

# Appendix 1 Extracts from relevant guidance and policies

## The Arnside & Silverdale AONB Special Qualities Report

### The Special Qualities of the Arnside & Silverdale AONB

#### 1. Outstanding landscape and spectacular views

*"The landscape is a highly diverse mosaic of low limestone hills, woodlands, wetlands and mosses, pastures, limestone pavements, coastal cliffs and intertidal flats. Thousands of years of interaction between human activity and nature have shaped its character creating a living 'patchwork' of contrasting habitats criss-crossed by limestone field boundaries and hedgerows and interspersed with distinctive buildings and settlements".*

*"Spectacular views over Morecambe Bay and towards the Lake District to the west and north, and towards the Yorkshire Dales and the Forest of Bowland to the east and south, give the area an impressive setting".*

*"The AONB's landscape is particularly distinguished by its limestone features, which essentially define the area of designated AONB".*

*"Wetlands and mosses, which typically cover the flat, lowland areas between the limestone hills, also contribute to the overall quality of the landscape; as do the woodlands, which cover a third of the AONB, across the limestone hills and the intervening valleys". [page 5]*

#### 2. Morecambe Bay – a stunning seascape

*"Morecambe Bay is the largest intertidal area in the UK where five estuaries meet in a horseshoe-shaped bay of spectacular scale and grandeur. Coastal saltmarsh and intertidal flats partly lie within the AONB but also extend westwards over a huge area (310km<sup>2</sup>) of mud and sand – a kaleidoscope of water and light; sea and sky; sound, texture and colour". [page 5]*

*"The general landscape of the AONB is considerably enhanced by its proximity to the coastal saltmarsh and mudflats of Morecambe Bay, which partly lie within the AONB but also extend westwards over a huge area of intertidal mud and sand. The tidal influence within the estuary provides a further twice daily dynamic". [page 6]*

#### 3. Rare and precious habitats

- **"native woodlands"** which include the fern and moss-rich ash woodlands typically found over limestone outcrops and pavement
- **lowland calcareous grassland** usually dominated by blue moor-grass, with a wide range of characteristic herb species
- **lowland heathland** which is unusual within a limestone setting but is found here in mosaic with limestone grassland
- **lowland fen** and **reedbeds**, with the reedbeds at Leighton Moss being the most extensive area of reedbeds in North West England
- **limestone pavement**, notably at Gait Barrows which has the most botanically rich limestone pavement in England
- **maritime cliff and slopes** which, around Morecambe Bay, support rare ledge and limestone grassland communities
- **coastal saltmarsh** which is extremely important to roosting and breeding waterfowl and waders
- **intertidal mudflats** which stretch across Morecambe Bay creating one of the most important sites in England for wildfowl and wading birds". [page 6]

#### **4. Internationally and nationally important species**

*"The AONB is home to an amazing diversity of species, many of which are uncommon in a national or international context but thrive within the unique mosaic of habitats. The density of rare and protected species found within this small area is also of note. Over 100 species included on the list of England's priority species are known to occur regularly within the AONB".*

*"The numbers and diversity of butterflies are particularly impressive with 34 species found in most years, including the nationally rare High Brown Fritillary, the nationally scarce Pearl-bordered Fritillary, Duke of Burgundy, White-letter Hairstreak and Northern Brown Argus, and one of only two English populations of Scotch Argus".*

*"Well over half the UK's flowering plant species have been recorded including the Lady's-slipper Orchid, the Lancaster Whitebeam...the purple ramping fumitory..., and the nationally scarce Blue Moor-grass which dominates the AONB's unimproved grasslands".*

*"Notable breeding birds include several reedbeds specialists which are found at Leighton Moss such as Bittern, Marsh Harrier and Bearded Tit". [page 7]*

#### **5. Unique limestone geology**

*"Rare and distinctive Carboniferous limestone geology underpins the landscape of the AONB and unifies its character. The limestone landscape is particularly unusual because its karst features were formed at low altitude and show clear evidence of glacial and post-glacial processes. This combination of attributes makes Arnside & Silverdale AONB a nationally important geological asset".*

*"Notable features include:*

- distinctive areas of limestone pavement, which are often covered by woodland but are sometimes open with only a scatter of ferns, herbs and stunted trees*
- low cliffs, which fringe the coast between the Arnside and Silverdale*
- cave systems which have developed through solution-weathering of the limestone*
- exposed palaeo-karst formations*
- extensive folding and faulting including the 'Silverdale Disturbance'*
- notable fossil assemblage sites, particularly along the coastal margin". [page 7]*

#### **6. Rich sense of history**

*"The historic heritage of the AONB is integral to its character and quality creating 'time-depth' within the landscape. Field patterns reflect human occupation over several thousand years with significant areas classed as Ancient Enclosure dating back to the Middle Ages. The stone ramparts of an Iron Age hill fort are still visible today on Warton Crag".*

*"Over a third of the AONB's now extensive woodlands are considered to be ancient woodland, where coppice workers produced both fuel and woodland products, with evidence of charcoal burners' pits and later iron workings".*

*"Historic designed landscapes at Leighton Hall, Hazelwood Hall, Hynning Park are of significance and the registered parkland at Dallam Park is nationally important". [page 8]*

#### **7. Distinctive settlement character**

*"Stone buildings and settlements created during the last 800 years contribute strongly to the character and quality of the landscape through the design, construction and detailing of individual buildings, the form, layout and pattern of villages and hamlets and the settings of many of the buildings".*

*"Much of the vernacular building style dates back to medieval times, when some of the earliest stone buildings were built, such as Hazelslack Tower, Arnside Tower, much of Leighton Hall, Beetham Hall and a number of farmsteads".*

*"The earliest settlements, at Warton, Yealand Redmayne, Beetham and Hale, have a distinctive historic character, retaining a medieval linear form with a characteristic 'main street' that is still clearly evident". [page 9]*

## **8. Strong community and culture**

*"Vibrant communities exist within each of the villages, but there is also a shared identity with parishes coming together as part of the AONB, strongly connected to the landscape. Working the land is the foundation of the rural economy and the long-standing cultures of low-intensity pasture management and woodland coppice management have created important habitats upon which many of today's notable species depend".*

*"There are many opportunities for people to get involved, learn about and actively participate in the conservation of the area".*

*"The AONB has become an important locus for scientific investigation and education due to its outstanding wildlife and geology". [page 9]*

## **9. Opportunities to enjoy the countryside of the AONB**

*"The area offers wonderful opportunities to enjoy quiet recreation such as walking, cycling, wildlife watching and horse riding. The network of narrow lanes and minor highways is one of the delights of the area and, along with an intricate web of public rights of way, access land and other paths, provides many opportunities for people to come into close contact with the area's wildlife, geology and history, providing inspiring learning opportunities and engaging visitors with the landscape". [page 10]*

