptake of HLS and other agri-environment schemes, in order to reinforce characteristic vegetation patterns. Seek to maintain the diverse species mix and age structure.
- 5.214. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.215. Seek to protect existing field patterns where these form a distinctive pattern in the landscape.

- 5.216. Seek to protect the historic integrity of estate settlements such as Ford and Etal should be maintained.
- 5.217. Development, including tourist-related development, which is sympathetic in style, and reflects local vernacular building types, will integrate most successfully with the existing villages.

Management Plans

5.218. Further guidance is contained in the Tweed and Till HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

August 2010

Landscape Character Type 17: Upland Fringe Ridges

Introduction

- 5.219. Long, farmed parallel ridges, running south-west to north-east, extending across the Scottish border. Large-scale, open landscape, with some woodland belts and shelterbelts. It occurs in a single area in the north-west of the study area.
- 5.220. This LCT is represented by one character area; 17a Horse Rigg.

Forces for Change

- Loss of hedgerow and hedgerow trees, which would emphasise the upland character and render the area more bleak.
- New planting of deciduous woodland.
- Increasing development of large farm buildings which contrast with the traditional farmstead vernacular.

Key Qualities

- Views concentrated on Coldstream and Tweed Valley.
- Visual relationship with Cheviot Hills.
- Upland fringe character, combined with arable land use and hedgerow trees.
- Open skylines with occasional small plantations and tree groups.
- Traditional farmsteads.

Guiding principle

Manage

Vision statement

This landscape is generally in good overall condition, although there are some gappy hedgerows. The open, large-scale nature of the landscape lends it an upland character, despite the presence of hedgerow trees and arable farmland. The approach for this landscape is to continue managing the land, maintaining its condition.

Land Management Guidelines

- 5.221. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect.
- 5.222. Encourage the planting and replacement of hedges and hedgerow trees, and of stone walls, where they are characteristic features.
- 5.223. Encourage less close trimming of hedges and retention of hedgerow trees in order to retain and strengthen the historic field enclosure pattern.
- 5.224. The geometric conifer blocks provide a regular feature within this landscape character area, however they contrast with the more natural form of woodland associated with landform, alongside streams or hill flanks. There is opportunity to seek to reduce the blocky pattern of the existing plantations through new woodland planting connecting areas and linking to landform features.

Landscape Character Assessment: Part B

Development Guidelines

- 5.225. Seek to encourage the sensitive siting of new farm buildings, particularly with regard to historic buildings and features. New built development should reflect local buildings styles and materials.
- 5.226. The numerous small conifer plantations may provide an opportunity to provide landscape context for limited new development.

Management Plans

5.227. Management and development in this area should have regard to the Northumberland National Park Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

August 2010

Landscape Character Type 18: Upland Fringe Valley

Introduction

- 5.228. Valley landscapes lying at the periphery of the Cheviots, and representing a transition between the incised upland valleys and broad lowland valleys. The valleys are typically rural in character, with limited urban influence.
- 5.229. This LCT is represented by four character areas; 18a Bowmont Valley, 18b Wooler Vale, 18c Upper Breamish and 18d Upper Aln.

Forces for Change

- Commercial development within rural landscapes, particularly as ribbon development on the A697 south of Wooler.
- Development of flood relief schemes.
- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Intensification of arable cropping which may cause the further loss of field margins and buried archaeology, soil erosion on steeper slopes, and loss of water quality in rivers.
- Development of large scale farm buildings which contrast with adjacent vernacular buildings and farmsteads affects some areas.

Key Qualities

- Views and important setting to the distinctive rounded hills of the Cheviots to the west, and the indented skyline of the sandstone outcrops to the east.
- Shallow river valleys with gravel river beds.
- Coniferous shelterbelts make a significant visual contribution to this landscape, giving rise to a blocky and estate character.
- Notable historic features such as cup and ring stones, marked stones and cairns as well as scheduled monuments such as Alham medieval settlement.
- Designed landscapes and country houses are a special feature of this landscape although none is on the English Heritage register.

Guiding principle

Manage

Vision statement

Managing change within this landscape will involve directing development, particularly around Wooler, to the most appropriate locations, while seeking to maintain the river-valley landscape pattern, and the important relationship with the Cheviot Hills.

Landscape Management Guidelines

5.230. Seek continued enhancement of degraded river and stream corridors through the reestablishment of marginal vegetation and provision of more open habitats for

- breeding waders and invertebrates. Promote uptake of HLS and other agrienvironment schemes, in order to reinforce these characteristic vegetation patterns.
- 5.231. Encourage a reversion to low intensity grassland management on land adjacent to river channels.
- 5.232. Planting new broadleaved woodland would be appropriate along many river valleys and other watercourses. Sensitive restoration of past mineral extraction sites would improve habitat diversity.
- 5.233. Future felling of coniferous shelterbelts should seek to reduce their visual dominance, either through removal or through restructuring with broadleaved planting to reflect local topography and soften woodland edges. New planting should seek to link existing areas of broadleaved woodland and break down the current blocky character that prevails.
- 5.234. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.

Development Guidelines

- 5.235. Any development within this landscape must have regard to the setting of the National Park, and the important relationship with the valleys.
- 5.236. Seek to encourage the sensitive siting of new farm or commercial buildings, particularly with regard to historic buildings and features.
- 5.237. New built development should reflect local buildings styles and materials, with particular consideration given to roofing materials.
- 5.238. Take opportunities to strengthen the settlement edge as part of any future development proposals.
- 5.239. Seek to steer tourism-related development (such as caravan parks and recreational grounds) away from locations which are visually prominent, particularly when viewed from surrounding higher land and where they extend an urbanising influence into open countryside.

Management Plans

5.240. Further guidance is contained in the Tweed and Till HLS Target Area Statement. Management and development in this area should have regard to the Northumberland National Park Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 5: BORDER MOORS AND FORESTS

- 5.241. This extensive upland plateau, dominated by coniferous woodland, is located in the Anglo-Scottish border country and is centred on the man-made Kielder Water. To the south-west it drops down towards Cumbria and the Solway Basin, and to the south it is defined by the Whin Sill scarps running along the *Tyne Gap* (NCA 11). To the east are the *Northumberland Sandstone Hills* (NCA 2). Much of the eastern part of this NCA lies in Northumberland National Park and is excluded from this study. The western part forms the isolated western segment of the study area, while the NCA extends further westwards into Cumbria.
- 5.242. This NCA, as refined for this classification, contains three landscape character types and eight landscape character areas, as set out in Table 5.5.

Table 5.5 Landscape character types and areas in NCA5

Landscape character type (LCT)		Landscape character area	
19	Moorland and Forest Mosaic	19a	Kielder and Redesdale Forests
		19b	Kielder Reservoir
20	Rolling Upland Valleys	20a	Otterburn and Elsdon Valley
		20b	Bellingham and Woodburn Valley
		20c	Upper North Tyne Valley
21	Rolling Uplands	21a	Corsenside Common
		21b	Ealingham Rigg
		2Ic	Otterburn Plateau

Landscape change

- 5.243. The Countryside Quality Counts (CQC) survey reports that between 1990 and 1998, this landscape underwent *limited or small changes consistent with character*. ²² Woodland management was being carried on in a manner that would maintain the landscape in line with the character area descriptions, and evidence of positive management of semi-natural habitats was identified.
- 5.244. Between 1998 and 2003, CQC states that the character of this area was enhanced. ²³ Changes in agriculture and semi-natural habitats were considered to be strengthening the landscape character. Woodland character was maintained, with some expansion in semi-natural cover. The character of the area was judged to be gradually changing in a positive manner, although further opportunities for landscape enhancement were noted.

²² http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA005.htm

http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?CqclcaID=5

Climate change

Freshwater systems

5.245. These upland areas give rise to streams which feed a number of rivers that drain towards the coast. The area experiences comparatively high levels of rainfall and a number of reservoirs are found on the fringes of the upland area. Changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent flood events, changing patterns of erosion and deposition, and alterations in river courses. The human responses to climate change may have more significant impacts on the landscape, and this is likely to include the implementation of measures to slow the speed of run-off with woodland expansion.

Habitats and biodiversity

5.246. Upland habitats are most at risk from changes in temperature and moisture availability, and from the increased fire risk. Changes in the extent and species composition of forestry may also impact on habitats. Changing rainfall could have mixed effects on peat bogs, since increased winter rainfall could increase the rate of peat formation, but could also lead to an elevated risk of bog-bursts and erosion. Summer drought may have a negative impact on peat bogs and mires. Heather moorlands may also change, partly in direct response to climate changes, and partly in response to the way they are managed.

Agriculture

5.247. Changes in agriculture may see an expansion of arable cultivation into the lowland pastoral areas, and there may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management.

Woodland and forests

5.248. The area of woodland may expand in order to contribute to carbon sequestration and flood management strategies, as well as the promotion of woodland as an energy crop. Productive forests may experience changes in species composition in response to changing climate and the impacts of pest and disease. There may be some loss of individual trees due to stress resulting from drought and flooding. Over time, dominant woodland species may change, and new patterns of diseases and pests may affect native woodland cover.

Recreation and tourism activity

5.249. The uplands are important for recreation, and this may result in increased erosion of public footpaths and cycleways as a result of changes in winter rainfall and storm events, and increased use during summer months. There may be increased fire risk in moorland and woodland resulting from increased temperatures and reduced summer rainfall.

Settlements

5.250. This is a sparsely settled area, with the villages of Bellingham and Otterburn located adjacent to the river flood plains. New development within these areas is likely to incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management which may contrast with the local building style.

Infrastructure

5.251. The uplands are a key location for reservoirs, and further development make take place to provide water during the drier summer months.

Historic environment

5.252. Pressure for changes in land use from forestry, agriculture, water storage and renewable energy may impact upon visible archaeological resources.

Landscape Character Type 19: Moorland and Forest Mosaic

Introduction

- 5.253. This landscape character type covers most of the isolated western part of the study area, to the west of the Northumberland National Park. It extends into the National Park, and also beyond the border into Scotland, forming one of the largest areas of forest in Britain. Within the study area, this landscape includes Kielder Forest and Reservoir, and much of Redesdale Forest.
- 5.254. This LCT is represented by two character areas; 19a Kielder and Redesdale Forests and 19b Kielder Reservoir.

Forces for Change

- Ongoing felling and restocking of coniferous plantations as part of Forestry Commission policy to restructure and diversify early plantations.
- Past farming and forestry activity have resulted in the drainage of upland areas causing a loss of peat bogs and wet flushes and damage to or loss of archaeological features.
- Decline in, or alteration to, upland bog and heather moorland management including overgrazing, drainage and regeneration of sitka has in some areas led to a decline of important moorland habitats.
- Upgrading of road infrastructure and creation of new access tracks in response to the construction of Kielder Reservoir and need to access areas for felling has altered the communications pattern in this landscape.
- Redevelopment of historic forestry villages may affect the distinctiveness and integrity of these settlements.
- Increased tourism and associated infrastructure such as signage, car parks, visitor centres, focused on Kielder Reservoir may intrude locally on landscape character.

Key Qualities

- Extensive areas of semi-natural habitat, including raised and blanket bog, heather
 and grass moorland, and diverse meadow grasslands along burns, many of which
 are designated SSSIs and NNRs e.g. Kielderhead and Emblehope Moors and
 Kielder Mires.
- Distinctive flat-topped sandstone ridgelines and outcrops in an otherwise largely uniform and inward-looking landscape e.g. Peel Fell and Carter Fell.
- Historic earthworks and features, including defended settlements such as Gibbe's Knowe and round and long cairns such as Devil's Lapful.
- Remoteness and isolation derived from its upland character, limited accessibility, very sparse population and inward looking character.
- Areas of scenic interest and importance for recreation in and around Kielder Reservoir, including the Forest Drive which provides access to a unique and remote area of upland.

 Historically significant forestry settlements reflecting an important period in England's forestry strategy of the 1960s e.g. Byrness.

Guiding principle

Plan

Vision statement

This is a dynamic landscape and one which serves a number of important functions from timber production to recreation and tourism. It has undergone considerable change over the last 50 years and continues to provide a range of landscape benefits. The approach for this area is one of continued enhancement, with a strong planning element in terms of ongoing forestry restructuring.

Land Management Guidelines

- 5.255. Encourage the ongoing restructuring of existing coniferous woodlands in order to diversify their structure, soften their outlines and enhance nature conservation value.
- 5.256. Encourage retention of native species, such as stands of Scots pine, and the planting of new semi-natural woodland which relates to local topography, in areas such as along burn valleys and plantation margins.
- 5.257. New woodland planting should be steered away from areas of nature conservation value such as meadow grassland, and should not mask landmark natural or historic features, such as distinctive skyline ridges.
- 5.258. Encourage the appropriate management of meadow grasslands particularly along burn valleys. Discourage the drainage of moorland areas and the improvement of in-bye pastures. Encourage restoration of bogs and heather moorland by blocking drains and reducing grazing and stocking levels. Promote uptake of agri-environment schemes to achieve such aims.

Development Guidelines

- 5.259. The historic forestry settlements have a distinctive urban form and character. New built development within or adjacent to these settlements should be carefully designed to ensure settlement integrity and local distinctiveness.
- 5.260. New built development should reflect local buildings styles and materials, with particular consideration given to roofing materials. Consideration should be had for the setting of Kielder Water.
- 5.261. Seek to steer tourism-related development (such as caravan parks and recreational grounds) away from locations which are visually prominent, particularly when viewed from surrounding higher land and where they extend an urbanising influence into open countryside.

Management Plans

5.262. Management and development in this area should have regard to the Northumberland National Park Management Plan and Natural England's Vision for the Uplands. Particular guidance on forestry may be obtained from the Forestry

Commission. Other reference m landscape character and managing	naterial helpful to understanding potential effects on g change may also be available.

Landscape Character Type 20: Rolling Upland Valleys

Introduction

- 5.263. The Rolling Upland Valleys landscape character type comprises broad valleys which carve through larger blocks of upland landscape. The valleys contrast strongly with the neighbouring upland LCTs. This landscape includes the valleys of the Rivers Rede and North Tyne and their tributaries, although parts of these valleys extend into the Northumberland National Park, and are therefore outside the study area.
- 5.264. This LCT is represented by three character areas; 20a Otterburn and Elsdon Valley, 20b Bellingham and Woodburn Valley, and 20c Upper North Tyne Valley.

Forces for Change

- Introduction of new woodlands, including conifer plantations on upper valley slopes, may alter the consistent patterns and simplicity of land cover that are so distinctive of this type.
- Decline in woodland management and replanting programmes may result in the loss of important landscape features such as ancient semi-natural woodland, particularly where woodlands are of even age.
- Improvement of pasture and expansion of arable cultivation on the valley sides may lead to a loss of the characteristic colours and textures of the pastures.
- Loss of field boundaries through lack of management may weaken the characteristic patterns of enclosure.
- Development pressures are evident in Bellingham and other valley settlements, where new housing and tourism developments show signs of expanding onto the valley sides, altering the historic form and approach routes to settlements.
- Increased traffic associated with tourism, timber extraction and through travel may undermine tranquillity.

Key Qualities

- Consistent patterns of land use including valley floor mixed farming and hedgerows, rushy valley-side pastures enclosed by stone walls, and open moorland above.
- Wooded bluffs along the edge of the valley floors and tributary burns, creating visual enclosure and comprising significant areas of ancient semi-natural broadleaved woodland.
- Historic sandstone villages occur repeatedly along the lower valley sides and act as important visual focal points.
- Historic features, including remains from the Roman period, medieval period, and the Border conflicts of the 16th century, as well as mining and industrial relicts.
- The valleys act as corridors and gateways to the National Park and to the recreational landscapes of Kielder Water, and form part of their setting.

