5.0 FUTURE FORCES FOR CHANGE

5.1 Introduction

5.1.1 The landscape, ecological and historical resources of the Study Area are constantly changing in response to human activity and natural processes. Section 4.0 includes detailed assessments of the predicted forces for change, both positive and negative, that are considered likely to affect the underlying condition and character of the AONB's landscape types in the future. These changes relate to four key areas:

- Agricultural change ;
- Land management;
- Climate change;
- Development pressures; and
- Demands for recreation.

5.1.2 This section sets out a brief overview of the key issues and challenges presented by these forces for change for the AONB as a whole. This provides as a context for future development of strategies for managing landscape change and for the proposed approach to monitoring landscape change set out in section 6.0.

5.2 Forces for Change

5.2.1 The following section examines the future forces and opportunities for change related to agricultural and land management practices in the Study Area.

Agricultural Change

5.2.2 In the years since the major reforms of the CAP in 2000, farmers have found the receipts from rural development subsidies more important than those from production-related subsidies. As subsidy payments are increasingly decoupled from agricultural production, the incentive to produce specific commodities is likely to decrease. This is considered likely to have two key effects. Firstly, land uses are likely to diversify, and secondly, production will be more strongly influenced by market demand and therefore types of land use will fluctuate as the relative demand for various commodities change.

5.2.3 In more recent reforms, agri-environment schemes have been introduced to reward farmers for agricultural production methods compatible with the protection and enhancement of the environment. There are projected gains for landscape and biodiversity, which can offer

indirect benefits to the farming community. These schemes can assist and encourage agriculture to face the competitive challenges of the growing and diversifying rural markets.

5.2.4 Within the Study Area, greater numbers of farmers are leaving the industry, and with an increase in the number of people visiting the area, there are an increasing number of farmhouses and associated buildings being sold and converted into housing, often for holiday homes. The domestication of buildings can have a significant impact on the character of the landscape, especially in remoter locations.

5.2.5 The Forest of Bowland retains a relatively large number of traditional barns which have not yet been converted. Converted farm buildings may provide an ideal location for rural businesses to act as a catalyst for local training and employment and they represent a means for preserving historic structures which are important local landscape features. However, the trend may lead to negative landscape impacts in sensitive, remote and often prominent rural locations and also to the loss of key features related to architecturally or historically important barns. Barn conversions also place considerable pressure on dwindling populations of barn owls and various species of bats. Most historic building conversions are subject to strict design guidance, but planners may find it more difficult to control the incremental development of the immediate surroundings. Ornamental garden plants, garden fences, driveways, car parking and power lines all contribute to the suburbanised character that often accompanies this sort of development.

5.2.6 As a result of the Renewables Obligation (which is designed to incentives the generation of electricity from eligible renewable sources in the United Kingdom). , there is likely to be an increase in demand for renewable energy crops, such as flax and hemp, biomass or woodfuel. The scale and form of these crops has potential impacts on the landscape character of the Study Area. There is also likely to be a continued transition towards organic production, both of livestock and crops (for example organic beef and vegetables).

5.2.7 In summary, the key potential future forces for change relating to agriculture are:

- Agricultural specialisation and intensification resulting in a loss of semi-natural habitats and cultural features;
- Changing agricultural policy creating uncertainty and pressures on livestock farming;
- Loss of traditional skills and infrastructure is reducing the ability to manage the traditional landscape features and buildings of the AONB;
- Ageing farm workforce with fewer younger farmers to replace those that are retiring. This can lead to fewer young people to look after the land, the conversion of farm units into

small gentrified hamlets and increased commuting into neighbouring towns, often resulting in more traffic on minor roads.

Land Management

5.2.8 Extensive areas of moorland within the Forest of Bowland AONB are managed specifically for grouse shooting and management varies with land ownership. Future pressures on the landscape area likely to include the need for new access tracks for shoots, potential new shooting butts and shooting cabins, which require careful choice of local materials, in keeping with the local vernacular. For example, the use of limestone for access tracks on gritstone moorland could result in the creation of a potentially incongruous landscape features.