## **10. Sense of tranquillity, space and place**

*"The AONB is a place for inspiration, spiritual refreshment, dark skies at night and clear, unpolluted air. People come here to relax, unwind and recharge their batteries, to get close to nature, breathe in the fresh sea air and absorb exhilarating wide open views. Tranquillity and a sense of space are easy to find both in the intimate inland landscape and on the hills and open coast".*

*"The area's distinctive character and unique combination of scenery, history, abundance of wildlife, peace and quiet, and culture makes the AONB unique. For many, this very particular sense of place is the primary motivation to visit and creates a strong connection with and love for this landscape". [page 11]*

## **11. Designations**

- *"49% of the total AONB area is designated under European directive for its habitat, species or bird interest;*
- *54% of the AONB is covered by national Site of Special Scientific Interest (SSSI) designation;*
- *a further 12% of the AONB has been identified as being of local wildlife value (Local Wildlife Sites) by Lancashire and Cumbria County Councils;*
- *over 15% of the AONB is covered by Limestone Pavement Orders;*
- *7 sites covering nearly 6% of the area of the AONB are designated as Local Geological Sites;*
- *there are 10 Scheduled Monuments, 111 Listed Buildings, and 1 Registered Park and Garden; and*
- *3 village Conservation Areas have also been identified for their built heritage value". [page 11]*

## Morecambe Bay Limestones National Character Area (NCA).

Key Characteristics
A flat lowland landscape, dominated by conspicuous, often steep-sided, hills of Lower Carboniferous Limestone, many of which include exposures of limestone pavement. Between the hills the landform is geologically recent, including areas of drumlin field, fluvial and estuarine sediment and peat bogs.
Wide expanses of shifting intertidal sand flats and expanses of salt marsh arcing round the head of Morecambe Bay, backed by low cliffs with windswept trees, or grassed embankments defending reclaimed grazing marshes.
The rivers Kent and Leven enter Morecambe Bay via dynamic estuary systems. The smaller rivers Winster, Bela and Keer lie predominantly within this NCA and have relatively extensive flood plain areas before flowing into the channel of the River Kent as they enter Morecambe Bay.
The limestones support a mixed pastoral farming and woodland landscape, often in tight mosaics, with orchards surrounding the farmsteads and fields bounded by limestone drystone walls.
A winter climate ameliorated sea which, as well as the exposed south facing slopes of the limestone outcrops allows a number of temperature sensitive species to make this the northernmost fringe of their range.
Strong contrasts between the rectilinear enclosures of reclaimed valley bottoms and coastal fringes, and the older enclosures associated with farmsteads and ancient woodland, bounded by limestone drystone walls, on the limestone escarpments.
Extensive areas of native broadleaved woodland on limestone areas, particularly on the steeper slopes and thinnest soils.
An abundance of high-quality semi-natural habitats of national and international importance, including limestone pavements, herb-rich grasslands with juniper, species-rich scrub, ancient limestone woodlands, peaty fenlands, marl tarns, reedbeds, lowland raised bogs, salt marshes and intertidal mud and sand flats.
An exceptional range of species associated with the diverse range of semi natural habitats, many with populations of national importance, including a suite of limestone butterflies, Bittern, Marsh Tit and Lady's-Slipper Orchid.
Within the drumlin field to the south of Kendal, a gently undulating farmland of pastures and arable, divided by drystone walls made of field stone, with a limited cover of broadleaved woodland.
Sheep and cattle graze the pastures and salt marshes, with rough grazing a feature of the higher grounds on unimproved limestone grassland.
Extensive areas of reclaimed land on the coastal fringe and in the Lyth Valley have large fields bounded by ditch-flanked hedgerows. Lowland raised mires surrounding the limestone outcrops have been reclaimed for agriculture.
Several stately homes set in parkland landscapes with well-maintained gardens.
A vernacular building style common to all settlements and farmsteads based on the use of local limestone for walls and Lake District slate.
Settlements are generally dispersed and rural in character, having usually grown around large farmsteads. Larger centres include Grange-over-Sands, Arnside, Silverdale and Milnthorpe, some of which have a seaside resort character, reflecting the growth in the use of the area for recreation from the 18th century onwards.
A range of visible heritage features including burial mounds, stone circles, prehistoric settlements and enclosures, medieval field patterns, the Lancaster Canal and Second World War airfields.
An extensive rights of way network, particularly on areas of limestone geology, integrated with areas of permissive access land.

## Ecosystem services provided in the Morecambe Bay Limestones NCA

Ecosystem Services	
<b>Provisioning services</b> (food, fibre and water supply)	<b>Food provision:</b> Pastoral farming on Grade 3 soil in the NCA provides meat and dairy produce, and there are small enterprises associated with features such as damson and apple orchards. The cockle fishery harvests natural resources on the sand flats of Morecambe Bay.
	<b>Biomass provision:</b> The extensive native woodland cover supports a growing wood fuel industry, with potential for more sustainable production, mainly supplying domestic markets through rotational coppice management.
<b>Regulating services</b> (water purification, air quality maintenance and climate regulation)	<b>Climate regulation:</b> The lowland raised bogs Foulshaw Moss and Meathop Moss, found to the north of the Kent Estuary and at Roudsea to the east of the Leven Estuary, are both a store and sequester of carbon when in good condition but can also be significant carbon emitters when degraded. The extensive woodland of the limestone outcrops and salt marshes of the bay fringe also have significant roles in carbon sequestration and storage.
	<b>Regulating water quality:</b> Wetlands such as riparian woodlands, fens and reedbeds (as nutrient sinks) and pastoral agricultural land (as a source of nutrients and sediments) play key roles in determining water quality both within the smaller watercourses of the NCA and in the transitional waters of the adjacent Morecambe Coast and Lune Estuary NCA, many of which are in poor condition.
	<b>Pollination:</b> The extensive areas of semi-natural habitat in the NCA support populations of pollinators – insects that are key not only to the maintenance of the many semi-natural habitats but also to food production.
	<b>Regulating coastal processes:</b> Salt marshes, which form the interface between the tidal flats of Morecambe Bay and the terrestrial hinterland, play a key role in regulating many processes, including both coastal flooding and coastal erosion.
<b>Cultural services</b> (inspiration, education and wellbeing)	<b>Sense of place/inspiration:</b> The rich and varied character of the area is largely determined by the interrelationship between the species-rich grasslands, the semi-natural woodlands, the limestone hills, the contrasting drumlins, the coastal salt marsh and intertidal habitats and the presence of the wide expanse of Morecambe Bay. The highly distinctive and varied landscapes of the NCA, including the Lake District National Park and the Arnside and Silverdale AONB, give the NCA a strong and unique sense of place. This contributes strongly to tourism in the area and, consequently, is intrinsic to the local economy.
	<b>Sense of history:</b> Visible historical features, ranging from Neolithic stone circles to traditional farmsteads, fieldscapes, manor houses, lime kilns and Second World War airfields, testify to longstanding human land use. Grazing livestock have been a familiar sight on the salt marshes and upland commons for centuries.
	<b>Recreation:</b> The quality of the NCA landscape, recognised in the National Park and AONB designations, is complemented by an extensive rights of way network and nature reserves, building a strong natural tourism economy.
	<b>Tranquillity:</b> The high-quality semi-natural environment with both intimate woodlands and areas of quiet expanse are important tranquillity assets, particularly within the AONB.
	<b>Biodiversity:</b> The NCA has an unusually wide range of high-quality habitats underpinning its identity as a biodiversity hotspot important for a wide range of species and habitats associated with limestone, wetlands and coastal environments. Among others these include areas internationally designated as SAC and Special Protection Areas for limestone grassland, Juniper scrub, limestone pavement, Ash woodland, Yew woodland, marl lakes, lowland raised bogs, rivers, salt marsh and mudflats and species including Bittern, wintering waders and wildfowl.
	<b>Geodiversity:</b> The NCA contains a number of nationally important geological sites including cave systems and fossil assemblages, most notable of which are the limestone pavements and lowland raised bogs of which the NCA contains a significant part of the global resource.