Guiding principle

Manage

Vision statement

The defining element of this landscape character type is the pattern of land use and enclosure, which progresses from mixed farming on the valley floor where fields are enclosed by hedges, to pastures on the valley sides defined by stone walls, to open moorland above. The overall approach should be to conserve and restore the enclosure pattern, and maintain the unique character of each of the valleys.

Land Management Guidelines

- 5.265. Encourage restructuring of coniferous plantations where these are visually dominant. Discourage planting on the skyline.
- 5.266. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect, particularly in wooded bluffs and along burns.
- 5.267. Encourage the planting of new woodland on the valley floor where it adds visual interest, enhances landscape structure and complements existing woods on steep side bluffs.
- 5.268. Retention of unimproved pastures on the valley sides and some areas of valley floor should be encouraged in order to retain the visual diversity of this landscape
- 5.269. Creation of landscape margins and buffers adjacent to watercourses would be beneficial where arable land or intensive grazing impinges on the water's edge.
- 5.270. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.271. Conservation of historic sites and structures, which act as local focal points and reinforce local distinctiveness in each of the valleys, is important. Access to and views of these key features should also be retained.

Development Guidelines

- 5.272. New built development should be steered away from valley sides, to retain settlement form, and ideally should not form abrupt edges. Local materials should be respected, particularly roofs. The approaches to settlements and key views should be protected from inappropriate development.
- 5.273. Recreational development (such as golf courses, caravan parks and playing fields) on the edges of settlements should not extend urbanising influences or uncharacteristic vegetation patterns into open countryside.

Management Plans

5.274. Management and development in this area should have regard to the Northumberland National Park Management Plan and Natural England's Vision for the Uplands. Particular guidance on forestry may be obtained from the Forestry Commission. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 21: Rolling Uplands

Introduction

- 5.275. This upland landscape occurs in large areas of the eastern part of the Border Moors and Forests, although much of it is located within the Northumberland National Park, and is therefore outside the present study area. However, three small areas of this landscape extend outside the National Park, where they are associated with the Rolling Upland Valleys (LCT 20).
- 5.276. This LCT is represented by three character areas; 21a Ealingham Rigg, 21b Corsenside Common and 21c Otterburn Plateau.

Forces for Change

- New conifer plantations which do not relate well to the landform and open expansive character.
- Drainage of upland areas for farming and forestry may result in a loss of peat bogs and wet flushes and a reduction in biodiversity.
- Overgrazing of heather moorland in some areas may cause an abrupt change in vegetation along fence lines and a loss of habitat value.
- Ongoing military training activity at Otterburn.

Key Qualities

- Open smooth rolling landform with expansive and panoramic views.
- Important setting to the Rolling Upland Valleys (LCT 20).
- Extensive areas of semi-natural habitat including ancient woodland along burns, heather and grass moorland, peat bog and mosses.
- Distinctive craggy sandstone outcrops.
- Archaeological and historical features including Dere Street, rig and furrow and a medieval church.
- Wildness and remoteness derived from the landscape's upland character, limited accessibility and relative lack of overt manmade features.

Guiding principle

Protect

Vision statement

The condition of this landscape, including its semi-natural habitats and historic features and patterns, remains good despite some changes associated with coniferous planting and military training activity. The approach for this landscape is therefore one of conservation.

Land Management Guidelines

5.277. Encourage restructuring of coniferous plantations where these are visually dominant.

- 5.278. Planting of new native woodland should focus on natural depressions in the landform and along burns, and should avoid masking rocky outcrops which act as local landmarks and a valuable habitat.
- 5.279. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect, particularly in wooded bluffs and along burns.
- 5.280. Heather moorland should be managed to enhance biodiversity through appropriate stocking densities and burning regimes. Conserve areas of blanket bog through the avoidance of drainage and physical damage. Restore damaged bogs and flushes by blocking drains. Promote uptake of agri-environment schemes to achieve such aims.
- 5.281. Protect historical features from inappropriate land management including drainage, woodland planting and arable cropping.
- 5.282. Encourage the sensitive management of areas used for military training.

Development Guidelines

- 5.283. Liaison with military authorities regarding future developments at Otterburn to ensure that these have regard to landscape character and are not overly prominent.
- 5.284. New development around Otterburn camp should ideally be concentrated within the existing camp area.

Management Plans

5.285. Management and development in this area should have regard to the Northumberland National Park Management Plan and Natural England's Vision for the Uplands. Particular guidance on forestry may be obtained from the Forestry Commission. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 10: NORTH PENNINES

- 5.286. The North Pennines NCA is located towards the northern end of the Pennine chain and forms a separate and distinct area of upland moor and dale south of the Tyne Gap (NCA II), characterised by some of the highest and wildest moorland summits in England, and dissected by dales radiating north and east. Nearly all of this NCA is part of the North Pennines AONB, and it extends west into Cumbria and south into County Durham.
- 5.287. This NCA, as refined for this classification, contains six landscape character types and 18 landscape character areas, as set out in Table 5.6.

Table 5.6 Landscape character types and areas in NCA10

Landscape character type (LCT)		Landscape character area	
22	Farmed River Valleys	22a	Devil's Water and Hinterland
		22b	Dipton Wood and Slaley
23	Lower Dale	23a	Lower South Tyne
		23b	Lower Allenheads
		23c	Lower Derwent
24	Middle Dale	24a	Middle South Tyne
		24b	Middle West Allen
		24c	Middle East Allen
		24d	Middle Devil's Water
		24e	Middle Derwent
25	Moorland Ridges	25a	Blenkinsopp Common
		25b	Hartleyburn and Knarsdale Commons
		25c	Whitfield Moor
		25d	Allen Common and Mohope/Acton Moors
		25e	Hexhamshire and Bulbeck Commons
26	Upland Farmland and Plantations	26a	Healey
27	Upper Dale	27a	Upper West Allen
		27b	Upper East Allen

Landscape change

- 5.288. The Countryside Quality Counts (CQC) survey reported that, between 1990 and 1998, this landscape underwent *limited or small changes consistent with character*. ²⁴ Woodland management was being carried on in a manner likely to maintain the existing character of the landscape. There was evidence of positive management of semi-natural habitats.
- 5.289. Between 1998 and 2003, CQC states that the character of this area was *maintained*. ²⁵ The overall character of the area was stable in relation to agricultural land cover and patterns of settlement and development. Positive changes to boundary features, trees and woodland were identified.

Climate change

Freshwater systems

5.290. The North Pennines feed a number of rivers, and experience a climate of high rainfall. The northern fringe of the Pennines within Northumberland drains into the Tyne catchment, and changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent flood events, changing patterns of erosion and deposition, and alterations in river courses. Human responses to the increased risk of flooding are likely to include the implementation of measures to slow the speed of run-off through woodland expansion within river catchments. Engineered flood defences may be constructed in towns and villages in the larger catchments such as those in the Tyne valley, in response to the increased frequency of flood events, particularly during the winter months.

Habitats and biodiversity

5.291. The North Pennines are characterized by rough moorland divided by pastoral dales. The impacts of climate change may lead to mixed effects on peat bog, as increased winter rainfall could increase the rate of peat formation, but could also lead to an elevated risk of bog-bursts and erosion. Summer drought could have a negative impact on peat bogs and mires. Heather moorlands may also change, partly in direct response to climate changes, and partly in response to changes in the way they are managed. The upland habitats may also be at increased fire risk as a result of drier summers.

Agriculture

5.292. There may be changes in agriculture within the pastoral dales, with potential extension of arable cultivation into these areas.

Woodland and forests

5.293. There is currently sparse tree cover; areas of existing coniferous forest occur on the moorland fringes, and woodlands are restricted to river gorges, gills and stream sides. The area of woodland is likely to increase across the upland area in order to contribute to carbon sequestration and flood management strategies. The productive forests may experience changes in species composition in response to changing climate and the impacts of pest and disease.

²⁴ http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA010.htm

http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?CqcJcaID=10

Recreation and tourism activity

5.294. As an important recreation area, changes in weather patterns are likely to impact on recreation patterns. Issues likely to affect the upland moorland areas include fire risk from increased temperatures and reduced summer rainfall. There may also be issues of increased erosion of footpaths as a result of changes in winter rainfall and storm events, and warmer, drier summers leading to higher levels of use.

Settlements

5.295. The area is sparsely settled, with small stone-built villages and scattered farmsteads. New development within these areas may incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management which may alter the settlement traditional character.

Infrastructure

5.296. Changes in infrastructure are likely to be seen within this NCA as there may be increased pressure for the creation of reservoirs within the upland area, in response to changes in rainfall patterns and potential water shortages elsewhere.

Historic environment

5.297. Increases in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also impact on the historic landscape structure within the dales, including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress.

Landscape Character Type 22: Farmed River Valleys

Introduction

- 5.298. This landscape character type forms an upland fringe farmland landscape between the North Tyne and Derwentdale which has been dissected by deeply incised burn valleys.
- 5.299. This LCT is represented by two character areas; 22a Devil's Water and Hinterland and 22b Dipton Wood and Slaley.

Forces for Change

- Decline in, or alteration to, native woodland management may cause the decline of the diversity and nature conservation value of ancient semi-natural woodland in the dene valleys.
- Planting of coniferous woodland within and adjacent to dene valleys may result in a changing pattern of woodland in this landscape and masking of the distinctive drainage pattern or deep valley clefts.
- Decline in field boundary management (stone wall and hedgerows) may lead to the use of post and wire to ensure stockproof function and lead to the erosion of the visually varied pattern of enclosures across this landscape.
- Development of equestrian uses on pastures, particularly adjacent to settlements or within dene haughs, may bring with it new enclosure patterns and associated equestrian features such as stables etc.

Key Qualities

- Deeply incised clefts or ravines with rocky outcrops and waterfalls give this landscape local distinctiveness and create intimate and secretive landscapes.
- Ancient semi-natural woodland along denes e.g. Long Bank and Letah Woods.
- Small, intact, Saxon and medieval villages, many of which have conservation areas and numerous listed buildings e.g. Juniper and Whitley Chapel.
- Historic stone bridges or fords across burns.

Guiding principle

Manage

Vision statement

The defining element of this landscape character type is the distinctive network of wooded incised denes and variety of field enclosure pattern and scale. Both these aspects of the landscape have been altered in the past by coniferous planting and land management to some degree. The overall approach for this landscape should be to conserve and restore this pattern through ongoing appropriate management.

Land Management Guidelines

5.300. Encourage the ongoing restructuring of existing coniferous woodlands in order to diversify their structure, soften their outlines and enhance nature conservation value.

- 5.301. New woodland or plantation planting should not extend over the edge of the denes into the wider landscape and should have soft edges comprising broadleaved species.
- 5.302. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect, particularly in the denes, ravines and along watercourse. Appropriate protection from overgrazing is important.
- 5.303. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.304. Retention of unimproved pastures and hay meadows on dene haughs should be encouraged.
- 5.305. Increase awareness of the landscape implications of equestrian use, encourage the retention and management of existing hedgerow boundaries and discourage the unnecessary subdivision of enclosures with post and rail or wire fencing.

Development Guidelines

- 5.306. Development which is sympathetic in style, and reflects historic village forms, will integrate most successfully with the existing villages.
- 5.307. New buildings should reflect local building material and styles. New crossing points over the dene watercourses should be resisted.

Management Plans

5.308. Particular guidance on forestry may be obtained from the Forestry Commission. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 23: Lower Dale

Introduction

- 5.309. This landscape comprises the lower sections of the dales which run north and east out of the North Pennines. Although the typical dale has characteristic 'upper', 'middle' and 'lower' sections, not all *Lower Dale* areas are associated with *Middle Dale* (LCT 24) and *Upper Dale* (LCT 27) areas.
- 5.310. This LCT is represented by three character areas; 23a Lower South Tyne, 23b Lower Allenheads and 23c Lower Derwent. 23b and 23c are within the North Pennines AONB.

Forces for Change

- Decline in management of woodlands due to overgrazing may result in changing woodland diversity and pattern of woodland cover.
- Decline in management of veteran trees and hedgerow trees could lead to a decrease in the overall wooded, sheltered and lush character of this landscape.
- Improvements to pastures through drainage and high use of herbicides and fertilisers may bring a decrease in the number and diversity of species-rich hay meadows and a loss of the texture and colour in the landscape.
- The declining ability of hedgerows and stone walls to act as stockproof barriers through lack of management has led to an increase in the use of post and wire fencing and loss of traditional boundaries.
- Growth in tourism activity associated with the mining heritage could result in changes to the character of archaeological sites and the wider landscape.

Key Qualities

- High concentration of ancient semi-natural woodland which contributes to this type's overall sheltered and intimate character e.g. Throstle Hall Wood and Stawardpell Wood.
- Mature field and hedgerow trees giving rise to an established character and sense of longevity.
- Significant areas of species-rich hay meadows, verges and woodland understorey
 giving rise to a richness in colour and texture e.g. along the River North Tyne at
 Featherstone Castle.
- Wealth of historic landscape features including parkland and rig and furrow as well as features relating to past mining activity.

Guiding principle

Protect

Vision statement

This is an intimate and well-wooded rural landscape which retains many of its key characteristics in good condition. The overall approach should be to protect the landscape from deterioration, and locally to restore or enhance.

Land Management Guidelines

- 5.311. Promote improved management of semi-natural woodland along gills, ravines and riversides, including through uptake of HLS and other agri-environment schemes, in order to reinforce characteristic vegetation patterns. Seek to maintain characteristic species mixes.
- 5.312. Encourage landowners to improve management and carry out replacement of hedgerows, hedgerow trees, and field trees, through agri-environment funding schemes.
- 5.313. Promote the maintenance and enhancement of unimproved pastures through agrienvironment practices which promote flowering and seed setting in order to retain the biodiversity as well as visual diversity and texture of hay meadows and pastures.
- 5.314. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.315. Creation of landscape margins and buffers adjacent to watercourses would be beneficial where arable land or intensive grazing impinges on the water's edge.
- 5.316. Seek restoration of former quarry sites through the development of naturalistic profiles using restoration blasting. Opportunities should be considered for improving access to some rock exposures which are of geological or visual interest.

Development Guidelines

- 5.317. Retain and actively manage areas of open space, village greens, orchards, tofts and garths which are defining characteristics of settlement in this landscape type.
- 5.318. New built development should seek to retain and reinforce local settlement character in terms of scale, form and local vernacular styles and materials. Care should be taken not to suburbanise rural lanes through inappropriate boundary treatment, use of hard kerbing or removal of traditional boundary features.
- 5.319. Appropriate tourism and recreation development of the former mining heritage in this landscape should be encouraged, whilst retaining the remote and rural character of these sites.
- 5.320. New infrastructure such as signage, interpretation and access should not detract from the character of the mining heritage resource, or introduce overt urban influences into the wider landscape.

Management Plans

5.321. Management and development in this area should have regard to the North Pennines AONB Management Plan, the North Pennines HLS Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 24: Middle Dale

Introduction

- 5.322. This landscape comprises the intermediate sections of the dales that run east and north from the North Pennines. Although the typical dale has characteristic 'upper', 'middle' and 'lower' sections, not all *Middle Dale* areas are associated with *Lower Dale* (LCT 23) and *Upper Dale* (LCT 27) areas. This LCT occurs wholly within the North Pennines AONB.
- 5.323. This LCT is represented by five character areas; 24a Middle South Tyne, 24b Middle West Allen, 24c Middle East Allen, 24d Middle Devil's Water and 24e Middle Derwent.

Forces for Change

- Decline in management of woodlands due to overgrazing may result in changing woodland diversity and pattern of woodland cover.
- Planting and development of coniferous plantations may create blanket woodland cover, mask underlying topography and alter the pattern of semi-natural woodland.
- Improvements to pastures through drainage and high use of herbicides and fertilisers may lead to a decline in the number and diversity of species-rich hay meadows and rushy pastures and a loss of texture and colour in the landscape.
- Declining ability of stone walls to act as stockproof barriers through lack of management may lead to an increase in the use of post and wire fencing and loss of traditional boundaries which may alter the enclosure pattern.
- Growth in tourism activity associated with the mining heritage may cause changes to the character of archaeological sites and the wider landscape.