5.2.9 In addition, the heather moorland of the Bowland Fells has traditionally been managed for red grouse shooting through the practice of annual burning. This takes place between October and mid April and encourages the growth of new young heather shoots as food for grouse. There has been a recent trend for replacement of the annual burning with cutting using machines. The product of this is a straighter landscape pattern than the traditional burning patchwork or mosaic as a result of the limited routes and directions that machines can follow. Future forces for change include measures to encourage heather regeneration, control of bracken and blocking of drains and grips to help restore blanket bogs and mires.

5.2.10 Louping ill is a viral disease transmitted by sheep ticks and has been recorded for more than 200 years in Britain in sheep flocks. This tick infestation is causing high mortality among grouse chicks and other ground nesting birds[88]. As part of the grouse moor management, there is current and future pressure to suppress 'louping ill' to levels where its impact on red grouse is low. Habitat improvements and predator control are being used by moorland gamekeepers in an attempt to control the disease. In some areas, sheep flocks which had once been removed from the moorland have now been protected against the disease. Sheep are now gradually being reintroduced to transfer ticks from grouse and other ground nesting birds. The control of louping ill is likely to be a future management issue for moorland within the Study Area.

5.2.11 It is likely, with the involvement of major landowners, such as United Utilities, that sensitive felling and restocking of woodland within the Study Area will be undertaken. This process has already begun in several locations within the AONB. There is also pressure for continued management and renewal of existing semi-natural woodlands, including those in riparian locations.

[88] Farmers weekly interactive article, 13th July 2009 – Hill Farming comes through turbulent times: Ouzel Thorn Farm, Abbeystead Estate, Forest of Bowland.

5.2.12 In summary, the key potential future forces for change relating to land management are:

- Management of moorland for recreational shooting;
- Management of moorland habitats and ecosystems to protect the birds and wildlife that it supports;
- Management of semi-natural woodland.

Climate Change

5.2.13 Climate change is increasingly acknowledged as a key driver of future landscape change. Defra's UK Climate Projections Study[89] has predicted the type of climate changes that might be expected over the coming century. These predictions include:

- All areas in the UK are likely to get warmer, and the warming is greater in the summer than in winter;
- There is likely to be little change in the amount of precipitation (rain, hail, snow etc) that falls annually, but it is likely that more of it will fall in the winter, with drier summers for much of the UK;
- Sea levels will rise, but this will be greater in the south of the UK than the north.

5.2.14 Predictions have also been made for the North-West region for low medium and high emission scenarios in 2020, 2050 and 2080. A number of general effects of climate change on woodlands and trees are already understood. Research indicates that there will be longer growing season, with milder winters and that growth rates of many of the main tree species will increase. Changing temperature patterns could also increase the number of pest and disease outbreaks. As a result, there is likely to be a need within the Study Area, to increase the range of tree species, increase genetic diversity and restructure the composition of woodlands to improve resilience[90].

5.2.15 Within the Moorland Plateaux and Unenclosed/Enclosed Moorland Hills Landscape Character Types, winters storms and increased incidences of heavy rainfall could wash nutrients from soils. Important peat soils could dry out and begin to release carbon into the atmosphere and there is also a risk of increased incidences of peat and bracken fires. The erosion of gullies from moorland grips as a result of freak rainfall or flash flooding is also a potential issue.

[89] http://ukcp09.defra.gov.uk
[90] http://www.forestresearch.gov.uk

5.2.16 From a biodiversity perspective, natural habitats and species may be put under severe pressure from changes in temperatures. The impacts of climate change on peat bogs within the AONB are also a particular concern. If peat bogs dry out, they could potentially release thousands of years worth of stored carbon into the atmosphere. The erosion of vegetation cover from blanket bog can reduce its water retention capacity and increase the risk of downstream flood peaks. In this context, the implementation of the Water Framework Directive is likely to have a significant influence on land use and water resource policy in the Study Area in the medium to long term. This may assist in the preservation of blanket peat bog areas and increase the extent and quality of wetland habitats through more integrated and ecosystem-led approaches to catchment management.