# The Cumbria Landscape Character Guidance & Toolkit

## Sub-Type 1a Intertidal Flats Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Adjacent to the AONB		
Type	Sub Type	Guidelines
1a Intertidal Flats		<p><b>Climate change and Coastal Processes</b></p> <ul style="list-style-type: none"> <li>• Avoid the use of 'hard' defences against erosion along the outer soft coast favouring 'soft' accretion solutions. Within the estuaries flood defences such as sea dykes need to be carefully planned to minimise environmental damage and selectively protect the most ecologically valuable areas.</li> <li>• Coordinate coastal protection approaches around the Cumbrian coast through the development of Shoreline Management Plans.</li> <li>• Consider the scope for managed retreat of flood and coastal defences allowing reversion of farmland to marsh, mudflat or beach.</li> </ul>
		<p><b>Coastal Features</b></p> <ul style="list-style-type: none"> <li>• Actively manage the intertidal zone including the careful removal of marine rubbish along beaches avoiding damage to strandline vegetation.</li> <li>• Provision of information and interpretation of wildlife and related interest.</li> <li>• Ensure adequate regulation of commercial fishing for cockles and mussels to minimise disturbance to birdlife and damage to their feeding areas.</li> <li>• Conserve and enhance historic sites through avoiding disturbance and removal of structures, levelling, excavation and tipping.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Avoid developments that damage features of ecological, archaeological or landscape interest or require long term protection through new coastal defences.</li> <li>• Protect the more intimate character of inner estuaries from inappropriate development, particularly with regard to sites in adjacent landscapes.</li> <li>• Retain open views across the intertidal flats, and to sensitive horizons, through the careful control, siting and design of infrastructure or energy developments.</li> <li>• Ensure that the design and siting of all development is of a high standard which enhances its surroundings and habitats are carefully restored after construction.</li> <li>• Ensure the development decisions respect long distance views to adjacent landscapes in the Lake District, Forest of Bowland and Dumfries and Galloway fells and within the Hadrian's Wall buffer zone.</li> <li>• Encourage the deep burial of cables to reduce the need for vertical structures both in this and adjacent seascapes that form the backdrop to this type, especially the Solway Coast and Arnside and Silverdale AONBs, and the Hadrian's Wall buffer zone.</li> </ul>
		<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>• In areas where coastal access will introduce new routes, appropriate access management may be needed in sensitive locations, at certain times of the year, to minimise disturbance to wildlife.</li> </ul>

## Sub-Type 1b Coastal Marsh Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Sub Type	Guidelines
1b Coastal Marsh		<p><b>Climate change and Coastal Processes</b></p> <ul style="list-style-type: none"> <li>Any improvement of sea dykes needs to be carefully planned to minimise environmental damage whilst selectively protecting the most valuable farmland and residential areas.</li> <li>Economic and social benefits need to be carefully weighed against the likely environmental impacts of flood defence schemes including loss of dyke hedgerows and marshy habitats.</li> <li>Consider the re-creation of saltmarsh on land, which in the past has been reclaimed to agriculture, in instances where managed retreat of coastal defences is inevitable.</li> </ul>
		<p><b>Coastal Features</b></p> <ul style="list-style-type: none"> <li>Conserve and enhance the marsh through the continuation of traditional grazing to maintain the open peaceful landscape qualities and maximise botanical and birdlife interest.</li> <li>Develop management programmes to provide optimum conditions for birds and to improve the variety of salt tolerant grasses and herbs.</li> <li>Resist commercial scale turf cutting or access by vehicles to prevent damage to the saltmarsh.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>Protect the periphery of saltmarshes from the intrusion of large and medium scale development within neighbouring landscape character types.</li> <li>Ensure large scale development does not cause significant harm to natural coastal processes and habitats.</li> <li>Resist the clutter and obstruction of views by minor development such as signs and fencing.</li> <li>Ensure that the design and siting of all development is of a high standard which enhances its surroundings and any saltmarsh habitat disturbed by construction is carefully restored.</li> </ul>
		<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>Improve information for visitors to encourage the protection of sensitive saltmarsh habitats and minimise wildlife disturbance.</li> <li>Ensure car parks and lay-bys are sensitively sited and well-designed being appropriate in size and form.</li> <li>Where appropriate provide well-designed vehicle barriers around car parking areas to prevent erosion of the saltmarsh.</li> <li>Ensure that planning decisions support increased recreation provision that is compatible with the remote and wild qualities of these landscapes.</li> <li>Support improved coastal access through waymarking, gates, gaps, bridges and appropriate surfacing and encourage wardening around areas of wildlife sensitivity.</li> <li>In areas where coastal access will introduce new routes, appropriate access management may be needed in sensitive locations at certain times of the year, to minimise disturbance to wildlife.</li> </ul>