Key Qualities

- Strong visual unity derived from the gentle dale topography, land use pattern, and stone wall enclosure pattern.
- Areas of ancient semi-natural woodland which visually reinforce the course of gills and becks in incised ravines.
- Significant area of species-rich hay meadows and wet rushy pastures giving rise to a richness in colour and texture.
- Notable estate landscapes and designed villages e.g. Blanchard and Hunstanworth
- Wealth of historic landscape features associated with the mining industry e.g.
 Derwent mining area.

Guiding principle

Protect

Vision statement

This is an intimate and well wooded rural landscape which retains many of its key characteristics in good condition. Although there are some changes relating to land management the overall approach should be to protect the landscape from deterioration, and locally to restore or enhance.

Land Management Guidelines

- 5.324. Encourage the felling and restocking of coniferous plantations with an increase in native species. Focus replanting on steepest slopes, extending areas of existing seminatural woodland and sensitivity to local topography variations and edge treatment.
- 5.325. Promote improved management and extension of semi-natural woodland along gills, ravines and riversides, including through uptake of HLS and other agri-environment schemes, in order to reinforce characteristic vegetation patterns. Seek to maintain characteristic species mixes, particularly juniper scrub.
- 5.326. Promote the maintenance and enhancement of unimproved pastures through agrienvironment practices which promote flowering and seed setting in order to retain the biodiversity as well as visual diversity and texture of hay meadows and pastures.
- 5.327. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.328. Encourage landowners to improve management and carry out replacement of hedgerows, hedgerow trees, and field trees, through agri-environment funding schemes.
- 5.329. Seek restoration of former quarry sites through the development of naturalistic profiles using restoration blasting. Opportunities should be considered for improving access to some rock exposures which are of geological or visual interest.

Development Guidelines

- 5.330. Retain and actively manage areas of open space, village greens, orchards, tofts and garths which are defining characteristics of settlement in this landscape type.
- 5.331. New built development should seek to retain and reinforce local settlement character in terms of scale, form and local vernacular styles and materials. Care should be taken not to suburbanise rural lanes through inappropriate boundary treatment, use of hard kerbing or removal of traditional boundary features.
- 5.332. Appropriate tourism and recreation development of the former mining heritage in this landscape should be encouraged, whilst retaining the remote and rural character of these sites

5.333. New infrastructure such as signage, interpretation and access should not detract from the character of the mining heritage resource, or introduce overt urban influences into the wider landscape.

Management Plans

5.334. Management and development in this area should have regard to the North Pennines AONB Management Plan, the North Pennines HLS Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 25: Moorland Ridges

Introduction

- 5.335. This landscape character type is found within the North Pennine uplands south of the Tyne Gap and forms an important visual backdrop to the lower lying dales which dissect it. Most of this landscape is within the North Pennines AONB.
- 5.336. This LCT is represented by five character areas; 25a Blenkinsopp Common, 25b Hartleyburn and Knarsdale Commons, 25c Whitfield Moor, 25d Allen Common and Mohope/Acton Moors and 25e Hexhamshire and Bulbeck Commons.

Forces for Change

- Decline in the number and distribution of juniper woods along ravines and gills as a result of damage by grazing livestock, which may result in a less visually apparent drainage pattern.
- Drainage of moorland areas for agricultural improvement may result in damage to blanket bog habitats, flushes and pools.
- Overgrazing of heather moorland may lead to the loss and fragmentation of heather communities.
- Growth and expansion of bracken encroachment as a result of lack of management and climate change may alter the character of the landscape and conceal local features such as rock exposures and mining heritage.
- Loss of stone wall enclosures and other stone built features such as sheepfolds, bields, bothies and mining heritage may undermine local distinctiveness.
- Development of coniferous plantations and shelterbelts on the moorland fringes may mask the transition from open moorland to dale and alter the characteristic land use patterns.

Key Qualities

- Natural rock outcrops and other geological features such as shake holes and stone bands within an otherwise simple landscape.
- Extensive areas of semi-natural vegetation including blanket bog and heather moorland which is designated as SSSI.
- Important stands of juniper woods which flank gills and steep ravines and visually reinforce the drainage pattern.
- Wealth of mining heritage features including disused mines and shafts.
- Open expansive and elemental character offering exceptional recreation experiences and a high degree of relative wildness.
- A simplicity of landform and landcover which contrasts with individual man made features such as mining chimneys, shafts and field barns.

Guiding principle

Protect

Vision statement

The condition of this landscape including its semi-natural habitats and historic features and patterns remains good despite some issues relating to the management of open moorland. The approach for this landscape is therefore to restore condition and conserve character through ongoing custodianship.

Land Management Guidelines

- 5.337. Promote improved management and extension of semi-natural woodland along gills, ravines and valley bottoms, including through uptake of HLS and other agrienvironment schemes, in order to reinforce characteristic vegetation patterns. Seek to maintain characteristic species mixes.
- 5.338. Encourage the felling and restocking of coniferous plantations with an increase in native species.
- 5.339. The rebuilding and restoration of stone walls, bields and bothies should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.340. Conserve areas of blanket bog through the avoidance of gripping and physical damage. Restore damaged bogs and flushes by blocking grips and drains.
- 5.341. Encourage appropriate long term management of existing heather moorland through a review of stocking levels and burning practices and implementation of new regimes if necessary.
- 5.342. Improve understanding of the mining archaeology through research and survey and seek to balance the conservation and protection of the most significant historic mining features with the gradual decay and dereliction of others, both of which make a valuable contribution to the visual interest and historic legacy of this landscape.

Development Guidelines

- 5.343. Manage access through this landscape and particularly to points of interest (viewpoints, historic sites), by encouraging the use of structured and seasonal paths to decrease pressure on fragile substrates and reduce disturbance to breeding birds.
- 5.344. New buildings in this landscape would affect the remote, tranquil character. Where necessary, they should be sited to minimise visibility, be built of natural materials, and where possible designed to look like traditional moorland features.

Management Plans

5.345. Management and development in this area should have regard to the North Pennines AONB Management Plan, the North Pennines HLS Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 26: Upland Farmland and Plantations

Introduction

- 5.346. This landscape forms a transitional area between the North Pennine dales and the Tyne Gap.
- 5.347. This LCT is represented by one character area; 26a Healey.

Forces for Change

- Development of estates and country houses for recreational or other uses may lead to a change in character and loss of parkland landscape features.
- Decline in stone wall and hedgerow management may result in a loss of the distinctive enclosure pattern and creation of a neglected feel.
- Drainage of pastures may cause a loss/decline in wet pastures and biodiversity leading to a change to landscape colours and textures.

Key Qualities

- Gorse scrub lane verges along with bracken, birch and Scots pine reflecting the underlying bands of sandstone geology.
- Interlocking pattern of native woodland and coniferous plantations typically seen around large houses and parkland estates.
- Mature beech and Scots pine shelterbelts along rural roads that act as strong skyline features.
- Strong geometric enclosure patterns defined by hedgerows and stone walls, many of which date to the period of parliamentary enclosure.

Guiding principle

Plan

Vision statement

This landscape has a mixed character and lacks cohesiveness. Although the geology of this area has given it a distinctive stepped topography and areas of acidic vegetation, the planting of coniferous woodland planting has obscured these patterns to some degree. The overall approach for this landscape should be to enhance the landscape through the planned restructuring of woodland and reinforcement of the wider enclosure pattern.

Land Management Guidelines

- 5.348. Encourage the ongoing restructuring of existing coniferous woodlands in order to diversify their structure, soften their outlines and enhance nature conservation value.
- 5.349. Retain areas of Scots pine and beech shelterbelt where they form visually significant skyline features.
- 5.350. Retain unimproved wet rushy pastures to optimise the visual diversity of this landscape. Use of fertilisers and lime on pastures should be discouraged.

- 5.351. Seek opportunities to revert arable back to pasture where soil conditions are poor, and restore wet pastures through blocking drains. Encourage uptake of agrienvironment schemes.
- 5.352. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of local skills. Ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.353. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.

Development Guidelines

- 5.354. Where former parkland estates are developed for recreational uses, ensure that landscape features such as field trees and woodland planting are retained and actively managed.
- 5.355. Golf course development should seek to reinforce parkland character through appropriate planting, such as avenues and field trees.
- 5.356. All new development within estates should be steered away from locations that are visually sensitive when viewed from the wider landscape, and should have regard to the layout of any designed landscapes, and the settings of listed buildings.

Management Plans

5.357. Management and development in this area should have regard to the North Pennines AONB Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 27: Upper Dale

Introduction

- 5.358. This landscape character type comprises a pastoral landscape in the upper reaches of the North Pennine dales.
- 5.359. This LCT is represented by two character areas; 27a Upper West Allen and 27b Upper East Allen.

Forces for Change

- Decline in, or alteration to, management of woodlands due to overgrazing may result in changing woodland diversity and pattern of woodland cover.
- Planting and development of coniferous plantations which may relate poorly to local topography and may impose stark geometric shapes on this landscape particularly when seen on or near the skyline.
- Improvements to pastures through drainage and high use of herbicides and fertilisers may lead to a decrease in the number and diversity of species-rich hay meadows and rushy pastures and a loss of texture and colour in the landscape.
- Declining ability of stone walls to act as stockproof barriers through lack of management, resulting in an increase in the use of post and wire fencing and loss of traditional boundaries, may alter the enclosure pattern.
- Damage to some archaeological sites may occur through regeneration of woodland and erosion by stock.

Key Qualities

- Distinctive pattern of stone walls and field barns which gives rise to a strong local identity and one which is iconic within the North Pennines AONB.
- A wealth of historic features associated with the mining industry, many of which are listed or scheduled and often from relic landscapes such as at Allenheads.
- Remote and tranquil landscape on the edge of farming communities and open moorland beyond.
- Notable species-rich hay meadows and wet rushy pastures which contribute significantly to the area's biodiversity and visual landscape texture and colour.
- Isolated farmsteads associated with clumps of shelter trees form local foci.

Guiding principle

Protect

Vision statement

The condition of this landscape including its semi-natural habitats and historic features and patterns remains in a good state of repair. The approach for this landscape is therefore to protect the landscape from deterioration, and locally to restore.

Land Management Guidelines

- 5.360. Promote improved management and extension of semi-natural woodland along gills, ravines and riversides, including through uptake of HLS and other agri-environment schemes, in order to reinforce characteristic vegetation patterns. Seek to maintain characteristic species mixes, particularly juniper scrub.
- 5.361. Encourage the felling and restocking of coniferous plantations with an increase in native species. Focus replanting on steepest slopes, extending areas of existing seminatural woodland and sensitivity to local topography variations and edge treatment.
- 5.362. Encourage ongoing appropriate management of traditional shelterbelts and stands of shelter trees around isolated farmsteads, where they contribute to landscape pattern.
- 5.363. The maintenance and enhancement of in-bye pastures and allotment grazing should be Encourage limited use of herbicides, fertilisers and liming and by ensuring appropriate stocking levels and avoiding drainage, ploughing or reseeding.
- 5.364. Promote the maintenance and enhancement of unimproved pastures through agrienvironment practices which promote flowering and seed setting in order to retain the biodiversity as well as visual diversity and texture of hay meadows and pastures.
- 5.365. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.366. Encourage the restoration and continued management of built structures such as field barns, farm buildings and lime kilns which add to local distinctiveness.
- 5.367. Seek restoration of former quarry sites through the development of naturalistic profiles using restoration blasting. Opportunities should be considered for improving access to some rock exposures which are of geological or visual interest.
- 5.368. Improve understanding of the mining archaeology through research and survey and seek to balance the conservation and protection of the most significant historic mining features with the gradual decay and dereliction of others, both of which make a valuable contribution to the visual interest and historic legacy of this landscape.

Development Guidelines

5.369. Seek opportunities to improve access (physical and intellectual) to the historic lead mining industry (sites and landscapes) which have left their imprint on this landscape (particularly in Allenheads).

5.370. Any new farm buildings should be sited close to existing buildings where possible reflecting their scale and design and using traditional materials.

Management Plans

5.371. Management and development in this area should have regard to the North Pennines AONB Management Plan, the North Pennines HLS Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA II: TYNE GAP

- 5.372. This narrow but distinctive lowland corridor, centred on the river Tyne, separates the North Pennines from the Border country. To the west lie the pastoral landscapes of the Solway Basin; to the east are the more densely populated Tyne and Wear Lowlands. Most of this NCA is within the study area, although it extends some way into the Northumberland National Park in the north-west. Much of Hadrian's Wall, for example, falls outside the study area.
- 5.373. This NCA, as refined for this classification, contains seven landscape character types and 20 landscape character areas, as set out in Table 5.7.

Table 5.7 Landscape character types and areas in NCAII

Landscape character type (LCT)		Landscape character area	
28	Basin Valley and Fringes	28a	River Irthing
29	Broad Wooded Valley	29a	North Tyne Valley
30	Glacial Trough Valley Floor	30a	Haltwhistle to Newbrough
		30b	Newbrough to Corbridge
		30c	Corbridge to Wylam
31	Glacial Trough Valley Sides	31a	Tipalt Burn
		31b	Haltwhistle to Bridge End
		31c	North Plenmeller Common
		31d	Langley to Stocksfield
		31e	Stocksfield to Prudhoe
		3 I f	Acomb to Ovington
		31g	Ovington to Wylam
32	Parallel Ridges and Commons	32a	Howden Hill
		32b	Haltwhistle, Melkridge and Ridley Commons
33	Tributary Valley	33a	Erring Burn
34	Upland Commons and Farmland	34a	Acomb Ridge
		34b	Broadpool Common
		34c	Grindon Common
		34d	Featherstone Common
		34e	Lowes and Nubbock Fells

Landscape change

- 5.374. The Countryside Quality Counts (CQC) survey reports that between 1990 and 1998, this landscape underwent *limited or small changes consistent with character*. ²⁶ Although there was some development pressure, this tended to be limited, and was offset by positive changes in woodland, agriculture and semi-natural vegetation, which were seen to be consistent with the existing landscape character, as set out in the NCA description.
- 5.375. Between 1998 and 2003, CQC states that the character of this area was maintained. ²⁷ Although there were enhancements to the character of woodlands, changes in the other themes were more limited, so that overall the landscape was considered to be stable. Scope was identified for future restoration and enhancement of key landscape features.

Climate change

Freshwater systems

5.376. The NCA contains the floodplain of the River Tyne, which has a large catchment area draining the surrounding uplands. Changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent flood events, changing patterns of erosion and deposition, and alterations in river courses. The human responses to climate change may have more significant impacts on the landscape. This is likely to include the implementation of measures to slow the speed of run-off through woodland expansion, and the restoration of natural flood plains. Engineered flood defences may be constructed in larger towns and villages along the River Tyne. Areas currently prone to flooding are likely to be subject to more frequent flood events, particularly during the winter months.

Habitats and biodiversity

5.377. Impacts on habitats may result from intensification of agriculture and changes in crop types, and changes in river morphology and management as a result of changing rainfall patterns.

Agriculture

5.378. Agriculture could experience a range of changes which may be driven by a range of wider economic influences. There may be opportunities for new crops or intensification of farming in currently productive areas. New food and energy crops may alter the appearance of the landscape. There may be a requirement for new farm buildings, and demand for irrigation infrastructure and on-farm storage of water for irrigation. There may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management. Arable cultivation may extend westwards into lowland pastoral areas. The ploughing of pasture areas could affect field patterns and rig and furrow, which are characteristic of Northumberland's pastoral landscapes.