5.2.17 In summary, the key potential future forces for change relating to climate change are:

- Change to the species composition of habitats;
- Increased risk and frequency of flooding;
- Increased risk of moorland fires;
- Potential increased soil erosion due to sudden downpours and weakened soil structure;
- Potential change to cropping patterns and types of crops in response to climate change;
- Hotter, drier summers, leading to reduced ground water and drying out of peat bog habitats, which can release carbon into the atmosphere. Appropriate management of blanket bogs across the AONB (e.g. grip blocking and suitable levels of grazing) will maintain and enhance the carbon sequestration function of these important habitats;
- A warmer but possibly more oceanic climate combined with high levels of diffuse (atmospheric) nutrient enrichment leads to the growth of taller, competitive plants causing a loss of less competitive species typical of nutrient-poor habitats.

Development Pressures

5.2.18 Buildings make a valuable contribution to the scale and identity of landscapes within the Study Area. Today, the distinctive character of the area's buildings and settlements is a product of local vernacular circumstances, however the landscape is constantly changing and there is likely to be pressure from several different types of development, other than just buildings within the future. The key potential future forces for change relating to development within the Study Area include:

- Tall vertical developments within or at the edges of the AONB, including wind farms or telecommunications masts, which can be visually intrusive and impact upon the landscape character of the area;
- Increasing traffic pressures on minor rural road corridors associated with increased visitor numbers, potentially resulting in increased signage or road improvements;
- Noise and movement of passenger and freight traffic associated with the towns of Clitheroe and Whalley (and their associated industries), which may result in pressure for road widening, impacting on overall sense of tranquillity;
- Lighting within and at the boundaries of the AONB, impacting upon dark night skies;
- Wind turbine/farm developments within or at the periphery of the AONB, which introduce tall vertical elements into the landscape. Taking into account their cumulative visual impact, this type of development could potentially impact on the wider setting of the AONB, the current landscape character and overall sense of tranquillity;
- Small-scale cumulative development (e.g. building extensions, residential boundary treatment, roadside concrete curbing and signage) resulting in erosion of integrity and quality;
- Suburbanisation of rural buildings, such as the conversion of farm buildings and the introduction of diversification activities such as horsiculture;
- Introduction of new overhead transmission lines. There is, however, potential for the undergrouding of overhead electricity lines within the AONB to reduce their visual impact[92].
- Development of infrastructure associated with the water supply industry which has potential landscape and visual impacts;
- Suburbanisation of the landscape around villages and towns, as a result of small-scale extensions to existing urban areas.

Recreational Demands

5.2.19 The Forest of Bowland is a popular visitor destination for the surrounding Lancashire urban settlement and the AONB provides an important recreational resource for the nearby settlements and the East Lancashire mill towns. There area remains relatively 'undiscovered'; however its popularity is likely to increase. Under the CRoW Act 2000 large areas of the Bowland Fells have been mapped as open country (mountain, moor, heath and down) bestowing new rights of access on foot. The key potential future forces for change relating to recreation within the Study Area include:

[92] The feasibility of this is currently being examined on Champion Moor as part of Electricity North West Ltd.s Undergrounding for Visual Amenity Project.

- Pressure on key destinations (for example, well visited areas within the Bowland Fells, adjacent to the Trough of Bowland and also at foot of Parlick Hill and Fellfoot) resulting in erosion and potential damage to archaeological sites, loss of habitats, tranquillity and diminished visitor experience;
- Use of rights of way both legally and illegally by motorised vehicles causes conflict with other recreational users and local communities;
- Increase in visitor numbers is likely to involve increase in use of private cars to access recreational sites, thus detracting from the visitor experience;
- Increased demand for car parking (both formally associated with visitor facilities and informally for access to the landscape);
- Pressure for chalet and caravan accommodation related to increased tourism which could have landscape and visual impacts.