## Sub-Type 2c Coastal Plain Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Adjacent to the AONB		
Type	Sub Type	Guidelines
2C Coastal Plain		<p><b>Climate change and Coastal Processes</b></p> <ul style="list-style-type: none"> <li>• Restrain development in areas susceptible to flooding to allow the land to possibly be grazed, drained or returned to wetland should areas of this landscape become liable to flooding due to climate change.</li> <li>• Encourage Shoreline Management Plan responses to be sensitive to undeveloped nature of parts of the seascape.</li> </ul>
		<p><b>Natural Features</b></p> <ul style="list-style-type: none"> <li>• Allow suitable marginal land, which in the past has been reclaimed to agriculture to revert to mossland, saltmarsh or wet grassland.</li> <li>• Reduce further drainage works that would result in the loss of wetland, hedges or trees and encourage sensitive ditch management to support wetland enhancement.</li> <li>• Maximise opportunities to improve floral diversity along verges, dykes or ditches through reprofiling banks, extending clearance cycles, working short stretches to allow recolonisation and restricting herbicide use.</li> <li>• Reinforce existing woods by appropriate management, natural regeneration, and exclusion of stock and restocking of plantations.</li> <li>• Plant new woodland belts to ameliorate existing conifer plantations, enhance significant views and reduce the visual dominance of transmission lines.</li> <li>• Consider the planting of willow coppice or other energy crops on farmland that avoids grazing marshland habitats and raised mires.</li> <li>• Plant new hedgerow trees to replace maturing stock using indigenous species, or tagging selected saplings avoiding obstruction of attractive open vistas.</li> <li>• Undertake small scale native woodland planting concentrated around villages and farmhouses to form visual islands on the coastal plain and soften the forms of new farm buildings.</li> <li>• Encourage small scale woodland planting along field margins to develop ecological corridors and link with hedgerows.</li> </ul>
		<p><b>Cultural Features</b></p> <ul style="list-style-type: none"> <li>• Restore fenced boundaries to traditional hedgerows involving replanting and renovation of gappy overgrown hedges.</li> <li>• Discourage the introduction of fences to replace or gap-up hedgerows.</li> <li>• Manage hedgerows in a traditional way involving a cycle of hand laying and trimming.</li> <li>• Restore and maintain locally distinctive boundary treatments such as cobblestone and turf hedge banks.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Minimise the impact of major developments such as large scale wind energy, roads, pylons, masts and infrastructure linked to offshore developments by careful siting to maximise screening from public view and high standards of design and landscape treatment. Open and exposed sites and those that affect key views should be avoided, especially where development would become the dominant feature.</li> <li>• Reduce the impact of new farm buildings by careful siting, breaking down mass, choice of sympathetic colours and non-reflective finishes and screen planting.</li> <li>• Encourage horse grazing and equestrian uses to respect field boundaries and field patterns. Stables and other facilities should be sited sensitively with appropriate landscape mitigation to prevent the erosion of the pastoral farmland character.</li> </ul>
		<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>• Support the roll out of coastal access and encourage sensitively sited coastal access and recreational infrastructure. Coastal access footpaths, areas and facilities should be improved and developed to be compatible with the undeveloped and natural character of this sub type.</li> <li>• In areas where coastal access will introduce new routes appropriate access management may be needed in sensitive locations at certain times of the year to minimise disturbance to wildlife.</li> </ul>

## Sub-Type 3a Open Farmland and Pavements Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Adjacent to the AONB		
Type	Sub Type	Guidelines
3a Open Farmland and Pavements		<p><b>Natural Features</b></p> <ul style="list-style-type: none"> <li>• Manage limestone pavement and species rich grassland to improve their biological diversity including controlled light grazing, appropriate control of scrub and bracken and discouragement of fertiliser use and control of poor woodland management on the limestone pavements to reduce damage. Established stands of dwarf shrubs such as juniper should be protected and natural regeneration encouraged.</li> <li>• Manage public access to limit disturbance to wildlife and sensitive habitats and improve awareness of natural features.</li> <li>• Reinforce existing woods by appropriate management including traditional coppice working, natural regeneration, restocking and exclusion of stock.</li> <li>• Conserve and manage scrub where it relates to characteristic vegetation patterns and provides valuable wildlife habitats. This may include rotational cutting to encourage a diverse structure or development to restore relic ancient semi-natural woodland.</li> </ul>
		<p><b>Cultural Features</b></p> <ul style="list-style-type: none"> <li>• Discourage field enlargement and introduction of fences to replace or gap-up walls and hedgerows.</li> <li>• Restore and manage limestone walls and hedgerows using traditional methods.</li> <li>• Protect selected features including remnant medieval 'strip fields' around villages.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Preserve the distinct historic forms of settlements and intimate relationship to the scale and form of the landscape.</li> <li>• Protect uncluttered skylines and key views to and from the area from large-scale energy infrastructure developments such as large scale wind turbines, pylons or telecommunications masts.</li> <li>• Resist expansion of quarries where these will produce prominent scars or destroy irreplaceable features and habitats.</li> <li>• Ensure quarries have high quality restoration schemes that support the expansion of semi-natural habitats.</li> <li>• Ensure new developments respect the scale, traditional form and materials of villages and do not infill important open spaces such as orchards and gardens integral to their character.</li> <li>• Enhance settlements through sensitive environmental improvements to village greens, ponds, lakes and other features.</li> </ul>
		<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>• Support the roll out of coastal access and encourage sensitively sited coastal access and recreational infrastructure. Coastal access footpaths, areas and facilities should be improved and developed to be compatible with the undeveloped and natural character of this sub type.</li> <li>• In line with the Marine and Coastal Access Act consideration should be given to routing coastal access footpaths along appropriate sea defence structures.</li> <li>• In areas where coastal access will introduce new routes, appropriate access management may be needed in sensitive locations at certain times of the year to minimise disturbance to wildlife.</li> <li>• Manage public footpaths through better waymarking, improved gates and gaps and appropriate surfaces and better interpretation, whilst retaining the open and comparatively wild character of the landscape.</li> <li>• Preserve the distinct historic forms of settlements and intimate relationship to the scale and form of the landscape</li> </ul>