²⁶ http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA011.htm

http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|ca|D=11

Woodland and forests

5.379. There may be an increase in the extent of woodland in order to contribute to flood management strategies. Existing areas of productive forestry on the valley slopes may experience changes in species composition in response to changing climate and the impacts of pest and disease. Within the agricultural landscapes of the valley floor there are likely to be changes in the pattern of woodland with an increase in the development of woodland networks and shelterbelts to provide habitat connectivity and shelter and shade for livestock, but possible loss of individual trees due to stress resulting from drought and flooding. Over time, dominant woodland species may change, and new patterns of diseases and pests may affect native woodland cover.

Recreation and tourism activity

5.380. The NCA is a significant transport route and provides a gateway to the North Pennines and Northumberland National Park. Hadrian's Wall also provides a key visitor attraction within the area. Changing weather patterns may impact on recreation patterns, with increased demand for wet weather attractions and greater pressure on green infrastructure within settlements in response to increasing temperatures. Fire risk as a result of increased summer temperatures may be an issue within parkland, and there may be increased erosion of public footpaths and cycleways as a result of changes in winter rainfall and storm events, and increased use during warmer, drier summer months.

Settlements

5.381. Within urban areas there is also an increased risk of flooding from drainage systems, and increased damage to the fabric of buildings. New developments are likely to incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management, altering the character of existing settlements.

Infrastructure

5.382. There may be changes in the management of road and rail infrastructure to address issues of flooding and stability.

Historic environment

5.383. Historic features are an important aspect of the landscape. Increases in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings and monuments.

Landscape Character Type 28: Basin Valley and Fringes

Introduction

- 5.384. This landscape lies at the far west of the study area and includes the watershed between the River Irthing, which flows west into Cumbria, and the Tipalt Burn, which flows east to the South Tyne. This landscape continues west along the Irthing valley, beyond the study area.
- 5.385. This LCT is represented by one character area; 28a River Irthing.

Forces for Change

- Decline in woodland management may lead to loss of structural diversity and biological richness and the eventual loss of areas of woodland.
- Decline in of management of coniferous shelterbelts could lead to visually intrusive wind throw damage and create a neglected character.
- Improvements to valley floor meadows may cause a change to biodiversity interest and may also affect river bank erosion.
- Development and infrastructure along the A69 may result in intrusive linear development.
- Loss of tranquillity may continue as a result of traffic on the A69, the railway and military operations within Spadeadam Forest.

Key Qualities

- Exceptional archaeological and upstanding historic remains this whole area forms part of Hadrian's Wall World Heritage Site.
- Ancient semi-natural woodland, particularly in the distinctive 'hanging' woods on the steep bluffs.
- River system valued for its nature conservation as part of the River Eden and Tributaries SSSI.
- Exceptional valley floor meadows and pastures, the majority of which are unimproved and have a rich floristic diversity.
- Small historic settlements reflecting the growth of the area as a result of the mining industry and development of the railway.
- Thick mature hedgerows and hedgerow oaks that combine to create a settled and sheltered character with a high degree of tranquillity when away from the A69.

Guiding principle

Protect

Vision statement

This is an intimate and well wooded rural landscape which retains many of its key characteristics in good condition. Although there are some issues relating to land management the overall approach should be to conserve and restore.

Land Management Guidelines

- 5.386. Promote improved management and extension of semi-natural woodland along gills, ravines and riversides, including through uptake of HLS and other agri-environment schemes, in order to reinforce characteristic vegetation patterns.
- 5.387. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.388. Encourage the management of river banks and ensure protection against erosion. Seek creation of landscape margins and buffers adjacent to watercourses where intensive grazing impinges on the water's edge.
- 5.389. Promote conservation of historic sites and structures, which add to the time-depth of this landscape. Care should be taken to minimise erosion of structures and features as a result of access, grazing or vegetation growth.

Development Guidelines

- 5.390. New built development should seek to retain and reinforce local settlement character in terms of scale, form and local vernacular styles and materials. Care should be taken not to suburbanise rural lanes through inappropriate boundary treatment, use of hard kerbing or removal of traditional boundary features.
- 5.391. Appropriate tourism and recreation development of the former mining heritage in this landscape should be encouraged, whilst retaining the remote and rural character of these sites.
- 5.392. New infrastructure such as signage, interpretation and access should not detract from the character of the mining heritage resource, or introduce overt urban influences into the wider landscape.

Management Plans

5.393. Management and development in this area should have regard to the Northumberland National Park and Hadrian's Wall Management Plans. Further guidance may be contained in the Hadrian's Wall HLS Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 29: Broad Wooded Valley

Introduction

- 5.394. This landscape character type comprises the broad wooded valley that contains the River North Tyne in its middle reaches and main tributary valleys. It is flanked by Sandstone Fringe Farmland (LCT 11) to the east and Upland Commons and Farmland (LCT 34) to the west, the rounded upper valley slopes showing a gradual transition into these landscape character types. It stretches from Redesmouth in the north to the confluence with the River South Tyne east of Bridge End.
- 5.395. This LCT is represented by one character area; 29a North Tyne Valley.

Forces for Change

- Changing management of woodlands as a result of a cessation of coppicing and overgrazing may in time change the pattern of woodland cover and reduce woodland diversity.
- Decline in management of veteran trees, avenues and hedgerow trees may affect the wooded, sheltered and parkland character of this landscape.
- Improvements and grazing regimes on meadows may lead to a decrease in the number and diversity of species-rich hay meadows and a loss of texture and colour in the landscape.
- Intensive arable cultivation may give rise to a loss of field margins, closely trimmed gappy hedgerows, proliferation of post and wire fencing and potential loss of archaeology.
- Increasing equestrian use of the landscape in some areas is causing proliferation of post and wire or post and rail fencing and changes to enclosure pattern.

Key Qualities

- Mature thick hedgerows, avenues of mature trees along rural lanes, and estate woodlands create a lush, sheltered and established character.
- Ancient and semi-natural riparian woodlands that are of value for nature conservation. Many show signs of past coppicing management.
- Repeating pattern of small settlements along the North Tyne lower valley slopes that are of historical importance, such as Wark.
- Remnants of past mining activity include disused railways, stone bridges and old quarries which add local visual and historical interest.
- Important hay meadows and calcareous grassland along the valley floor and in areas of limestone geology. Some of the calcareous grasslands are designated SSSIs e.g. Gunnerton Nick.
- Notable geological and geomorphological features such as deeply incised gorges, cut-off meanders and river terraces.
- Important Roman archaeology associated with Hadrian's Wall.

Guiding principle

Protect

Vision statement

The defining characteristics of this landscape character type are its pattern of land use and well-wooded character. This is overlain with a wealth of historic features. The overall approach should be to conserve and restore through ongoing custodianship.

Land Management Guidelines

- 5.396. Encourage the ongoing restructuring of existing coniferous woodlands in order to diversify their structure, soften their outlines and enhance nature conservation value. New woodland or plantation planting should not extend over the skyline, and should have soft edges comprising broadleaved species.
- 5.397. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect.
- 5.398. Encourage landowners to improve management and carry out replacement of hedgerows, hedgerow trees, and field trees through agri-environment funding schemes.
- 5.399. Retention of unimproved pastures and hay meadows on the valley sides and valley floor and protection of buried archaeology and earthworks (including mining heritage) should be encouraged in order to retain the biodiversity, visual diversity and time-depth of this landscape. Seek to protect areas of calcareous grassland from overgrazing and erosion.
- 5.400. Increase awareness of the landscape implications of equestrian use. Encourage the retention and management of existing hedgerow boundaries and discourage the unnecessary subdivision of enclosures with post and rail/wire fencing.
- 5.401. Creation of landscape margins and buffers adjacent to watercourses would be beneficial where arable land or intensive grazing impinges on the water's edge.

Development Guidelines

- 5.402. New built development should reflect local buildings styles and materials, with particular consideration given to roofing materials.
- 5.403. Settlement approach routes, key views and gateways to settlements are important for local distinctiveness and should be protected from inappropriate development. Construction of any new crossing points over the North Tyne river should be resisted.

Management Plans

5.404. Management and development in this area should have regard to the Northumberland National Park Management Plan and the Hadrian's Wall HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 30: Glacial trough valley floor

Introduction

- 5.405. This landscape character type comprises the flat floodplain and lower valley slopes above the River Tyne. This type is distinguished from the *Glacial trough valley sides* (LCT 31) by changes in topography, land use and settlement.
- 5.406. This LCT is represented by three character areas; 30a Haltwhistle to Newbrough, 30b Newbrough to Corbridge and 30c Corbridge to Wylam.

Forces for Change

- Decline in, or alteration to, management of semi-natural woodlands, hedgerows and trees may cause a loss of enclosure pattern and maintained parkland character.
- Lack of river bank management and adjustment of river channel to past aggregate extraction sites. Improvements to valley floor pastures and meadows may exacerbate the loss of biodiversity.
- Noise and visual impact of road and rail infrastructure may result in a loss of tranquillity locally.
- Expansion of development (particularly commercial) onto the floodplain may undermine the traditional settlement pattern and increase flood risk. Responsive flood control measures may alter the character of the valley floor.
- Development of new roads which by-pass valley floor settlements and increase the number of river crossings may affect the traditional settlement pattern.

Key Qualities

- Ancient semi-natural woodland in steep valley side bluffs e.g. Lees Heugh which visually define the edge of the valley floor and are important for nature conservation.
- Meandering watercourse of the River Tyne within with broad, relatively flat valley floor. Associated geological and geomorphological features and remnant areas of traditional floodplain meadows.
- Significant eighteenth century estate landscapes and castles such as Ridley Hall, Bellister Castle and Bywell and Stocksfield Halls.
- Historic settlement and traditional stone built bridges marking early crossing points and many of which are scheduled monuments.
- Notable areas of archaeology including Corbridge Roman Station and temporary camps at Farnley Grange.
- Calcareous grassland habitats associated with mining spoil at Prudhoe.

Guiding principle

Manage

Vision statement

This is a landscape which retains a high degree of naturalness despite its relatively high population and human activity. Its value as a transport corridor and its existing settlement pattern mean that it is under pressure for further development. The overall approach should be to manage change while seeking to conserve and locally enhance character, taking advantage of opportunities offered by new development.

Land Management Guidelines

- 5.407. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect and lack of age diversity, particularly in wooded bluffs and along the rivers.
- 5.408. Retention of meadows on the valley floor and protection of glacial features should be encouraged in order to enhance the visual diversity and topography of this landscape.
- 5.409. Creation of landscape margins and buffers adjacent to watercourses would be beneficial where arable land or intensive grazing impinges on the water's edge. Ensure protection against erosion, particularly those areas of geodiversity value.
- 5.410. Wetland and washland creation in response to the need for flood alleviation schemes may present opportunities to create a more visually varied and biologically rich valley floor landscape with the reversion of arable to wet pastures and shallow wetlands.
- 5.411. Encourage conservation of historic parks and gardens which contribute to local distinctiveness is important, including improved access and retention of views.

Development Guidelines

- 5.412. Discourage new built development from extending onto the valley floor, and encourage the creation of strong settlement boundaries. The approach routes, key views and gateways to settlements should be given particular consideration.
- 5.413. Creation of open space adjacent to existing settlements presents opportunities to enhance the setting of towns, strengthen settlement distinctiveness and reinstate or reinforce characteristic landscape patterns.
- 5.414. Essential roads and bridges should be integrated into the valley landscape by careful siting, ground modelling and planting of characteristic and sensitively located woodland that relates to characteristic landscape patterns. Seek to minimise effects on cultural and natural heritage interests.
- 5.415. Restoration of extraction areas should seek to introduce characteristic alder woodland and care should be taken not to create extensive areas of open water which would be visually prominent from surrounding higher land.

Management Plans

5.416. Management and development in this area should have regard to the North Pennines AONB Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 31: Glacial trough valley sides

Introduction

- 5.417. This landscape character type comprises the valley sides of the glacial trough which carries the Rivers South Tyne and Tyne. These valley sides have been identified as distinct from the *Glacial trough valley floor* (LCT 30) both in terms of topography and land use patterns.
- 5.418. This LCT is represented by seven character areas; 31a Tipalt Burn, 31b Haltwhistle to Bridge End, 31c North Plenmeller Common, 31d Langley to Stocksfield, 31e Stocksfield to Prudhoe, 31f Acomb to Ovington and 31g Ovington to Wylam.

Forces for Change

- Decline in management of semi-natural woodland as a result of overgrazing or public access may cause decline in woodland structure or species diversity.
- Loss of field boundaries and field amalgamation in areas of arable farming could in time cause a larger scale enclosure pattern and loss of local distinctiveness.
- Development of equestrian uses of the landscape particularly in urban fringe areas may result in the proliferation of fencing and associated features.
- Growth of existing settlements may result in raw urban edges, urbanisation of the surrounding landscape setting and loss of settlement distinctiveness.
- Development of new road infrastructure could alter the accessibility of some parts of the valley floor and affect the traditional settlement pattern.

Key Qualities

- Distinctive stepped profile to valleys sides reflecting the underlying banding of millstone grits and coal seams and former glacial activity.
- Semi-natural woodland along incised tributary burn valleys.
- Wealth of archaeological earthworks evident in areas of pasture including extensive areas of rig and furrow.
- Strong enclosure pattern comprising hedgerows on lower slopes and stone walls on upper slopes, varies in scale along the valley influencing local distinctiveness.
- Estate landscapes and large houses which make a significant contribution to woodland cover and contain notable mature veteran trees and avenues.
- Historic valley side settlements many of which have intact historic cores recognised for their architectural value in listed buildings and conservation areas.

Guiding principle

Manage

Vision statement

This landscape retains a remarkably rural character and notable visual diversity through the course of the valley, despite its high population and importance as a communications corridor. It is also a landscape which is under pressure from further development and therefore the approach for this landscape is to strengthen existing characteristics and manage pressures for change.

Land Management Guidelines

- 5.419. Promote improved management and extension of semi-natural woodland, including through uptake of HLS and other agri-environment schemes, in order to diversify the age structure of the woodlands and retain characteristic patterns of woodland in the landscape. Appropriate protection from overgrazing is paramount.
- 5.420. Encourage landowners to improve management and carry out replacement of hedgerows, hedgerow trees, and field trees, through agri-environment funding schemes.
- 5.421. Encourage maintenance and enhancement of unimproved and wet pastures on the valley sides to retain biodiversity as well as visual diversity and texture of pastures.
- 5.422. The rebuilding and restoration of stone wall enclosures should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.423. Increase awareness of the landscape implications of equestrian use and encourage the retention and management of existing hedgerow boundaries. Discourage the unnecessary subdivision of enclosures with post and rail or wire fencing.
- 5.424. Seek to protect historic sites, structures and features, such as rig and furrow, from damage or loss from ploughing or development.

Development Guidelines

- 5.425. Discourage new built development from extending onto upper valley sides, and encourage the creation of good settlement boundaries. The approach routes, key views and gateways to settlements should be given particular consideration.
- 5.426. New built development should not substantially alter the character, scale or form of existing settlements. All development should respect local vernacular styles and materials; consideration should be given to the preparation of design guidance.
- 5.427. Creation of open space adjacent to existing settlements presents opportunities to enhance the setting of towns, strengthen settlement distinctiveness and reinstate or reinforce characteristic landscape patterns.

5.428. Essential roads and bridges should be integrated into the valley landscape by careful siting, ground modelling and planting of characteristic and sensitively located woodland that relates to characteristic landscape patterns. Seek to minimise effects on cultural and natural heritage interests.