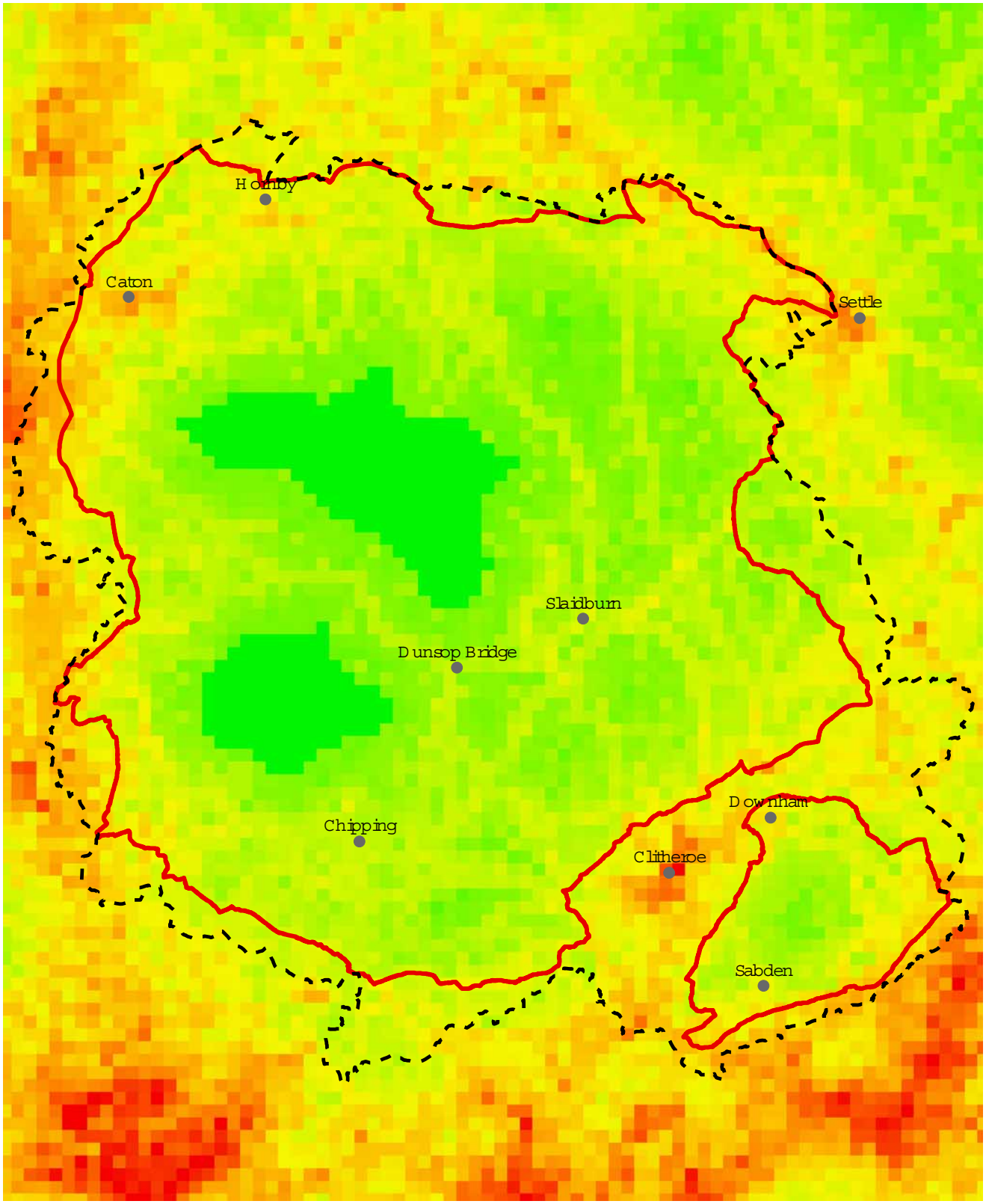
5.3 Landscape Tranquillity

5.3.1 Tranquillity is an important aspect of landscape character and quality of life. Tranquillity can be defined as freedom from the noise and visual intrusion, including light pollution, associated with developed areas, roads, transport and traffic, and areas with intensive recreational activities and other uses that contribute to disturbance.