## Sub-Type 3b Wooded Hills and Pavements Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Sub Type	Guidelines
3b Wooded Hills and Pavements		<p><b>Natural Features</b></p> <ul style="list-style-type: none"> <li>• Conserve and restore the broad scale pattern of ancient semi-natural woodland cover through appropriate management for amenity and nature conservation benefits.</li> <li>• Encourage appropriate species and structural diversity of woodlands to maximise ecological interest and attractive combinations of colour and texture.</li> <li>• Retain the character and structure of yew dominant woodland.</li> <li>• Retain and appropriately manage areas of historic 18th and 19th century designed landscapes and parkland.</li> <li>• Continue to enhance the appearance and biodiversity value of existing commercial and coniferous plantations and support the removal of planted woodland from pavement areas.</li> <li>• Conserve and enhance through appropriate management, the biological diversity of the characteristic open mosaic of bare rock outcrops, species rich calcareous grassland, heath and scrub vegetation.</li> <li>• Encourage natural diversity through the reversion of drained and intensively managed mossland and pasture back to semi-natural wetland and meadows.</li> <li>• Reverse the effects of agricultural improvements and scrub/woodland encroachment on remaining wetland mosses through the adoption of environmentally sensitive management measures.</li> <li>• Encourage the reversion of drained and managed mossland back to semi-natural wetland.</li> </ul>
		<p><b>Cultural Features</b></p> <ul style="list-style-type: none"> <li>• Conserve and restore through appropriate management the dry stone walls and hedges which enclose the historic pattern of small-scale fields and lanes.</li> <li>• Discourage field enlargement and introduction of fencing to subdivide fields, or to replace or gap-up walls and hedgerows.</li> <li>• Conserve and enhance disused quarries and historic structures such as medieval farmhouses, wells, lime kilns and associated quarries.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Manage any further expansion of villages to respect their natural and historic boundaries and features and to avoid sprawl and encroachment into surrounding countryside and important village settings.</li> <li>• Protect village fringes from unsympathetic peripheral development. Ensure any new developments are visually contained and respect the scale, traditional form and character of the settlement and building materials.</li> <li>• Resist infill development of important open or historic spaces within villages.</li> <li>• Enhance villages through sensitive environmental improvements to entrances, village greens, estuary frontages etc.</li> <li>• Retain the character of the rural road network and encourage new highways signage to reflect the rural character of the area.</li> <li>• Manage other development, such as new or extensions to caravan sites, to prevent unsympathetic development, additional suburban characteristics and to ensure they are visually contained and are of an appropriate scale.</li> <li>• Manage the siting of large scale development, and particularly energy infrastructure, in adjacent landscapes where it could adversely affect key coastal and inland views.</li> </ul>

## Sub-Type 3b Wooded Hills and Pavements Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Sub Type	Guidelines
	<b>3b Wooded Hills and Pavements</b>	<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>• Support the roll out of coastal access and encourage sensitively sited coastal access and recreational infrastructure. Coastal access footpaths, areas and facilities should be improved and developed to be compatible with the undeveloped and natural character of this sub type.</li> <li>• In line with the Marine and Coastal Access Act consideration should be given to routing coastal access footpaths along appropriate sea defence structures.</li> <li>• In areas where coastal access will introduce new routes appropriate access management may be needed in sensitive locations at certain times of the year to minimise disturbance to wildlife.</li> <li>• Protect sensitive natural habitats through careful routing of paths and provision of vehicle restraints.</li> <li>• Resist the expansion or further development of tourism or recreation facilities, which would prejudice the quiet scenic qualities of this area.</li> <li>• Develop traffic management schemes to address the problems of congestion and parking whilst avoiding measures to increase capacity for cars.</li> <li>• Minimise the visual intrusion and ecological damage created by existing facilities such as car parks, lay-bys, waymarking, signage and footpaths through sensitive siting and design, and use of high quality durable materials.</li> </ul>

## Sub-Type 7a Low Drumlins Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Sub Type	Guidelines
7a Low Drumlins		<p><b>Climate change</b></p> <ul style="list-style-type: none"> <li>Encourage biomass planting in hollows and between the lower more open drumlins to help retain the distinctive form and pasture land cover of the drumlins</li> </ul>
		<p><b>Natural Features</b></p> <ul style="list-style-type: none"> <li>Plant small pockets of indigenous woodland within hollows and woodland belts between the lower more open drumlin swarms.</li> <li>Establish new hedgerow trees using indigenous species or tagging selected saplings to replace maturing stock.</li> <li>Discourage large scale planting that would obscure or swamp the pattern of drumlins.</li> <li>Protect and enhance tarns and wetlands through carefully controlling drainage schemes to safeguard water quality and levels and regenerating water margin vegetation by preventing overgrazing and poaching by stock and controlling scrub encroachment.</li> <li>Create new ponds, tarns and wetlands in hollows and by streams.</li> <li>Maximise floral diversity along road verges by adopting sensitive cutting cycles and restricting use of herbicides.</li> </ul>
		<p><b>Cultural Features</b></p> <ul style="list-style-type: none"> <li>Conserve and maintain hedgerows in a traditional way where possible with hand laying and trimming.</li> <li>Discourage boundary removal and field enlargement.</li> <li>Maintain dry stone walls in the traditional manner.</li> <li>Restore dry stone walls and neglected hedgerows; the latter involving replanting of gaps and coppicing of overgrown plants.</li> <li>Conserve and enhance features such as remnant medieval 'town fields' and disused iron ore mines in Furness by positive management and discouraging damaging agricultural and other reclamation schemes.</li> <li>Conserve and enhance historic routes such as the Lancaster Canal and encourage public use by management of trees and scrub, carrying out structural repairs to bridges, walls etc. (with archaeological advice) and protection from stock.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>Ensure that all developments are of high quality and well related to the distinctive grain and scale of this landscape. Avoid siting development on prominent hill tops or cutting across slopes, particularly with reference to tall structures such as pylons and large scale wind turbines, and take advantage of natural containment by landform and trees.</li> <li>Avoid siting large scale wind energy, other vertical structures such as telecommunications masts, pylons and overhead transmission lines in open and prominent areas where it could degrade the rural character of the area.</li> <li>Reduce the impact of new farm buildings by careful siting, breaking down mass, choice of sympathetic colours and non-reflective finishes and screen planting. Ensure any diversification from farming use does not disrupt the strong held pattern.</li> <li>Conserve and protect historic villages by ensuring new housing development respects their scale, traditional form and vernacular styles and does not overcrowd narrow lanes or infill open spaces such as orchards and gardens integral to the character. Encourage sensitive environmental improvements to village greens, ponds, tree plantings etc.</li> </ul>
		<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>Public rights of way should be well maintained and quiet recreational areas and facilities should be improved and developed to be compatible with the pastoral character of this sub type.</li> <li>Seek opportunities to enhance access to farmland through farm stewardship or other schemes.</li> </ul>