Management Plans

5.429. Management and development in this area should have regard to the Northumberland National Park and North Pennines AONB Management Plans. Further guidance may be contained in the Hadrian's Wall HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 32: Parallel Ridges and Commons

Introduction

- 5.430. This landscape character type shows a marked pattern of elevated ridges and shallow troughs with a strong east west alignment. This landscape extends north beyond the study area, into Northumberland National Park.
- 5.431. This LCT is represented by two character areas; 32a Howden Hill and 32b Haltwhistle, Melkridge and Ridley Commons.

Forces for Change

- Maturing shelterbelts may be affected by wind throw and the need for felling, which may alter the character of parts of this landscape.
- Pressures from increased tourism may result in footpath erosion and damage to archaeological features as well as proliferation of tourism infrastructure such as signage and car parking.
- Decline in management of moorland vegetation, including distinctive woodland clumps and wet pastures.

Key Qualities

- Unique and defining cuesta landscape and geological features with clear evidence of glacial activity.
- Extensive areas of semi-natural vegetation including grass moorland, wet pastures, loughs and mires, many of which are designated as SSSI.
- Internationally significant archaeological remains related to the Roman period and associated with Hadrian's Wall World Heritage Site.
- Open, exposed and elevated landscape with extensive views across the Tyne Gap south towards the North Pennines.
- Good footpath access and associated infrastructure.

Guiding principle

Protect

Vision statement

This landscape has a strong identity and many valuable landscape features which remain in good condition. The overall approach for this area is to protect existing features and sensitively manage pressures.

- 5.432. Encourage the felling and restocking of coniferous plantations and shelterbelts. Seek softer plantation outlines with an increase in native species and shapes designed to integrate with local topography.
- 5.433. Maintain the pattern of clumps of mixed woodland species on rocky knolls where they accentuate topography, and in association with dispersed farmsteads where they provide shelter and reinforce the settlement pattern. Discourage any large scale

- planting of new woodland and ensure that any new planting minimises damage or masking of significant archaeological sites.
- 5.434. Retention of unimproved wet pastures and the protection of buried archaeology and earthworks should be encouraged in order to retain the visual diversity and timedepth of this landscape.
- 5.435. The rebuilding and restoration of stone walls should be encouraged through appropriate grants and development of locally-based skills to ensure walls are stockproof.
- 5.436. Encourage uptake of HLS and other agri-environment schemes for management of grass moorland, and conservation of wetlands and mires.
- 5.437. Conservation of historic sites and their settings and areas of earthworks should be encouraged particularly where they act as local focal points and create strong landscape patterns and textures.

Development Guidelines

- 5.438. Care should be taken to minimise the effects of development upon the setting of the WHS. New buildings should respect the local surroundings in terms of choice of building material and scale of development. New development should not be visually prominent and should not detract from the scenic quality of the area.
- 5.439. Manage access through this landscape and particularly to points of interest by encouraging the use of structured and seasonal paths to decrease pressure on fragile archaeology, substrates, and reduce disturbance to breeding birds.

Management Plans

5.440. Management and development in this area should have regard to the Northumberland National Park and Hadrian's Wall Management Plans. Further guidance may be contained in the Hadrian's Wall HLS Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 33: Tributary Valley

Introduction

- 5.441. This landscape character type occurs to the east of the North Tyne Valley and is defined by the higher land of Sandstone Fringe Farmland (LCT 11) to the north and Upland Commons and Farmland (LCT 34) to the south. The coniferous woodland to the north of this area forms a dominant feature on the skyline.
- 5.442. This LCT is represented by one character area; 33a Erring Burn.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from lack of management or further intensification of arable farming, may cause a loss of enclosure pattern.
- Improvements to pastures through drainage and herbicides and fertiliser use may result in a decrease in the number and diversity of species-rich hay meadows along the Erring Burn and a loss of the texture and colour in the landscape.
- Felling and restocking of coniferous plantations and shelterbelts which occur on the upper slopes may result in temporary visual scarring and physical disturbance.
- Changes to traditional farmsteads, including development of large, utilitarian farm buildings which do not reflect local vernacular.

Key Qualities

- Overlapping lines of vegetation are a defining characteristic of this landscape.
- Important setting to Hadrian's Wall World Heritage Site which lies along the southern skyline of this shallow valley.
- Open skyline which defines the outer edge of this landscape type.
- Notable upstanding historic structures which are listed e.g. pele tower at Cocklaw.
- Areas of earthworks such as rig and furrow, which add texture and visual interest.

Guiding principle

Manage

Vision statement

The majority of landscape elements and the landscape pattern in this landscape are in fair condition overall. The overall approach should be to manage the conservation and enhancement of the character of this landscape.

- 5.443. Encourage the felling and restocking of coniferous plantations and shelterbelts. Seek softer plantation outlines with an increase in native species and shapes designed to integrate with local topography.
- 5.444. Encourage landowners to improve management of existing hedgerows and hedgerow trees through agri-environment funding schemes.

- 5.445. Retention of unimproved wet pastures and the protection of buried archaeology and earthworks should be encouraged in order to retain the visual diversity and timedepth of this landscape.
- 5.446. Creation of field margins along hedgerows and the course of the Erring Burn would be beneficial in areas of arable land.
- 5.447. Conservation of historic sites and structures is important. Increased survey, awareness and management agreements should prevent loss form intensive arable cultivation.

Development Guidelines

5.448. Care should be taken to ensure new farm buildings are of an appropriate scale, relate well to existing farmsteads in terms of form and building materials, and visually sit comfortably within the landscape. Their scale and siting should seek to minimise effects on adjacent listed buildings.

Management Plans

5.449. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 34: Upland Commons and Farmland Introduction

- 5.450. This landscape character type is located above the slopes of the River South Tyne valley and North Tyne valley, forming an intermediate and transitional landscape to the upland moorland and forestry landscapes beyond.
- 5.451. This LCT is represented by five character areas; 34a Acomb Ridge, 34b Broadpool Common, 34c Grindon Common, 34d Featherstone Common and 34e Lowes and Nubbock Fells.

Forces for Change

- Decline in, or alteration to, management of burn woodlands and damage by livestock may weaken the visual drainage pattern and woodland biodiversity.
- Decline in condition of stone walls and hedgerows may lead to a fragmentation and weakening of the enclosure pattern in some areas.
- Improvements to wet pastures through drainage and use of fertilisers may result in the loss of biodiversity and characteristic muted hues and textures.
- Erosion of archaeological sites as a result of vegetation growth may damage built structures.
- Felling and restocking of shelterbelts and plantations may change their character but also offers opportunities to increase native species and restore softer outlines.

Key Qualities

- Strong geometric enclosure pattern defined by stone walls and hedgerows is a defining element over large parts of this landscape.
- Remote, marginal and transitional landscape between open moorland and more productive areas of agriculture.
- Extensive areas of unimproved or semi-improved wet pastures which create characteristic muted hues and texture.
- Ancient semi-natural birch woodland line incised burns which drain the moorland above and create a strong landscape pattern.
- Expansive long distance views within this landscape type and to other valley and moorland landscape types beyond.
- Internationally important archaeology associated with Hadrian's Wall.

Guiding principle

Manage

Vision statement

This landscape has a sense of remoteness and comprises extensively managed farmland. It is a transitional area and can appear to be on the 'fringe' of farmland. Land uses and the condition of features can give rise to the impression of neglect in places. The overall approach for this area is to manage the restoration and enhancement of the landscape.

Land Management Guidelines

- 5.452. Encourage the felling and restocking of coniferous plantations and shelterbelts. Seek softer plantation outlines with an increase in native and locally typical species and shapes designed to integrate with local topography.
- 5.453. Seek to ensure that craggy outcrops and visually significant archaeological sites are not visually masked by woodland where feasible.
- 5.454. Retention of unimproved upland and wet pastures and the protection of buried archaeology and earthworks should be encouraged in order to retain the visual diversity and time-depth of this landscape.
- 5.455. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of local skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.
- 5.456. Promote uptake of HLS and other agri-environment schemes to manage grass moorland and sustain and enhance biodiversity through appropriate stocking densities.
- 5.457. Protect incised burns and ravines from stock to encourage regeneration of seminatural vegetation.
- 5.458. Conservation of historic sites and their settings and areas of earthworks should be encouraged particularly where they act as local focal points and create strong landscape patterns and textures. Where necessary remove vegetation which is likely to damage upstanding and buried remains.

Development Guidelines

5.459. Farm building conversions and diversification may offer opportunities to restore the vernacular built fabric of the area, particularly farm buildings. Discourage any development of new farm buildings which would compromise the pattern and scale of farmsteads across this landscape.

Management Plans

5.460. Management and development in this area should have regard to the Hadrian's Wall Management Plan. Further guidance may be contained in the Hadrian's Wall HLS

Target Area Statement and Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 12: MID NORTHUMBERLAND

- 5.461. This area, which lies inland of the Northumberland coast between Ponteland and Alnwick, is a transitional landscape between the coastal plain to the east and the hills, moors and forests to the west. It comprises rolling farmland, shallow valleys and low ridges. The whole area lies within the study area.
- 5.462. This NCA, as refined for this classification, contains four landscape character types and 10 landscape character areas, as set out in Table 5.8.

Table 5.8 Landscape character types and areas in NCA12

Landscape character type (LCT)		Landscape character area	
35	Broad Lowland Valley	35a	Coquet Valley
		35b	Font and Wansbeck Valleys
36	Lowland Farmed Moor	36a	Ingoe Moor
37	Lowland Farmed Ridges	37a	Wingates Ridge
		37b	Longwitton Ridge
38	Lowland Rolling Farmland	38a	Longframlington
		38b	Longhorsley
		38c	Whalton and Belsay
		38d	Pont Valley
		38e	North Tyne Ridge

Landscape change

- 5.463. The Countryside Quality Counts (CQC) survey of landscape change reports that between 1990 and 1998, this landscape underwent some changes inconsistent with character. ²⁸ Mixed patterns of changes were observed, with positive changes in woodland and semi-natural habitats, being offset by changes in agriculture, boundaries and development which eroded the landscape character to some degree.
- 5.464. Between 1998 and 2003, CQC states that the character of this area was maintained. ²⁹ The character of the farmed landscape was generally stable, while the character of woodland and semi-natural habitats had been enhanced. Despite locally significant development pressure in the south of the area, and the opportunities to enhance riparian elements, the overall character had been maintained, or was strengthening slowly.

²⁸ http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA012.htm

²⁹ http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|caID=12

Climate change

Freshwater systems

5.465. The area is drained by the Font, Wansbeck, Blyth and Coquet rivers. Changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent flood events, changing patterns of erosion and deposition, and alterations in river courses. The human responses to climate change may have more significant impacts on the landscape. This is likely to include the implementation of measures to slow the speed of run-off with woodland expansion and the restoration of natural flood plains. There is likely to be an increase in the frequency of flooding in flood prone areas.

Habitats and biodiversity

5.466. Impacts on habitats may result from the intensification of agriculture and changes in crop types. Increased fire risk, due to warmer, drier summers, may threaten valuable grassland habitats. Changes in the occurrence of flora and fauna species may take place, in response to an altered climate.

Agriculture

5.467. Agriculture could experience a range of changes which may be driven by a range of wider economic influences. There may be opportunities for new crops or intensification of farming in currently productive areas. New food and energy crops would potentially alter the appearance of the landscape. There may be a requirement for new farm buildings, and demand for irrigation infrastructure and on-farm storage of water for irrigation. There are likely to be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management. Arable cultivation could extend into lowland pastoral areas. The ploughing of pasture areas could affect field patterns and rig and furrow, which are characteristic of Northumberland's pastoral landscapes.

Woodland and forests

5.468. Changes in the valley woodlands may result from the impacts of changing climate and potential new pests and disease. Within the agricultural landscapes there may be an increase in the development of woodland networks and shelterbelts to provide habitat connectivity and shelter and shade for livestock, but possible loss of individual trees due to stress resulting from drought and flooding.

Recreation and tourism activity

5.469. There are several visitor attractions within this landscape. Changing weather patterns may impact on recreation patterns, with increased demand for wet weather attractions and greater pressure on green infrastructure within settlements in response to increasing temperatures. Fire risk from increased temperatures and reduced summer rainfall may increase in the areas of parkland. Public footpaths may experience increased erosion as a result of changes in winter rainfall and storm events, and increased summer use due to warmer, drier summers.

Settlements

5.470. Within settlements there is an increased risk of flooding from drainage systems within urban areas, and increased damage to the fabric of buildings as a result of climate change. New developments may incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management, which may alter the character of settlements.

Infrastructure

5.471. There may be changes in the management of road and rail infrastructure to address issues of flooding and stability.

Historic environment

5.472. Changes in agricultural practices in response to climate change may affect historic environment remains such as the extensive ridge and furrow of medieval field systems, and ancient earthworks. Increases in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also impact on the historic landscape structure including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress.

Landscape Character Type 35: Broad Lowland Valley

Introduction

- 5.473. This landscape comprises the broad, gently v-shaped valleys of the Coquet, Font and Wansbeck rivers, between the sandstone hills and the coastal plain.
- 5.474. This LCT is represented by two character areas; 35a Coquet Valley and 35b Font and Wansbeck Valley.

Forces for Change

- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.
- Changing management practices across extensive land holdings of a small number of estates mean that the consequences could occur on a large scale (The Wallington estate for example covers 13,000 acres).
- Pressure for residential development within villages, and conversion of rural buildings.
- Increasing pressure for recreational development as Northumberland becomes more popular as a tourist destination.

Key Qualities

- Riparian woodland of high biodiversity value.
- Estate woodland and hedgerow trees giving an established, sheltered quality.
- Smaller scale and sense of enclosure relative to open farmland around.
- Rich historic landscape, with estate villages and buildings.

Guiding principle

Manage

Vision statement

The approach should be to encourage the ongoing custodianship of a landscape that is generally well-preserved and in good condition. The landscape should be managed to conserve both its natural and cultural history with good freedom of access. Management should particularly focus on maintaining and improving the existing riparian habitats.

- 5.475. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect, particularly riparian woodlands.
- 5.476. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.477. Retention of unimproved flood plain meadows should be encouraged in order to retain the visual diversity of this landscape

5.478. Provision of improved footpaths and interpretation along the river corridor would increase its appeal as a recreational resource. The economic and social benefits brought by increased recreational usage, both by residents and by tourists, could provide income streams to subsidise landscape management.

Development Guidelines

- 5.479. Expansion of tourist infrastructure, including accommodation, may be appropriate either in conversions or well-designed new build developments which respect local character. New build should reflect local building characteristics.
- 5.480. Seek to influence expansion of existing settlements to meet the demand for rural housing by steering development to the most appropriate locations, and seeking a net gain for landscape quality for instance by securing funding for long term woodland management through planning agreements.
- 5.481. Where larger proposals are concerned, it would be appropriate to prepare detailed development briefs with specific measures included to address the effects upon landscape character. This could be informed by a detailed local landscape character assessment at the appropriate scale, leading to an examination of landscape capacity.

Management Plans

5.482. Further guidance is contained in the Northumberland River Basin District Management Plan. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 36: Lowland Farmed Moor

Introduction

- 5.483. This is a transitional landscape, between the upland fringe to the west and the rolling farmland to the east.
- 5.484. This LCT is represented by one character areas; 36a Ingoe Moor.

Forces for Change

- Decline in active management of hedgerows and woodlands in this marginal agricultural area.
- Replacement of stone walls or hedges with post and wire fencing, leading to erosion of enclosure pattern.
- Changes to traditional farmsteads, including development of large, utilitarian farm buildings which do not reflect local vernacular.

Key Qualities

- Open, rectilinear landscape pattern of stone walls, hedges, and roads.
- Prominent sandstone scarp between Bingfield and Kirkheaton which acts as local landmark.
- Designed parkland and associated woodland has an important local influence, including Capheaton Hall, a registered park and garden.
- Vernacular stone-built farmsteads and estate villages.