5.3.2 The Campaign to Protect Rural England (CPRE) has developed a new methodology to measure tranquillity within England[93]. CPRE commissioned researchers to carry out a nationwide survey to test what tranquillity means to people, and identify their perceptions of what factors were most likely to add and to detract from their sense of experiencing tranquillity when they visited the countryside. Using a Geographical Information Systems (GIS) model, this survey information was associated with a range of national datasets and took account of topography to create a nation-wide map revealing the likelihood someone would experience tranquillity within any locality.

5.3.3 The degree of relative tranquillity within the Study Area as measured by CPRE is shown on **Figure 5.1**. This shows that the likelihood someone would experience tranquillity is relatively high throughout much of the AONB, and greatest in the remoter, higher areas, and in other areas which are served by narrow, minor roads. Away from these quieter areas, tranquillity is affected by increasing levels of noise and light pollution associated with traffic along the road corridors at the edge of the Study Area. Maintaining a sense of tranquillity within the Study Area is likely to be a key issue in the future, in light of the pressures for changed noted above.

[93] www.cpre.org.uk/campaigns/landscape/tranquillity



KEY

Relatively Most Tranquil

Relatively Least Tranquil

Study Area

Forest of Bowland Area of Outstanding Natural Beauty

0 2 4 km

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CHRIS BLANDFORD ASSOCIATES
www.cba.uk.net

SEPTEMBER 2009

FOREST OF BOWLAND AONB
LANDSCAPE CHARACTER ASSESSMENT

Figure 5.1
Tranquillity

6.0 MONITORING LANDSCAPE CHANGE

6.1 Introduction

6.1.1 This final section identifies indicators for monitoring changes, both positive and negative, in the character of the AONB's landscape.

6.1.2 Good practice for monitoring landscape change[94] suggests that characteristic landscape elements of individual character units need to be selected to act as key indicators for monitoring change. The main criteria for selection of indicators include:

- Must be central to the distinctive character of individual landscape character units;
- Should be liable to experience change either in magnitude/extent or in condition/quality;
- Are capable of being measured against the defined guidelines for individual landscape character units;
- They need to be defined precisely in terms of desired trends;
- The desired direction of change for the chosen indicator must be known; and
- Where possible, local stakeholders should be involved in the choice of indicators, particularly where their participation is needed to collect information or assist in monitoring changes.

6.2 The National Approach to Monitoring Landscape Change

6.2.1 At the national level, the Countryside Quality Counts (CQC) study[95] has developed indicators for monitoring changes in the character of the English landscape within the framework of National Character Areas. The CGC approach is based on evaluating the magnitude of change (assessed as 'stable' or 'changing') and then its direction (assessed as 'consistent' or 'inconsistent' with the vision for the National Character Area for each of the following main elements or themes that determine landscape character:

- Woodlands and trees;
- Boundary features;
- Agricultural land cover;
- Settlement and development patterns;
- Semi-natural habitats;
- Historic features; and

[94] Landscape Character Assessment – Guidance for England and Scotland: Topic Paper 2 – Links to Other Sustainability Tools (Countryside Agency/Scottish Natural Heritage, 2002)
[95] CQC is sponsored by Natural England, in partnership with Defra and English Heritage

- River and coastal features.