## Sub-Type 7b Drumlin Field Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Sub Type	Guidelines
7b Drumlin Field		<p><b>Climate change</b></p> <ul style="list-style-type: none"> <li>• Encourage biomass planting in hollows and between the lower more open drumlins to help retain the distinctive form and pasture land cover of the drumlins.</li> <li>• Encourage appropriate flood risk management measures to reflect the local character.</li> </ul>
		<p><b>Natural Features</b></p> <ul style="list-style-type: none"> <li>• Plant small pockets of indigenous woodland within hollows or on prominent hilltops and woodland belts between the lower more open drumlins.</li> <li>• Manage existing woods by selective felling, natural regeneration, restocking and exclusion of stock.</li> <li>• Establish new hedgerow trees using indigenous species or tagging selected saplings to replace maturing stock.</li> <li>• Resist large scale planting that would obscure or swamp the pattern of drumlins.</li> <li>• Protect and enhance tarns and wetlands through carefully controlling drainage schemes to safeguard water quality and levels and regenerating water margin vegetation by preventing overgrazing and poaching by stock and controlling scrub encroachment.</li> <li>• Create new ponds, tarns and wetlands in hollows and by streams.</li> <li>• Maximise floral diversity along road verges by adopting sensitive cutting cycles and restricting use of herbicides.</li> </ul>
		<p><b>Cultural Features</b></p> <ul style="list-style-type: none"> <li>• Conserve and maintain hedgerows in a traditional way where possible with hand laying and trimming.</li> <li>• Discourage boundary removal and field enlargement.</li> <li>• Maintain dry stone walls in the traditional manner.</li> <li>• Restore dry stone walls and neglected hedgerows; the latter involving replanting of gaps and coppicing of overgrown plants.</li> <li>• Conserve and enhance features such as remnant medieval 'town fields' and disused iron ore mines in Furness by positive management and discouraging damaging agricultural and other reclamation schemes.</li> <li>• Conserve and enhance historic routes such as the Lancaster Canal and encourage public use by management of trees and scrub, carrying out structural repairs to bridges, walls etc. (with archaeological advice) and protection from stock.</li> </ul>
		<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Ensure that all developments are of high quality and well related to the distinctive grain and scale of this landscape. Avoid prominent hill tops or cutting across slopes, particularly with reference to tall structures such as pylons and large scale wind turbines and, take advantage of natural containment by landform and trees.</li> <li>• Reduce the impact of new farm buildings by careful siting, breaking down mass, choice of sympathetic colours and non-reflective finishes and screen planting. Ensure any diversification from farming use does not disrupt the strong held pattern.</li> <li>• Conserve and protect historic villages by ensuring new housing development respects their scale, traditional form and vernacular styles and does not overcrowd narrow lanes or infill open spaces such as orchards and gardens integral to the character. Encourage sensitive environmental improvements to village greens, ponds, tree plantings etc.</li> </ul>

## Sub-Type 7b Drumlin Field Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Sub Type	Guidelines
	7b Drumlin Field	<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Avoid siting large scale wind energy, other vertical structures such as telecommunications masts, pylons and overhead transmission lines in open and prominent areas where they could degrade the rural character of the area.</li> <li>• Retain the rural character of the M6 corridor by resisting large scale commercial development and ensuring new motorway infrastructure such as information signs and necessary lighting is sited to minimise adverse effects on open parts of the landscape. Noise pollution should be mitigated against through careful selection of surface materials.</li> </ul>
		<p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>• Public rights of way should be well maintained and quiet recreational areas and facilities should be improved and developed to be compatible with the pastoral character of this sub type.</li> <li>• Promote and enhance existing recreation routes by improving waymarking, appropriate surfacing, gates and gaps and interpretation.</li> <li>• Encourage the development of footpath, bridleway and cycleway networks where appropriate combined with additional hedgerow and tree planting to provide interest.</li> <li>• Seek opportunities to enhance access to farmland through farm stewardship or other schemes.</li> </ul>

## Sub-Type 8b Broad Valleys Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Adjacent to the AONB		
Type	Sub Type	Guidelines
8b Broad Valleys		<p><b>Climate Change</b></p> <ul style="list-style-type: none"> <li>• Opportunities should be taken to create new areas of wetland in response to changes in flood risk management, such as is planned in the Lyth Valley.</li> </ul>
		<p><b>Natural Features</b></p> <ul style="list-style-type: none"> <li>• Encourage the restoration of the floodplain and catchment centered farming to protect river edges and vulnerable habitats in association with Biodiversity Action Plans (BAP).</li> <li>• Conserve and enhance marginal wetland features and support the re-wetting of areas such as the Lyth Valley to provide wildlife and landscape diversity.</li> <li>• Protect, enhance or restore marshes, wet meadows and pasture, off-stream ponds, reed beds, willow and alder, carr and bank side trees. This may involve for example, sensitively timed light grazing, maintenance of water levels, protection from livestock or control of invasive vegetation.</li> <li>• Ameliorate incongruous river engineering and canalisation works by softening geometric forms and creating a variety of habitats and natural features within and alongside rivers.</li> <li>• Reinforce established broad-leaved and mixed woodlands through improved management and supplementary planting ensuring a balance is maintained between coniferous and deciduous plantations.</li> <li>• Extend tree cover into adjacent areas by additional planting of tree groups, lines, hedgerow trees and roadside planting, encouraging use of indigenous species.</li> <li>• Plant trees to enhance vistas whilst emphasising contrasts between wooded valley sides and open flood plain.</li> <li>• Encourage the use of deciduous species along the river valley sides to give definition to the watercourse and encourage the development of riverside habitats.</li> <li>• Introduce open areas within woodland and manage water and wetlands to increase landscape and nature conservation value.</li> <li>• Ensure that the planting of designed landscapes using non-native trees does not bring disease into the surrounding landscape.</li> <li>• Maintain and enhance other semi-natural habitats such as ancient woodlands and unimproved grasslands.</li> <li>• Create ecological corridors to enhance nature conservation value.</li> </ul>
		<p><b>Cultural Features</b></p> <ul style="list-style-type: none"> <li>• Improve the management of existing hedgerows to create stronger patterns in the landscape.</li> <li>• Encourage the replanting and renovation of gappy overgrown hedges.</li> <li>• Renovate parkland respecting historic designed layouts and planting schemes.</li> <li>• Conserve historic buildings and structures, which may include removal of trees and scrub to keep them open and viewable.</li> <li>• Conserve historic earthworks through avoidance of damaging agricultural activities such as infilling or levelling, tree planting, poaching by cattle, ploughing or tipping.</li> </ul>