Guiding principle

Plan

Vision statement

The approach for this landscape should be restoration and maintenance of the rectilinear landscape patterns, with active enhancement of landscape character being encouraged through the repair of field boundaries.

- 5.485. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape, particularly where it is associated with historic sites.
- 5.486. Seek to enhance field boundaries through hedgerow and tree planting, maintaining existing structure and pattern within the landscape.
- 5.487. New tree and hedge planting may not be appropriate where it does not currently exist, or where there is no evidence of its previous existence, as this could diminish the sense of openness.
- 5.488. Conservation of historic sites and their settings and areas of earthworks should be encouraged particularly where they act as local focal points and create strong landscape patterns and textures.

5.489. Further enhancement to this landscape type could be achieved by the continued management of the settings of natural and historic features.

Development Guidelines

- 5.490. New farm buildings which are of an appropriate scale and relate well to existing farmsteads, in terms of form and building materials, will sit comfortably within the landscape.
- 5.491. Seek restoration of former quarry sites through the development of naturalistic profiles using restoration blasting. Opportunities should be considered for improving access to some rock exposures which are of geological or visual interest.

Management Plans

5.492. Further guidance is contained in Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 37: Lowland Farmed Ridges

Introduction

- 5.493. This landscape comprises two broad, low ridges, located between the Coquet, Font and Wansbeck river valleys. These areas are linked to the sandstone hills to the west, and have an upland fringe character.
- 5.494. This LCT is represented by two character areas; 37a Wingates Ridge and 37b Longwitton Ridge.

Forces for Change

- Agricultural changes arising from the increasing marginality of upland farming, leading to land management changes.
- Introduction of new woodlands, either coniferous or broadleaved, is underway, and will alter the open nature of the landscape.
- Further decline in hedgerow and deciduous woodland management.
- Decline in, or alteration to, management of existing forestry, leading to overmature shelterbelts and subsequent decline.
- Increased access to the landscape, in particular the historic environment, for example the recent acquisition of Codger Fort by the National Trust.

Key Qualities

- Open, exposed character, combined with marginal land use, giving an upland fringe character.
- Remnant moorland and heath habitat, with stone walls, in the highest areas.
- Outward-looking views to the National Park, particularly Simonside Hill, and eastward towards the coast.
- Prominent historical features, part of the wider estate landscape of Wallington.
- Important relationship with the valley landscapes of the Rivers Coquet, Font and Wansbeck.

Guiding principle

Plan

Vision statement

This is a landscape that has increasingly been able to deliver only marginal economic returns, and landscape management has declined as a consequence. As such, the focus for this landscape is to maintain those areas where the landscape is generally well-preserved, and plan moves toward nature conservation and landscape improvement where decline is apparent.

Land Management Guidelines

5.495. Promote uptake of agri-environment schemes to manage grass heath, and sustain and enhance biodiversity through appropriate stocking densities. Seek to create

- conditions for the extension of the dry heath habitat found at Longhorsley Moor. Ensure ongoing active management to prevent scrub encroachment.
- 5.496. Encourage landowners to improve management of existing hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.497. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect, particularly beech and pine shelterbelts.
- 5.498. Encourage the felling and restocking of coniferous plantations and shelterbelts. Seek softer plantation outlines with an increase in native and locally typical species and shapes designed to integrate with local topography.
- 5.499. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of local skills to ensure walls are stockproof and reflect the distinctive enclosure pattern found in parts of this landscape.

Development Guidelines

- 5.500. Encourage appropriate access to historic features within the countryside, while seeking to steer associated development to sites where they will have less impact on the open landscape. Development close to historic landmark features may impinge on this aspect of the landscape character.
- 5.501. Farm building conversions and diversification may offer opportunities to restore the vernacular built fabric of the area, particularly farm buildings. Discourage any development of new farm buildings which would compromise the pattern and scale of farmsteads across this landscape.

Management Plans

5.502. Further guidance is contained in Natural England's Vision for the Uplands. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 38: Lowland Rolling Farmland

Introduction

- 5.503. This is a large area of rolling or undulating farmland, stretching from the Tyne Gap to Alnwick. Although there are variations in enclosure, patterns, and tree cover in this landscape, the overall form is relatively continuous.
- 5.504. This LCT is represented by four character areas; 38a Longframlington, 38b Longhorsley, 38c Whalton and Belsay and 38d Pont Valley.

Forces for Change

- Visitor pressure in this area has the potential to increase in parallel with the general popularity of the region. Certain categories of facilities for visitors are relatively undeveloped at present.
- Recreational pressures may increase along Hadrian's Wall, given that there are very few facilities at all along this stretch of the World Heritage Site.
- Continuing decline of hedgerows and hedgerow trees in areas of arable cultivation, arising from past agricultural intensification.
- Increasing urban fringe influences at certain edges of this landscape.
- Some historic parklands may be susceptible to loss of character due to underuse where private, or due to alternative uses, both leading to changes in management regimes, e.g. Bolam Country Park.

Key Qualities

- Open, medium-scale farmland.
- Remaining areas of strong enclosure pattern, with intact hedges and hedgerow trees.
- Designed parkland landscapes.
- Stone-built estate villages around greens.
- Influence of Hadrian's Wall.

Guiding principle

Manage

Vision statement

Where key qualities are intact, their long-term viability should be secured, and where these are damaged, the approach for this landscape is to manage their restoration and replacement.

- 5.505. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.506. Encourage a greater uptake of woodland grants to bring semi-natural woodlands back into active management where they have suffered from neglect.

- 5.507. Encourage the felling and restocking of coniferous plantations and shelterbelts. Seek softer plantation outlines with an increase in native and locally typical species and shapes designed to integrate with local topography.
- 5.508. Creation of landscape margins and buffers adjacent to watercourses would be beneficial where arable land or intensive grazing impinges on the water's edge.
- 5.509. Promote uptake of agri-environment schemes to manage wetland, and sustain and enhance biodiversity across the agricultural landscape.
- 5.510. The maintenance of country estates must aim to retain their special character within this landscape. Protection of the key features, especially woodland but also built features, will ensure their contribution to the landscape character.
- 5.511. Maintenance of other historic features, notably the section of Hadrian's Wall within this landscape, must also seek to maintain their contribution to character.

Development Guidelines

- 5.512. Farm building conversions and diversification may offer opportunities to restore the vernacular built fabric of the area, particularly farm buildings.
- 5.513. Seek to encourage the sensitive siting of new farm buildings, particularly with regard to historic buildings and features.
- 5.514. Development within or beside traditional estate villages should respect local vernacular forms and materials. Encourage the establishment of strong settlement boundaries as part of any new development.
- 5.515. Redevelopment or reuse of country estates may be an option, and in some cases, due to financial pressures, may be the only way that these can remain intact. Such redevelopment should ideally retain the core of any parkland landscape, as well as important landscape aspects such as woodlands, which contribute to the wider character.
- 5.516. Where larger-scale developments are proposed, it may be appropriate to develop a design brief, with accompanying assessment of local landscape character and potential effects of development.
- 5.517. Any development which may affect the setting of historic features, particularly the World Heritage Site, should be carefully considered. Development which marries in well with the existing landscape character is less likely to have an effect on the setting of historic features.

Management Plans

5.518. Management and development in this area should have regard to the Hadrian's Wall Management Plan and the Belsay Estate Trust Development Plan. Further guidance may be contained in the Hadrian's Wall HLS Target Area Statement. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 13: SOUTH EAST NORTHUMBERLAND COASTAL PLAIN

- 5.519. This area covers a broad strip of the North Sea coast, and occupies the easternmost part of the study area. It stretches from Amble in the north to the southern edge of the study area, where it extends into Newcastle and North Tyneside. The coastal plain widens towards the south, taking in the developed areas around Ashington, Blyth, and Cramlington. Morpeth and Ponteland are located on its western boundary.
- 5.520. This NCA, as refined for this classification, contains four landscape character types and seven landscape character areas, as set out in Table 5.9.

Table 5.9 Landscape character types and areas in NCA13

Landscape character type (LCT)		Landscape character area	
39	Coalfield Farmland	39a	Coastal Coalfields
		39b	Seaton Delaval
		39c	Stannington
40	Broad Bays and Dunes	40a	Druridge Bay
		40b	Seaton Dunes
41	Developed Coast	41a	Blyth and Wansbeck Estuaries
42	Urban and Urban	42a	Ashington, Blyth and
	Fringe		Cramlington

Landscape change

- 5.521. The Countryside Quality Counts (CQC) survey reported that between 1990 and 1998, this landscape underwent *marked changes inconsistent with character*. ³⁰ Changes in woodland cover represented an improvement in landscape character, but these were outweighed by changes in agriculture and increasing development, which served to erode the character of the landscape.
- 5.522. Between 1998 and 2003, CQC states that the character of this area was neglected. ³¹ Development pressure continued to transform the areas around major towns, although away from settlements, positive changes in agriculture led to the character of the farmed area being enhanced. Coastal, boundary and woodland character were mostly stable but were considered to have been weakened. Overall, landscape character still appeared to be eroding slowly.

Climate change

Sea-level rise

5.523. At the coastal edge there will be increasing pressure on existing flood and sea defences and more frequent flooding of presently undefended areas. Areas currently affected by flooding will potentially be affected by more frequent flood events. The sandy beaches and dune systems are particularly vulnerable to changing patterns of

³⁰ http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA013.htm

http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|caID=13

- erosion and deposition, and to greater frequency of storm surge. Beaches and dunes could migrate inland and soft cliffs will recede. There is also an increased risk of flooding in low lying coastal areas, and frequency of flooding is likely to increase. Predicted changes in seal level may result in a particularly notable scale and extent of landscape change.
- 5.524. Responses to sea-level rise may include larger or more extensive sea defences, which may take a number of forms. Coastal defences are likely to be strengthened in settled areas. Elsewhere, managed realignment may be the preferred policy, whereby certain areas are allowed to flood, with the flooded area becoming a buffer zone protecting areas further inland.

Freshwater systems

5.525. The areas of open water and wetland in areas of mining subsidence and restoration may become more actively managed for water storage and flood management. Activities such as the restoration of natural flood plains may also take place. Changes in the patterns of rainfall and possible increases in the intensity of rainfall events are likely to result in more frequent flood events, changing patterns of erosion and deposition, and alterations in river courses. Engineered flood defences may be constructed in larger settlements. There may also be more frequent flooding of presently undefended areas, and increased occurrence in areas prone to flood risk.

Habitats and biodiversity

5.526. The coastal plain is typically intensively cultivated with large scale arable fields limiting biodiversity value. The coastal edge is richly important for natural heritage, and coastal habitats will be particularly vulnerable to changes in sea level and coastal erosion, particularly intertidal habitats which could be subject to coastal squeeze. Managed realignment measures may provide the opportunity to offset any losses.

Agriculture

5.527. The coastal plain is characterised by large field sizes, hedgerows and field trees. There are also numerous small woodlands, copses and shelterbelts. Agriculture could experience a range of changes which may be driven by a range of wider economic influences. There may be opportunities for new crops, or intensification of farming in current productive areas. New food and energy crops could alter the appearance of the landscape. There may be a requirement for new farm buildings, and demand for irrigation infrastructure and on-farm storage of water for irrigation. There may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management.

Woodland and forests

5.528. Within the lowland agricultural landscapes there are likely to be changes in the pattern of woodland with a potential increase in the development of woodland networks and shelterbelts to provide habitat connectivity and shelter and shade for livestock, but possible loss of individual trees due to stress resulting from drought and flooding. Over time, dominant woodland species may change, and new patterns of diseases and pests may affect native woodland cover.

Recreation and tourism activity

5.529. The proximity of the area to the Newcastle conurbation, and the likelihood of warmer, drier summers, may result in increased popularity of this area's coast, bringing increased pressure on the landscape. The greater potential for flooding and erosion of coastal areas will also impact on coastal recreation. Unpredictability of weather patterns may increase demand for wet weather attractions, and greater pressure on green infrastructure within settlements may result from increasing temperatures. There could also be increased erosion of public footpaths and cycleways as a result of changes in winter rainfall and storm events, and increased use during summer months.

Settlements

5.530. The area is the most densely settled within Northumberland, and is close to the Newcastle conurbation. Within these urban areas there may be an increased risk of flooding from drainage systems, and increased damage to the fabric of buildings. New developments are likely to incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management.

Infrastructure

5.531. There may be changes in the management of road and rail infrastructure to address issues of flooding and stability.

Historic environment

5.532. The increase in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also impact on the historic landscape structure including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress. Historic bridges in downstream locations may be at risk from extreme flood events.

Landscape Character Type 39: Coalfield Farmland

Introduction

- 5.533. This landscape comprises the more rural areas of the coastal plain, and comprises well settled farmland, with extensive industrial land uses. Historic and ongoing mineral extraction has affected large parts of the landscape, while urban fringe is also a key influence. This is a heavily modified landscape which has lost much of its natural landscape structure and which is dominated by man-made elements.
- 5.534. This LCT is represented by three character areas; 39a Coastal Coalfields, 39b Seaton Delaval and 39c Stannington.

Forces for Change

- South east Northumberland has been identified as a focus for regeneration and construction of new homes, to meet demand for expansion of the Tyne conurbation.
- Restoration of existing open cast operations. The scale and extent of open cast operations is such that when they are restored, great potential exists for the restoration to be a force for change.
- Potential loss of hedgerows and hedgerow trees, arising from climate change or further intensification of arable farming, may cause a loss of enclosure pattern.

Key Qualities

- Surviving remnants of ancient woodland and designed landscapes.
- Industrial heritage.
- Historic farmsteads and village cores.
- Large-scale landscape with coastal and landward views.

Guiding principle

Plan

Vision statement

In general, it could be argued that the most significant changes to this landscape have already occurred, in the form of extensive mining activity and urbanisation. Where key qualities remain intact, their long-term viability should be secured. The approach for this landscape is therefore one of restoration where possible, and recreation where the landscape has been overly damaged.

- 5.535. Seek opportunities, either through restoration or in association with other development, to introduce landscape structure.
- 5.536. Encourage a greater uptake of woodland grants to increase woodland cover, and to bring semi-natural woodlands back into active management where they have suffered from neglect.
- 5.537. Promote improved management of woodlands and habitats, including through uptake of HLS and other agri-environment schemes. Seek to facilitate the retention,

- restoration and reinstatement of historic field boundaries, such as species-rich hedgerows, and the reintroduction of less intensive agriculture.
- 5.538. Retention and enhancement of semi-natural landscape structure would assist in maintaining a buffer between Morpeth and the urban areas further south and east, and would benefit nature conservation and recreation.
- 5.539. In parallel with the restoration of landscape features, land managers should be encouraged to increase widths of field margins and to incorporate buffer strips managed primarily for nature conservation, particularly along water courses.
- 5.540. Opportunities should be taken to secure the future viability of designed landscapes and estate woodlands, including Blagdon and Seaton Delaval Hall, recently acquired by the National Trust.
- 5.541. Promote improved access to the landscape in association with woodland or habitat enhancement schemes, and seek to ensure provision for long-term management.

Development Guidelines

- 5.542. The redevelopment of major industrial sites, including Ellington Colliery and Stobswood Open Cast, would begin to repair this landscape. Restoration proposals which aim to achieve a wide range of habitats and offer opportunities for biodiversity and recreation, are likely to be the most successful in restoring this landscape.
- 5.543. The preparation of wide-ranging development briefs should be considered, to ensure a strategic approach to renewal of restoration sites, with accompanying assessment of local landscape character and potential effects of development.
- 5.544. Future developments which provide a substantial landscape framework as part of the enabling infrastructure would heal existing visual and environmental scars. Extensive planting of native woodland could provide a framework within which new and existing development and infrastructure would be contained.