6.2.2 Each National Character Area in England was allocated to one of four categories, based upon quantitative and qualitative analysis of spatial and tabular data related to the above themes, the significance of which was judged and validated by local stakeholders. The categories are:

- ***'Maintained:*** 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;

- ***Enhancing:*** if the changes in the 'key' themes tended to restore the overall character of an area, or to strengthen it;

- ***Neglected:*** 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. National Character Areas have also been described as 'neglected' if significant opportunities to restore or strengthen character remain;

- ***Diverging:*** 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.'

6.2.3 The CQC study has made an assessment of countryside change for two periods: 1990-1998 and 1999-2003. The headline indicators for the most recent monitoring period[96] in relation to the five National Character Areas that apply within the Forest of Bowland AONB are as follows:

- Morecambe Bay Limestones - ***Maintained***
- Yorkshire Dales - ***Maintained***
- Bowland Fringe and Pendle Hill - ***Maintained***
- Bowland Fells - ***Enhancing***
- Lancashire Valleys - ***Diverging***

6.3 Monitoring Landscape Change in the AONB

6.3.1 The AONB Management Plan highlights that landscapes are a product of constant change. It notes that one of the purposes of the AONB designation is to reflect this process of change by encouraging activities that conserve and enhance the special qualities of the area and minimising activities that present a threat to the unique character of the landscape.

[96] Haines-Young, R.H. (2007) Tracking Change in the Character of the English Landscape, 1999-2003 Natural England, NE42

6.3.2 Using an approach that is complimentary to the CQC monitoring data, it is proposed that landscape change within the AONB is monitored by measuring changes in landscape character over time, based on observations in the field from sample views. This approach uses the Landscape Character Assessment as a baseline and provides a finer grain level of analysis to inform the monitoring, and where necessary review, of the guidelines for each of the Landscape Character Types.

6.3.3 The following three key indicators for measuring changes in landscape character are proposed:

- (A) - Number of changes inconsistent and consistent with defined landscape character;
- (B) - Mapping tranquillity, including light and noise pollution; and
- (C) - Changes in vegetation mosaics.

Indicator A - Number of Changes Inconsistent and Consistent with Defined Landscape Character

6.3.4 The information provided by this Landscape Character Assessment provides a basis for choosing sample views that define landscape character within the AONB. These sample views should be used to identify and measure the extent and condition of features that directly affect visual landscape change, including:

- individual elements or cumulative change that affects the landscape character in a negative way (e.g. loss and/or neglect of traditional field boundaries); and
- monitoring changes that support or enhance landscape character and the special qualities of the AONB (e.g. where walls have been restored and hedges re-laid).

6.3.5 The descriptions and guidelines for the Landscape Character Types (Section 4.0) provide the baseline for monitoring changes in landscape character from the sample views.

6.3.6 The proposed key indicators for monitoring changes inconsistent and consistent with the guidelines for each defined Landscape Character Type are set out in the table below.

Table 3: Proposed Key Indicators for Monitoring Change within Landscape Character Types

Landscape Character Type	Proposed Key Indicator
A: Moorland Plateaux	• Changes to panoramic views from fell summits • Change in area of heath/heather moorland • Change in area of acid grassland • Change in area of blanket bog • Change in area of coniferous plantations
B: Unenclosed Moorland Hills	• Changes to panoramic views from fell summits • Change in area of heath/heather moorland • Change in area of blanket bog • Change in area of coniferous plantations • Change in area of clough woodland
C: Enclosed Moorland Hills	• Changes to panoramic views from fell summits • Change in area of heath/heather moorland • Change in area of blanket bog • Change in area of commercial coniferous plantations. • Change in area of semi-natural clough woodland • Change in length and condition of stone walls
D: Moorland Fringe	• Change in area of semi-improved pasture; • Change in length and condition of stone walls; • Change in area of semi-natural broadleaved woodland; • Change in number and condition of traditional field barns; • Changes to panoramic views from higher points; • Change in area of scrub/marginal land • Change in settlement pattern • Change in area of pastoral/in-bye farmland
E: Undulating Lowland Farmland	• Change in pattern of hedgerow network • Change in area of semi-natural broadleaved woodland • Change in the area of semi-natural ancient woodland • Change in settlement pattern • Change in materials or use of traditional farm buildings • Change in area of hay meadows
F: Undulating Lowland Farmland with Wooded Brooks	• Change in pattern of hedgerow network • Change in area of semi-natural broadleaved woodland • Change in the area of semi-natural ancient woodland • Change in settlement pattern • Change in extent of woodland along brook corridors
G: Undulating Lowland Farmland with	• Change in area of formal parkland • Change in number of former parkland