## Sub-Type 8b Broad Valleys Guidelines

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Adjacent to the AONB		
Type	Sub Type	Guidelines
	<b>8b Broad Valleys</b>	<p><b>Development</b></p> <ul style="list-style-type: none"> <li>• Minimise the visual impact of recreational developments such as caravan sites.</li> <li>• Careful siting, restrictions on scale and a high standard of design and landscaping may achieve this.</li> <li>• Minimise the impact of infrastructure and housing development by careful siting, avoiding open valley floors, obstruction of corridor views and relating them to existing development. Set high standards of landscape treatment.</li> <li>• Maximise opportunities to create/enhance semi natural elements such as woodland and wetland in association with recreation developments such as golf courses.</li> <li>• Minimise developments impact on local character through ensuring design and scale respects the local vernacular and character particularly regarding the introduction of modern large-scale farm buildings.</li> <li>• Large scale wind energy schemes should avoid small enclosed valleys and valley tops where they could appear dominant.</li> <li>• Hydroelectric schemes should be sited and designed to be discrete elements in the landscape and not harm nature conservation interests.</li> <li>• Conserve and enhance traditional farm buildings and features particularly within a historic setting.</li> <li>• Encourage retention and restoration of stone gate posts, historical artefacts and features forming part of the cultural heritage.</li> <li>• Reduce the impact of large scale new buildings by careful location, siting and design.</li> <li>• Conserve and protect the character of historic stone built villages in their landscape settings.</li> <li>• Discourage fringe development in non-traditional materials that will affect the setting of the village particularly in its relationship with the River Eden.</li> </ul> <p><b>Access and Recreation</b></p> <ul style="list-style-type: none"> <li>• Public rights of way should be well maintained and quiet recreational areas and facilities should be improved and developed to be compatible with the pastoral character of this sub type.</li> <li>• Seek opportunities to enhance access to farmland through farm stewardship or other schemes.</li> <li>• Promote and enhance existing recreation routes by improving waymarking, providing appropriate surfacing, gates and gaps and interpretation.</li> </ul>

# A Landscape Strategy for Lancashire

## Type 12 Low Coastal Drumlins Recommendations

### LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT

#### Cumbria Landscape Character Guidance

##### Within the AONB

Type	Area	Recommendation
	<b>12a</b> Carnforth-Galgate-Cockerham <b>12b</b> Warton-Borwick <b>12c</b> Heysham-Overton	<p><b>Conserve the inter-drumlin wetlands</b></p> <ul style="list-style-type: none"> <li>• site sand and gravel quarries away from sensitive wetland sites</li> <li>• avoid drainage of wetlands for built development or highway improvements</li> </ul> <p><b>Conserve the pattern of discrete rural settlements</b></p> <ul style="list-style-type: none"> <li>• avoid ribbon development which will lead to the rural settlements amalgamation of adjacent dispersed settlements</li> <li>• planting may help to delineate boundaries of settlements</li> </ul> <p><b>Conserve the hedgerow and woodland network</b></p> <ul style="list-style-type: none"> <li>• avoid further fragmentation of the hedgerow network, designing built development around the existing landscape structure and designing planting to enhance structure and wildlife habitats</li> <li>• give priority to hedgerows which contribute to the characteristic hedgerow network and those adjacent to semi-natural grasslands</li> <li>• avoid amalgamation of fields which will erode the strong landscape pattern</li> <li>• conserve ancient semi-natural woodlands</li> </ul> <p><b>Enhance the number of rural landscape features</b></p> <ul style="list-style-type: none"> <li>• planting hedgerow trees and managing hedgerows for wildlife will enhance their status landscape features as features</li> <li>• new farm woodlands and copses should remain small in scale and enhance hill top copses as features of the landscape</li> <li>• creation of small field ponds may add to the diversity of the landscape and enhance the nature conservation value of the landscape</li> </ul> <p><b>Enhance settlements character of existing settlements</b></p> <ul style="list-style-type: none"> <li>• new built development which responds to the local vernacular will enhance the character of existing settlements character of existing settlements</li> <li>• design cues which are taken from the historic core of settlements (rather than the enveloping new development) will be more beneficial to the settlement's overall character</li> <li>• small scale planting may be used to screen unsightly developments and enhance visual amenity on urban fringes</li> </ul> <p><b>Restore sand and gravel quarries</b></p> <ul style="list-style-type: none"> <li>• former sand and gravel quarries should be restored to a mosaic of wetland habitats</li> </ul>

## Type 13 Drumlin Field Recommendations

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Adjacent to the AONB		
Type	Area	Recommendation
	<b>13a Gargrave Drumlin Field</b> <b>13b Bentham – Clapham</b> <b>13c Docker – Kellet - Lancaster</b>	<p><b>Conserve the distinctive rolling landform</b></p> <ul style="list-style-type: none"> <li>• minimise vertical elements, such as communication masts, to retain the uncluttered, open character of the landscape</li> <li>• shelter built development within the undulating landform - avoid ridgelines or hill tops</li> </ul>
		<p><b>Conserve the character of small woodlands</b></p> <ul style="list-style-type: none"> <li>• careful visual analysis should be undertaken before extending small scale mixed woodlands to large scale woodlands</li> <li>• opportunities for new planting should reflect existing scale and character, ensuring the survival of the characteristic hill top copses</li> </ul>
		<p><b>Conserve semi-natural habitats</b></p> <ul style="list-style-type: none"> <li>• conserve and restore inter-drumlin wetlands and semi-natural grasslands wherever these occur</li> <li>• conserve and restore ancient semi-natural woodlands</li> </ul>
		<p><b>Conserve characteristic settlement patterns</b></p> <ul style="list-style-type: none"> <li>• avoid ribbon development which may detract from the characteristic dispersed pattern of groups of buildings in a rural setting</li> <li>• ensure new development is associated with tree planting (of native trees) which links to the existing network of woods and hedgerows</li> <li>• restrict built development on the skyline of drumlins; buildings should be sited on the mid-slopes, above poorly drained land</li> </ul>
		<p><b>Conserve historic houses and designed parkland</b></p> <ul style="list-style-type: none"> <li>• preserve the settings to country houses, encouraging continued management of grounds as parkland</li> <li>• ensure entrances are not affected by road alterations or built development</li> <li>• avoid loss of integrity by division into multiple ownership and retain as permanent pasture</li> <li>• retain traditional parkland features such as railings, kissing gates and veteran trees</li> </ul>
		<p><b>Conserve field boundaries which give the landscape a strong pattern</b></p> <ul style="list-style-type: none"> <li>• maintain stone walls, particularly around clusters of buildings and settlements</li> <li>• planting up gaps in hedgerows will enhance the hedgerow network</li> <li>• plant hedgerow trees to promote their survival as valuable elements of the landscape</li> </ul>
		<p><b>Restore quarries to enhance landscape character</b></p> <ul style="list-style-type: none"> <li>• ensure quarry restoration has regard to landscape and biodiversity, as well as archaeological and cultural value</li> </ul>