Management Plans

5.545. Further guidance is contained in the Northumberland Coast HLS Target Area Statement and the Druridge Bay Management Strategy. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 40: Broad Bays and Dunes

Introduction

- 5.546. This landscape forms the coastal strip of the less intensively developed part of the South East Northumberland Coastal Plain. Although largely undeveloped, and with significant nature conservation interest, the coastline has been extensively manmodified by past mineral extraction. Druridge Bay is within the Northumberland Heritage Coast.
- 5.547. This LCT is represented by two character areas; 40a Druridge Bay and 40b Seaton Dunes.

Forces for Change

- Coastal erosion, exacerbated by future sea-level rise, may lead to loss of property and/or habitats. Responses may include introduction of erosion control measures and/or managed realignment measures.
- Erosion of dune systems, either as a result of natural processes or human activity.
- Increased tourist/recreational pressure leading to loss of tranquillity.
- Increased tourist infrastructure, including car parks and signage.

Key Qualities

- Sweeping sandy bays with intact dune systems, open to wide views of the sea.
- Dynamic seascape environment.
- Rich ecological heritage, often associated with water bodies originating in past human activity.
- Industrial heritage, as well as a rich archaeology.

Guiding principle

Manage

Vision statement

The approach in this landscape should be to manage the ongoing restoration of the landscape. The era of industrial development is now firmly behind this area, and there are high quality assets which can be built on to ensure the longer term stability and value of this landscape.

- 5.548. Promote improved management of important coastal habitats, including through uptake of HLS and other agri-environment schemes. Encourage environmental management of marginal agricultural land to extend the influence of maritime habitats and attractiveness of the area for tourism.
- 5.549. Seek improvement of recreational access along the coast, where this can be combined with management to prevent increased erosion.
- 5.550. A strategic approach to the co-ordination of recreational infrastructure would benefit the landscape, encouraging the appropriate siting of car parks and other facilities. Seek to ensure ongoing appropriate management and enhancement of existing

- facilities, and consider possible relocation where these have adverse effects on the landscape.
- 5.551. Manage coastal defences in line with the aims of the Northumberland Shoreline Management Plan. Erosion control measures not carried out in a sympathetic manner may damage the integrity of the coastal landforms.
- 5.552. Dune vegetation would in places benefit from proactive management to ensure their long-term stability, whilst preserving access to the coast.

Development Guidelines

- 5.553. Inappropriate development along the coast would affect the visual characteristics of this landscape, and would consequently affect the potential of the area for tourism. Seek to protect key views along the coast and to seaward.
- 5.554. The introduction of new or expanded tourist infrastructure, such as roads, car parking, or signage, should be undertaken with regard to key views, and should seek to minimise effects upon the landscape. Recreational developments should include adequate car parks in order to manage vehicles.
- 5.555. New coastal developments, such as caravan parks, may affect dune systems unless protection and management systems are put in place.
- 5.556. The redevelopment of disused industrial land and buildings is an opportunity for restoration of landscape, and also for the accommodation of recreational land uses, without subjecting undeveloped areas to pressure.

Management Plans

5.557. Further guidance is contained in the Northumberland Coast HLS Target Area Statement and the Druridge Bay Management Strategy. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 41: Developed Coast

Introduction

- 5.558. This landscape forms the coastal edge of Blyth and adjacent settlements, and is closely related to *Urban and Urban Fringe* (LCT 42). Its coastal character is linked to the *Broad Bays and Dunes* (LCT 40) to north and south.
- 5.559. This LCT is represented by one character area; 41 a Blyth and Wansbeck Estuaries.

Forces for Change

- Development pressure for tourism and recreation purposes is likely to increase, for example caravan parks.
- Redevelopment and renewal of coastal and post-industrial settlements, with potential for major new industrial, commercial or residential developments on existing brownfield sites.
- Coastal erosion, exacerbated by future sea-level rise, may lead to loss of property and/or habitats. Responses may include introduction of erosion control measures and/or managed realignment measures.

Key Qualities

- Open coastal views from rocky headlands and man-made piers and harbours.
- Dynamic seascape environment.
- Traditional seaside resort of Newbiggin-by-the-Sea.
- Industrial and architectural heritage, particularly around Blyth Harbour.
- Ecological interest in the rocky foreshore and estuaries.

Guiding principle

Plan

Vision statement

The approach in this landscape should be to plan for active enhancement. Where key qualities are intact, their long-term viability should be secured. Elsewhere, redevelopment of brownfield land may bring opportunities to restore landscape structure and quality.

Land Management Guidelines

- 5.560. Encourage environmental management of marginal agricultural land to extend the influence of maritime habitats and attractiveness of the area for tourism.
- 5.561. Seek improvement of recreational access along the coast, where this can be combined with management to prevent increased erosion.
- 5.562. Encourage a greater uptake of woodland grants to establish new broadleaf woodlands, and to enhance those already present, introducing landscape structure around estuary corridors.

5.563. Manage coastal defences in line with the aims of the Northumberland Shoreline Management Plan. Erosion control measures not carried out in a sympathetic manner may damage the integrity of the coastal landforms.

Development Guidelines

- 5.564. The redevelopment of disused industrial land and buildings is a major opportunity for restoration of landscape. Opportunities should be sought to establish real benefits for the landscape, in terms of structure, access and long-term management, as part of any large-scale proposal.
- 5.565. Regard should be had to the potential ecological value of brownfield land, and measures should be taken to ensure that development of such sites leads to no net loss, and if possible a net gain, in biodiversity.
- 5.566. Promote the development of design briefs for major sites, setting out the contributions which can be made to landscape in the form of site design, structure planting, and habitat creation and restoration.
- 5.567. Seek to protect features of architectural and industrial heritage interest. Encourage the provision of interpretation to make these features more accessible. Opportunities should be taken to preserve industrial heritage in conjunction with new development.

Management Plans

5.568. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 42: Urban and Urban Fringe

Introduction

- 5.569. This landscape comprises the large settlements at the south-east of the study area, together with the heavily urban-influenced areas of fragmented farmland and industry which separate them.
- 5.570. This LCT is represented by one character area; 42a Ashington, Blyth and Cramlington.

Forces for Change

- South east Northumberland has been identified as a focus for regeneration and construction of new homes, to meet demand for expansion of the Tyne conurbation.
- Development pressure for industrial and commercial land uses within and adjacent to existing built-up areas.
- Further loss or deterioration of field boundaries and woodland cover due to intensification of agriculture, and advancing development.
- Urban renewal and regeneration of derelict land, particularly post-industrial sites.

Key Qualities

- Historic cores of settlements.
- Fragmented farmland serves as accessible open space.
- Industrial heritage in the form of mining towns and former industrial sites.
- Wooded river valleys dissect this landscape providing an important resource.

Guiding principle

Plan

Vision statement

The approach for the remaining areas of open landscape within this area should be one of restoration and enhancement, to ensure their future as an open space resource for the numerous local residents, while at the same time permitting the managed growth of the settlements to accommodate housing needs.

Land Management Guidelines

- 5.571. The replanting of hedgerows and hedgerow trees should be encouraged, as well as maintenance of woodlands. Ongoing maintenance will retain landscape structure, as well as offering enhanced biodiversity.
- 5.572. Encourage a greater uptake of woodland grants to establish new broadleaf woodlands, and to enhance those already present, introducing and improving landscape structure and recreational opportunities.
- 5.573. Extension of the footpath network should be encouraged, in order to improve access to the countryside for all residents.

5.574. Encourage environmental management of the remaining fragmented farmland to extend the influence of valuable habitats and species, and provide recreational opportunities.

Development Guidelines

- 5.575. New development, whether for housing or commercial uses, should be guided first towards brownfield sites, in order to maintain the integrity of settlements, and preserve the remaining areas of open space.
- 5.576. The redevelopment of brownfield sites is a major opportunity for restoration of landscape. Opportunities should be sought to establish real benefits for the landscape, in terms of structure, access and long-term management, as part of any large-scale proposal.
- 5.577. Regard should be had to the potential ecological value of brownfield land, and measures should be taken to ensure that development of such sites leads to no net loss, and if possible a net gain, in biodiversity.
- 5.578. Where new development is proposed within the remaining fragmented farmland, it will present an opportunity to introduce new or enhanced landscape structure, including woodlands, to enhance biodiversity and green infrastructure. Seek the establishment of strong settlement edges.
- 5.579. Promote the development of design briefs for major sites, setting out the contributions which can be made to landscape in the form of site design, structure planting, and habitat creation and restoration.
- 5.580. Seek to protect features of architectural and industrial heritage interest. Encourage the provision of interpretation to make these features more accessible. Opportunities should be taken to preserve industrial heritage in conjunction with new development.

Management Plans

5.581. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

NCA 16: DURHAM COALFIELD PENNINE FRINGE

- 5.582. This rolling, large-scale low upland landscape lies to the east of the *North Pennines* (NCA 10), dipping down gently eastwards to the heavily settled lowlands of the Tyne and Wear valleys. A mainly rural landscape, it is heavily influenced in places by urban and industrial development and mineral working. Only a small part of the north-west of this NCA lies within Northumberland.
- 5.583. This NCA, as refined for this classification, contains two landscape character types and three landscape character areas, as set out in Table 5.10.

Table 5.10 Landscape character types and areas in NCA16

Landscape	character type (LCT)	Landscape	character area
43	Coalfield Upland Fringe	43a	Kiln Pit Hill Hinterland
		43b	Prudhoe Hinterland
44	Coalfield Valley	44a	Derwent Valley

Landscape change

- 5.584. The Countryside Quality Counts (CQC) survey reports that between 1990 and 1998, this landscape underwent some change consistent with character. ³² Changes across the character area were small and mostly consistent with the existing character. Boundary features were noted as an area with opportunities for more positive management.
- 5.585. Between 1998 and 2003, CQC states that the character of this area was neglected. 33 Although woodland character was enhanced, development pressure and the weakened character of the agricultural landscape suggested that this area remained subject to declining strength of character. Significant opportunities for further restoration and enhancement were noted.

Climate change

Freshwater systems

5.586. The upland fringe may be influenced by flood management measures. This is likely to include the implementation of measures to slow the speed of run-off with woodland expansion and the restoration of natural flood plains. Areas currently prone to flooding will be subject to more frequent flood events, particularly during winter months.

Habitats and biodiversity

5.587. Changes in agriculture and forestry may impact on existing biodiversity.

³² http://countryside-quality-counts.org.uk/archive/oldweb/cap/northeast/CA016.htm

³³ http://countryside-quality-counts.org.uk/jca/Consultation/Default.aspx?Cqc|calD=16

Agriculture

5.588. Agriculture could experience a range of changes which may be driven by a range of wider economic influences. There may be opportunities for new crops, intensification of farming in current productive areas. There may be a requirement for new farm buildings, and demand for irrigation infrastructure and on-farm storage of water for irrigation. There may be changes in traditional field boundaries and field trees, and new planting for shelter, shade and flood management. Arable cultivation may extend into lowland pastoral areas. The ploughing of pasture areas could affect field patterns and rig and furrow, which are characteristic of Northumberland's pastoral landscapes.

Woodland and forests

5.589. This is a wooded landscape with numerous small blocks or shelterbelts and plantations of conifers and mixed woodland. There may be expansion of woodland within this landscape in order to contribute to carbon sequestration and flood management strategies. The areas of productive forest may experience changes in species composition in response to changing climate and the impacts of pest and disease.

Recreation and tourism activity

5.590. This NCA could experience increased recreational pressure due to the proximity to population and the likely warmer, drier summers. Changing weather patterns may also impact on recreation patterns, with increased demand for wet weather attractions and greater pressure on green infrastructure within settlements in response to increasing temperatures. Fire risk within moorland and parkland will increase as a result of increased temperatures and reduced summer rainfall. Increased erosion of public footpaths and cycleways will result from changes in winter rainfall and storm events, and increased use during summer months.

Settlements

5.591. There may be increased development pressure at the fringes of the area due to the proximity to the Newcastle conurbation. New developments are likely to incorporate design amendments such as ventilation, shading and planting to assist in cooling and water management which may contrast with the existing building style.

Infrastructure

5.592. There may be changes in the management of road infrastructure to address issues of flooding and stability.

Historic environment

5.593. Increases in winter rainfall and temperature may result in direct effects on the fabric and structure of historic buildings. Changing weather patterns may also affect the historic landscape structure including estate woodlands and parkland trees. This may result in changes in species composition and loss of individual trees to disease, drought and flood stress.

Landscape Character Type 43: Coalfield Upland Fringe

Introduction

- 5.594. This is an upland fringe landscape made up of the broad ridges and shallow tributary valleys of the Durham coalfield.
- 5.595. This LCT is represented by two character areas; 43a Kiln Pit Hill Hinterland and 43b Prudhoe Hinterland.

Forces for Change

- Planting of coniferous woodland and shelterbelts may create a more enclosed and 'blocky' character concealing the flow of topography.
- Loss of hedgerows and stone walls through lack of management and replacement by post and wire may degrade the character of some areas and fragment the distinctive enclosure pattern.
- Development of equestrian uses on pastures may bring with it new enclosure patterns.
- Development of large scale farm buildings may lead to the erosion of the historic pattern of farmsteads and affect the setting of some listed farm buildings.
- Growth of settlements into the rural countryside may undermine the sense of separation between settlements, create abrupt urban edges and have an urbanising influence on surrounding rural areas.

Key Qualities

- Wide, long distance views into adjacent valleys including the Derwent valley and the Tyne Gap.
- Strong, unifying enclosure pattern of stone walls and hedges, often dating to the eighteenth century and associated with enclosure roads.
- Narrow rural lanes flanked by gorse scrub and grass verges that give this landscape a rural and often remote character despite the close proximity of major settlements.
- Elevated and strongly horizontal character, making this landscape an important skyline and backdrop to hilltop settlements as well as settlements within the Tyne and Derwent Valleys.
- Isolated farmsteads associated with clumps of shelter trees that form local skyline features.

Guiding principle

Manage

Vision statement

Elements of the original structure of this landscape have been lost and there is a need to conserve those areas where the character and pattern remains and to restore areas where it has been weakened. The overall approach for this area is therefore to manage the conservation and restoration of the landscape.

Land Management Guidelines

- 5.596. Encourage the felling and restocking of coniferous plantations and shelterbelts with an increase in native species. Focus replanting on steepest slopes, extending areas of existing semi-natural woodland in a way that is sensitive to local topographic variations and edge treatments.
- 5.597. Protect and maintain existing hedgerow trees and plant new field boundary trees using ash, oak and rowan. Conserve roadside trees and gorse scrub along rural lanes, particularly those associated with enclosure.
- 5.598. Encourage a greater uptake of woodland grants to re-establish active management of clumps of shelter planting associated with farmstead
- 5.599. Seek to maintain and enhance semi-improved pastures and meadows, wet pastures and rough grazing areas by adopting appropriate stocking levels or cutting regimes and avoiding improvements such as drainage, ploughing and reseeding.
- 5.600. Encourage the regular management of stone wall and hedgerow enclosures through appropriate trimming and hedge laying or coppicing and rebuilding of stone walls where necessary.
- 5.601. Encourage widening of field margins and incorporation of buffer strips managed primarily for nature conservation along watercourses.

Development Guidelines

- 5.602. Maintain the separation of villages and towns and the rural character of the countryside between them when planning new development.
- 5.603. Seek to steer extensions to existing settlements away from open or exposed ridgelines which form a setting or backdrop to a settlement, and encourage the creation of strong settlement boundaries.
- 5.604. Seek to encourage the sensitive siting of new farm buildings, particularly with regard to historic buildings and features.

Management Plans

5.605. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

Landscape Character Type 44: Coalfield Valley

Introduction

- 5.606. This character type occurs once within Northumberland, covering the Derwent valley, through which the River Derwent and its tributaries flow. This landscape straddles the south-eastern boundary of Northumberland, extending into County Durham.
- 5.607. This LCT is represented by one character area; 44a Derwent Valley.