Landscape Character Type	Proposed Key Indicator
Parkland	boundary features • Change in area of former deer parks • Change in length of avenues of formal tree planting; • Change in extent of estate fencing • Change in pattern of hedgerow network • Change in area of semi-natural broadleaved woodland • Change in the area of semi-natural ancient woodland • Change in settlement pattern
H: Undulating Lowland Farmland with Settlement and Industry	• Change in pattern of hedgerow network; • Change in area of semi-natural broadleaved woodland; • Change in settlement pattern; • Change in extent of industrial areas
I: Wooded Rural Valleys	• Change in area of semi-natural oak woodland • Change in area of herb-rich grassland and wet meadows • Change in the number of historic mills • Change in condition and length of stone walls
J: Valley Floodplains	• Change in area of species-rich hay meadows • Change in pattern of stone walls • Change in pattern of hedgerows • Change in area of broadleaved woodland • Change in number of field boundary trees • Change in number of tree clumps • Change in settlement pattern
K: Drumlin Field	• Change in pattern of settlement • Change in pattern of limestone walls; • Change in length of limestone walls; • Change in area of unimproved limestone grassland; • Change in the area of traditional coppiced woodlands; • Change in the pattern of hedgerows; • Change in traffic noise levels from the A65 road corridor; • Change in number and condition of traditional field barns.
L: Rolling Upland Farmland	• Change in pattern of drystone walls • Change in settlement pattern • Change in panoramic views from higher ground
M: Forestry and Reservoir	• Change in area of pastoral grazing land • Change in area of broadleaved woodland • Change in pattern of drystone walls • Change in pattern of hedgerows
N: Farmed Ridges	• Change in pattern of drystone walls • Change in area of broadleaved woodland • Change in area of mixed woodland • Change in settlement pattern • Changes to panoramic views from ridge

Landscape Character Type	Proposed Key Indicator
	tops • Change in area of commercial coniferous plantations • Change in settlement pattern • Change in number of historic halls, estates and deer parks

Indicator B - Mapping Tranquillity, including Light and Noise Pollution

6.3.7 Tranquillity is an important aspect of landscape character and quality of life. Tranquillity can be defined as freedom from the noise and visual intrusion, including light pollution, associated with developed areas, roads, transport and traffic, and areas with intensive recreational activities and other uses that contribute to disturbance.

6.3.8 The Campaign to Protect Rural England (CPRE) has developed a new methodology to measure tranquillity within England[97]. CPRE commissioned researchers to carry out a nationwide survey to test what tranquillity means to people, and identify their perceptions of what factors were most likely to add to and to detract from their sense of experiencing tranquillity when they visited the countryside. Using Geographical Information Systems (GIS) model, this survey information was associated with a range of national datasets and took account of topography to create a nation-wide map revealing the likelihood someone would experience tranquillity in any locality. This tranquillity mapping forms a baseline against which, changes in tranquillity within the AONB can be measured.

Indicator C - Changes in Vegetation Mosaics

6.3.9 General information on the extent or patterns of vegetation mosaics in the landscape across the AONB is provided within the Ecological Character section of each defined Landscape Character Type (Section 4.0). This may provide useful baseline data for judging changes.