Forces for Change

- Decline in, or alteration to, management of semi-natural woodlands, hedgerows and trees may cause a loss of historic field enclosure pattern.
- Improvement of pastures and meadows may lead to loss of species diversity and subsequent changes in landscape colours and textures.
- Intensification of arable cropping may exacerbate the loss of hedgerows and field margins with implications for water quality and soil erosion.
- Growth of valley settlements and development of large buildings may result in the gradual suburbanisation of adjacent areas through boundary treatment, concrete road kerbs, lighting, raw urban edges or the development of hobby farming and pony paddocks.

Key Qualities

- Ancient semi-natural oak wooded denes along tributary becks, forming an important and valued habitat network.
- Distinctive sub-regular pattern and regular grids of historic enclosures comprising hedgerows with mature hedgerow trees that exert a strong visual pattern on this landscape.
- High degree of tranquillity and intimacy in some areas on account of the unspoilt and mature character of the landscape and wooded denes and lack of man-made features.
- Relic mining features such as disused railway routes and Derwentcote Steel Furnace and Iron Forge which is a scheduled monument.
- Unspoilt unfettered skyline which forms the setting for the valley landscape.

Guiding principle

Manage

Vision statement

Elements of the original structure of this landscape have been lost and there is a need to conserve areas where the character and pattern remains and to restore areas where it has been weakened. The overall approach for this area is therefore to manage the conservation and restoration of the landscape.

Land Management Guidelines

- 5.608. Encourage the felling and restocking of coniferous plantations (particularly those within and adjacent to denes) with an increase in native species. Focus replanting on steepest slopes associated with the denes, extending areas of existing semi-natural woodland with sensitivity to local topographic variations and edge treatment.
- 5.609. Encourage a greater uptake of woodland grants to enhance and expand native oakbirch woodlands along denes, valley floors and steep valley side bluffs and alder woods along stream sides.
- 5.610. Encourage landowners to improve management and carry out replacement of hedgerows and hedgerow trees through agri-environment funding schemes.
- 5.611. The rebuilding and restoration of stone walls should be encouraged through provision of appropriate grants and development of locally-based skills to ensure walls are stockproof and reflect the distinctive historic enclosure pattern found in this landscape.
- 5.612. Encourage maintenance and enhancement semi-improved pastures and meadows and wet pastures by adopting appropriate stocking levels or cutting regimes and avoiding improvements such as drainage, ploughing and reseeding.
- 5.613. Encourage widening of field margins and incorporation of buffer strips managed primarily for nature conservation along watercourses.

Development Guidelines

- 5.614. Maintain the separation of villages and towns and the rural character of the countryside between them when planning new development.
- 5.615. Encourage the establishment of strong settlement boundaries through structure planting as part of new development proposals. Seek to maintain clear urban/rural boundaries by discouraging 'suburbanisation' through, for example, urban detailing on country roads or inappropriate boundary treatment.
- 5.616. Restoration of past mining sites should include the reinstatement of species rich pasture, meadow and semi-natural woodland. .

Management Plans

5.617. Other reference material helpful to understanding potential effects on landscape character and managing change may also be available.

6. REFERENCES

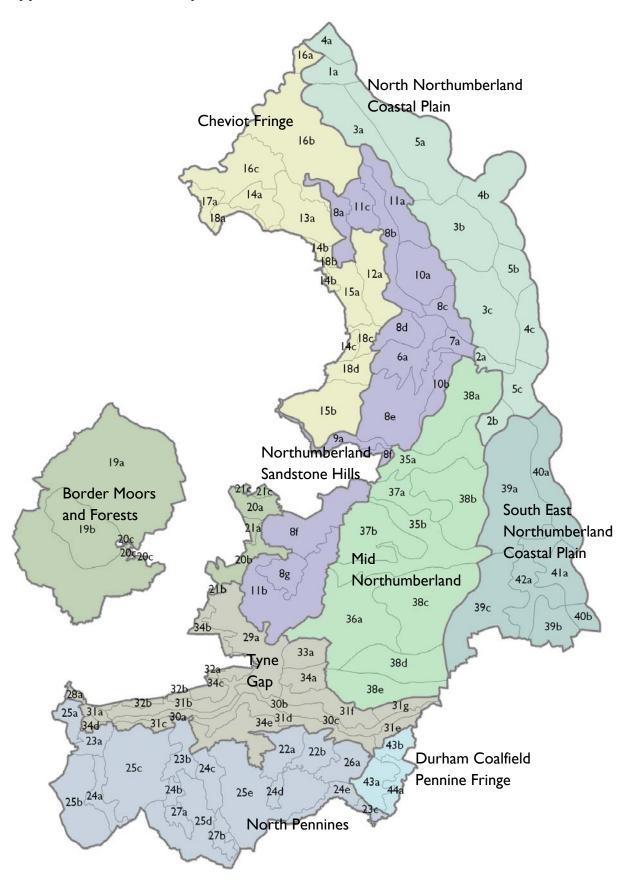
- Cheviot Futures (2009) *Cheviot Futures Delivery Plan*. http://www.cheviotfutures.co.uk/phpdocuments/67.doc
- Countryside Agency (2004 and 2007) Countryside Quality Counts. Reporting available at http://countryside-quality-counts.org.uk
- Defra (2007) A Strategy for England's Trees, Woods and Forests.
 http://www.defra.gov.uk/rural/documents/forestry/20070620-forestry.pdf
- The Druridge Bay Partnership (2006) *Druridge Bay: A Strategy for Management to* 2010. http://www.druridgebay.org.uk/report.pdfgy
- Environment Agency (2009) River Basin Management Plan: Northumbria River Basin District. http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/Northumbria/Intro.aspx
- Forestry Commission (2009) England's Trees Woods and Forests (ETWF) Delivery Plan 2008-2012. http://www.forestry.gov.uk/pdf/eng-etwf-delivery-plan.pdf
 FILE/eng-etwf-delivery-plan.pdf
- Forestry Commission (2007) Northumberland Native Woodland Project: Taking forward the Regional Forestry Strategy. http://www.forestry.gov.uk/pdf/nee-nnwp.pdf
 FILE/nee-nnwp.pdf
- Forestry Commission (2005) Trees, Woodlands, Forests and People: The Regional
 Forest Strategy for the North East of England. http://www.forestry.gov.uk/pdf/ne-rff-forest-strategy.pdf
- Government Office for the North East (2008) The North East of England Plan: Regional Spatial Strategy to 2021 http://www.gos.gov.uk/nestore/docs/planning/rss/rss.pdf
- Hadrian's Wall Heritage Ltd (2008) Hadrian's Wall Management Plan 2008-2014
 http://www.hadrians-wall.org/page.aspx/About-the-World-Heritage-Site/Management-Plan/Management-Plan-Documents
- National Assessment of UK Forestry and Climate Change Steering Group (2009)
 Combating Climate Change: A Role for UK Forests.
 http://www.forestry.gov.uk/pdf/SynthesisUKAssessmentfinal.pdf/\$FILE/SynthesisUKAssessmentfinal.pdf
- Natural England (2008) HLS Target Area Statements.
 http://www.naturalengland.org.uk/ourwork/farming/funding/es/hls/targeting/default_aspx
- Natural England (2009) Vital Uplands: A 2060 vision for England's upland environment. http://naturalengland.etraderstores.com/NaturalEnglandShop/NE210

- North East Climate Change Partnership (2008) North East England Climate
 Change Adaptation Study Summary Report.
 http://www.climatenortheast.com/contentControl/documentControl/Climate%20
 Change%20Adaptation%20Study%20lo%20res.pdf.pdf
- North Pennines AONB Partnership (2009) North Pennines AONB Management Plan 2009-2014. http://www.northpennines.org.uk/index.cfm?articleid=14161
- Northumberland Biodiversity Partnership (2008) Northumberland Biodiversity Action Plan. http://www.northumberlandbiodiversity.org.uk/index.asp
- Northumberland Coast AONB Partnership (2009) Northumberland Coast AONB and Berwickshire and North Northumberland Coast EMS Management Plan 2009-2014 http://www.northumberlandcoastaonb.org/media/Management%20Plan.pdf
- Northumberland Council (2009) Annual Monitoring Report 2008-09.
 http://www.northumberland.gov.uk/idoc.ashx?docid=707214bb-d6d2-4a41-9ae6-1548c1e02784&version=-1
- Northumberland Council (2008) Annual Monitoring Report 2007-08.
 http://www.northumberland.gov.uk/idoc.ashx?docid=8519a951-5cf9-4095-86dc-5593e8cd0da6&version=-1
- Northumberland National Park Authority (2009) Northumberland National Park Management Plan 2009-2014
 http://www.northumberlandnationalpark.org.uk/nnpamanagementplan2009-2014.pdf
- Northumberland Tourism (2010) The Northumberland Area Tourism Management Plan 2010-2015 Final Draft.
 http://www.tourismnortheast.co.uk/downloads/ATMaP%202010-15%20FINAL%20DRAFT%20Jan%202010.pdf
- Royal Haskoning (2009) Northumberland and North Tyneside Shoreline Management Plan 2. Northumbrian Coastal Authority Group. http://www.northumberland-smp2.org.uk/download.htm

APPENDIX I

The Landscape Classification

Appendix I The Landscape Classification



NCA	: North Northumberland Coastal	Plain	
Landso	ape character type (LCT)	Charact	er area
Ι	Broad River Mouth	la	Tweed River Mouth
2	Coastal Incised Valley	2a	Lower Aln
		2b	Lower Coquet
3	Farmed Coastal Plain	3a	Haggerston
		3b	Lucker
		3c	Rock
4	Rocky Coastline	4a	North Tweed Coast
		4b	Farne Islands Coast
		4c	Craster Coast
5	Sandy Coastline	5a	Holy Island Coast
		5b	Beadnell and Embleton Bays
		5c	Aln and Coquet Estuaries
NCA	2: Northumberland Sandstone Hills		
Landso	ape character type (LCT)	Charact	er area
6	Broad Sandstone Valley	6a	Whittingham Vale
7	Estate Valley	7a	Hulne Park
8	Outcrop Hills and Escarpments	8a	Doddington Ridge
		8b	Kyloe and Chillingham Hills
		8c	Charlton Ridge
		8d	Beanley Moor
		8e	Rothbury Forest
		8f	Harwood Forest
		8g	Sweethope and Blackdown
9	Sandstone Upland Valleys	9a	Coquetdale
10	Smooth Moorland	10a	Roseborough Moor
		10Ь	Alnwick Moor
П	Sandstone Fringe Farmland	Ha	Belford Hills
		ПЬ	Buteland and Colt Crag
		Hc	Hetton
<u> </u>		1	

NCA	3: Cheviot Fringe		
Lands	cape character type (LCT)	Charac	ter area
12	Broad Farmed Vale	I2a	Breamish Vale
13	Broad Floodplain Valley	I3a	Till and Glen Valleys
14	Igneous Foothills	I4a	Moneylaws/Coldside
		I4b	Wooler Foothills
		I4c	Old Fawdon
15	Upland Fringe Farmland	15a	Lilburn/Roddam
		I5b	Upper Coquet
16	Open Rolling Farmland	16a	Halidon
		16b	Duddo/Lowick
		16c	East Learmouth
17	Upland Fringe Ridges	17a	Horse Rigg
18	Upland Fringe Valley	18a	Bowmont Valley
		18b	Wooler Vale
		18c	Upper Breamish
		18d	Upper Aln
NCA	5: Border Moors and Forests		
Lands	cape character type (LCT)	Charac	ter area
19	Moorland Forestry Mosaic	19a	Kielder and Redesdale Forests
		19b	Kielder Reservoir
20	Rolling Upland Valleys	20a	Otterburn and Elsdon Valley
		20b	Bellingham and Woodburn Valley
		20c	Upper North Tyne Valley
21	Rolling Uplands	21a	Corsenside Common
		21b	Ealingham Rigg
		2Ic	Otterburn Plateau
NCA	10: North Pennines		
Lands	cape character type (LCT)	Charac	ter area
22	Farmed River Valleys	22a	Devil's Water and Hinterland
		22b	Dipton Wood and Slaley
23	Lower Dale	23a	Lower South Tyne
		23b	Lower Allenheads
		23c	Lower Derwent
i	1		

24	Middle Dale	24a	Middle South Tyne
		24b	Middle West Allen
		24c	Middle East Allen
		24d	Middle Devil's Water
		24e	Middle Derwent
25	Moorland Ridges and Summits	25a	Blenkinsopp Common
		25b	Hartleyburn Common
		25c	Whitfield Moor
		25d	Allen Common and Mohope/Acton Moors
		25e	Hexhamshire and Bulbeck Commons
26	Upland Farmland and Plantations	26a	Healey
27	Upper Dale	27a	Upper West Allen
		27b	Upper East Allen
NCA	II: Tyne Gap		
Lands	cape character type (LCT)	Charact	er area
28	Basin Valley and Fringes	28a	River Irthing
29	Broad Wooded Valley	29a	North Tyne Valley
30	Glacial trough valley floor	30a	Haltwhistle to Newborough
		30b	Newborough to Corbridge
		30c	Corbridge to Wylam
31	Glacial trough valley sides	31a	Tipalt Burn
		31b	Haltwhistle to Bridge End
		31c	North Plenmeller Common
		31d	Langley to Stocksfield
		31e	Stocksfield to Prudhoe
		31f	Acomb to Ovington
		31g	Ovington to Wylam
32	Parallel Ridges and Commons	32a	Howden Hill
		32b	Haltwhistle, Melkridge and Ridley Commons
33	Tributary Valley	33a	Erring Burn
34	Upland Commons and Farmland	34a	Acomb Ridge
		34b	Broadpool Common
		34c	Grindon Common
		34d	Featherstone Common
		34e	Lowes and Nobback Fells

_and	scape character type (LCT)	Charac	Character area		
35	Broad Lowland Valleys	35a	Coquet Valley		
		35b	Font and Wansbeck Valleys		
36	Lowland Farmed Moor	36a	Ingoe Moor		
37	Lowland Farmed Ridges	37a	Wingates Ridge		
		37b	Longwitton Ridge		
38	Lowland Rolling Farmland	38a	Longframlington		
		38b	Longhorsley		
		38c	Whalton and Belsay		
		38d	Pont Valley		
		38e	North Tyne Ridge		
NCA	Al3: South East Northumberlan	d Coastal Pl	ain		
Land	scape character type (LCT)	Charac	ter area		
39	Coalfield Farmland	39a	Coastal Coalfields		
		39b	Seaton Delaval		
		39b 39c	Seaton Delaval Stannington		
40	Broad Bays and Dunes		333333		
40	Broad Bays and Dunes	39c	Stannington		
40	Broad Bays and Dunes Developed Coast	39c 40a	Stannington Druridge Bay		
41	ŕ	39c 40a 40b	Stannington Druridge Bay Seaton Dunes		
41	Developed Coast	39c 40a 40b 41a 42a	Stannington Druridge Bay Seaton Dunes Blyth and Wansbeck Estuaries		
41 42 NC/	Developed Coast Urban and Urban Fringe	39c 40a 40b 41a 42a Fringe	Stannington Druridge Bay Seaton Dunes Blyth and Wansbeck Estuaries		
41 42 NC /	Developed Coast Urban and Urban Fringe Al6: Durham Coalfield Pennine	39c 40a 40b 41a 42a Fringe	Stannington Druridge Bay Seaton Dunes Blyth and Wansbeck Estuaries Ashington, Blyth and Cramlington		
41 42 NC/	Developed Coast Urban and Urban Fringe Al6: Durham Coalfield Pennine scape character type (LCT)	39c 40a 40b 41a 42a Fringe Charace	Stannington Druridge Bay Seaton Dunes Blyth and Wansbeck Estuaries Ashington, Blyth and Cramlington		