Selecting Sample Views

6.3.10 The selection of sample views for monitoring changes should reflect the nature of the indicator being monitored, and agreed with relevant key stakeholders as appropriate. For indicators A and C, a sample view should be identified within each of the 13 Landscape Character Types as a minimum (with the larger units having a greater number of sample views to reflect geographical variations as appropriate). In relation to indicator B, sample areas within Areas

[97] http://www.cpre.org.uk/campaigns/landscape/tranquillity

Landscape Character Types where the likelihood of experiencing a reduction in tranquility should be identified.

Evaluating Landscape Change

6.3.11 It is advisable that the four CQC evaluation categories in Section 5.2.2 above are adopted, in a modified form, to determine the significance of observed changes in a sample view using the above indicators. This will help facilitate a consistent approach to reporting and understanding landscape change between the JCA and AONB scales. The modified categories for the AONB are shown in Table 4 on the following page.

Table 4: Modified CQC evaluation categories

	OBSERVED CHANGE CONSISTENT WITH GUDIELINES	OBSERVED CHANGE INCONSISTENT WITH GUIDELINES
STABLE CHARACTER	**Maintained:** if the character of the Landscape Character Type is already strong and largely intact, and the observed changes serve to *sustain* it, or simply because the lack of change means that the important qualities are likely to be retained in the long term.	**Neglected:** if the character of the Landscape Character Type has been *weakened* or *degraded* by past change, and the changes observed do not have the effect of restoring the desired qualities that make the Landscape Character Type distinct. The Landscape Character Type is also described as 'neglected' if significant opportunities to restore or strengthen its character remain
CHANGING CHARACTER	**Enhancing:** if the changes tend to restore the overall character of the Landscape Character Type, or to *strengthen* it.	**Diverging:** if the change appears to be *transforming* the character of the Landscape Character Type so that either its distinctive qualities are being *eroded*, or significant new patterns are emerging

6.3.12 For each sample view, judgements about the magnitude of observed change ('stable' or 'changing') and its direction ('consistent' or 'inconsistent' with the relevant guidelines) need to be made by an assessor with good working knowledge of the Landscape Character Assessment

and Guidelines, and also the AONB's landscapes. The results from this process need to be recorded on a standard sample view proforma, and subject to review and moderation by key stakeholders as appropriate. The frequency of monitoring should be informed by the nature of the indicator, the type of change(s) anticipated and available resources.

6.4 Next Steps

6.4.1 There is a need for further work to implement a strategy for monitoring landscape change within the AONB. Suggested key actions include:

- Identification of sample viewpoints (as set out within 6.3.10) by an assessor with a good working knowledge of the AONB's landscapes. Background information could potentially be gained from discussions with statutory and community stakeholders about locations where change is perceived to be occurring.
- Selection of proposed key indicators to be measured (chosen from the list set out within Table 3 above).
- Selection of methodology to be implemented to measure key indicators and frequency at which measurements will be taken. This may include, for example, the use of fixed point photography from sample viewpoints, or methods to measure the length/condition of features such as stone walls or hedgerows.
- Allocation of resources to carry out measurements: Alongside a trained assessor, there is potential for involvement from local voluntary or community groups.

6.4.2 As set out within the Landscape Strategy for Lancashire[98] (which covers a large proportion of the Study Area), potential existing useful baseline sources of information for monitoring landscape change, to be read alongside this Landscape Character Assessment include:

- Lancashire County Council Aerials survey: There may be scope to compare with earlier surveys or future surveys to be undertaken;
- Natural England habitat surveys and records for SSSI's, nature reserved and designated areas, as well as data from a range of nature conservation initiatives within the AONB;
- Environmental Stewardship Records: The number and types of applications for landscape management grants over a certain time period;
- Forestry Commission Records – including the number of applications for Woodland Grant Schemes;
- Lancashire Pond Loss Survey;
- Biological Heritage Site database and annual review.

[98] http://www.lancashire.gov.uk/environment/landscape