## Type 18 Open Coastal Marsh Recommendations

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Area	Recommendation
	<p>18a Ribble Marshes</p> <p>18b Hest Bank – Silverdale Marshes</p> <p>18c Wyre Marshes</p> <p>18d Lune Marshes</p> <p>18e Pilling and Cockerham Marshes</p>	<p><b>Conserve valuable wildlife habitats</b></p> <ul style="list-style-type: none"> <li>• monitor and control levels of grazing on the Morecambe Bay saltmarshes</li> <li>• monitor and control discharges from local water courses to ensure the risk of</li> <li>• contamination and eutrophication is minimised</li> <li>• avoid further reclamation by landfilling, land raising and other activities</li> <li>• avoid further enclosures of salt marsh and ecologically insensitive flood defence works</li> <li>• conserve the plant communities on coastal clay cliffs</li> <li>• manage ditches and drainage channels to maximise wildlife benefits and maintain an appropriate balance between freshwater and saltwater</li> </ul> <p><b>Conserve the expansive landscape and tranquillity of the Open Coastal Marsh</b></p> <ul style="list-style-type: none"> <li>• keep built development and infrastructure to an absolute minimum</li> <li>• any built structure should be low and constructed to minimise visual impact in views across the marsh</li> <li>• avoid vertical structures, such as communication masts or telegraph poles</li> </ul> <p><b>Enhance coastal defences</b></p> <ul style="list-style-type: none"> <li>• manage the use of coastal defences for informal recreation which is compatible with wildlife conservation interest</li> <li>• wherever possible, consider 'soft' engineering options which will maximise benefits to wildlife habitats</li> </ul> <p><b>Enhance opportunities for informal recreation</b></p> <ul style="list-style-type: none"> <li>• improve interpretation facilities in relation to wildlife, natural and historic features, including the history of successive reclamation and coastal defences</li> <li>• ensure boardwalks and signed trails provide access to circular routes while avoiding the risk of erosion</li> <li>• deflect visitor pressure from the more sensitive nature conservation sites</li> <li>• site car parks away from sensitive coastal marsh habitats</li> </ul>

## Wooded Limestone Hills and Pavements Recommendations

LANDSCAPE CHARACTER GUIDANCE AND TOOLKIT		
Cumbria Landscape Character Guidance		
Within the AONB		
Type	Area	Recommendation
20a Arnsdale and Silverdale		<p><b>Conserve the diverse mosaic of habitats</b></p> <ul style="list-style-type: none"> <li>discourage the conversion of unimproved grazing to improved pasture and amenity grassland in order to maintain bio-diversity, particularly of the limestone grasslands, and prevent polluting run-off into adjacent areas</li> <li>discourage the drainage of wetland habitats and encourage the restoration and management of such features</li> <li>resist amalgamation of farms to conserve the scale of buildings and pastures</li> <li>avoid intensification of farming in specific areas and decline in others which would alter the balance, colour and texture of landcover and landscape elements</li> <li>conserve the integrity of all limestone pavements and other outcrops</li> </ul>
		<p><b>Conserve landscape condition and natural beauty</b></p> <ul style="list-style-type: none"> <li>promote the conservation and maintenance of hedgerows and walls, encouraging permanent agricultural workforce who undertake routine maintenance</li> <li>control erosion of sensitive landscapes, using signs and careful location of car parks/visitor facilities to direct visitors away from sensitive habitats</li> <li>visitor facilities and car parks should pay particular attention to siting and design, using local materials and avoiding urbanising elements</li> </ul>
		<p><b>Conserve traditional management techniques</b></p> <ul style="list-style-type: none"> <li>encourage management of diverse grassland meadows for hay crops rather than intensive silage production</li> <li>encourage conservation woodland management practices such as coppicing and pollarding</li> <li>encourage appropriate grazing management</li> </ul>
		<p><b>Conserve the character of the woodland and farmed landscapes</b></p> <ul style="list-style-type: none"> <li>conserve ancient semi-natural woodlands and encourage the management of small farm woodlands, giving priority to woodlands and hedgerows which provide links between semi-natural habitats</li> <li>control the rise in horse paddocks and try to maintain historic field boundaries rather than post and rail fences which are incongruous elements</li> </ul>
		<p><b>Conserve the traditional farming landscape</b></p> <ul style="list-style-type: none"> <li>support new and existing rural enterprises, particularly where these promote the continued viability of farms, that are in keeping with landscape character and quality, and are of particular benefit to the local economy</li> </ul>
		<p><b>Conserve characteristic woodland landscapes</b></p> <ul style="list-style-type: none"> <li>give priority to the conservation and enhancement of ancient semi-natural woodlands</li> </ul>
		<p><b>Restore landscape condition</b></p> <ul style="list-style-type: none"> <li>encourage the restoration of hedgerows and walls where they have been removed, and promote the conservation and restoration of ancient field patterns</li> </ul>
		<p><b>Restore redundant buildings</b></p> <ul style="list-style-type: none"> <li>encourage new uses for old or redundant farm buildings, paying particular attention to the scale, character and use of materials of existing farm buildings</li> </ul>
		<p><b>Restore redundant quarries</b></p> <ul style="list-style-type: none"> <li>manage redundant quarries in a sympathetic manner, having regard to their visual, wildlife, recreational, geological and historic interest. Many quarries present an opportunity for habitat creation, management for wildlife and for interpretation of historic and natural features</li> </ul>

## Lake District National Park Authority Landscape Character Assessment

Landscape Character Sub-Type	Specific Characteristics
<p><b>Sub-Type B2 – Coastal Mosses</b></p>	<p>Flat to undulating mosses (peat bogs or raised mires) have been formed by peat accumulation in alluvial or boulder clay basins, they rise up to three metres above surrounding levels. Formerly much more extensive, they have been reclaimed since the 12th century;</p> <p>Mosaic of moss, heath and willow carr or birch scrub woodland and pasture;</p> <p>Field shapes range from the small and irregular to undulating areas to large rectangular fields on flat mosses;</p> <p>Remnant patches of moss provide a rich note of interest in the rich agricultural landscapes which surround them; and</p> <p>Variety of moss plants is colourful and rough textured, contrasting with the monochrome smooth pasture fields.</p>
<p><b>Sub-Type M2 – Valley Floor with River Floodplain</b></p>	<p><b>Wide, predominantly flat valley floor and floodplain; and Broad or narrow river dominates landscape unless screened by trees.</b></p>

## Appendix 2 Policy Context

### The National Planning Policy Framework

The National Planning Policy Framework<sup>53</sup> (NPPF) was published on 27 March 2012, replacing a wide range of previous Planning Policy Statements (PPSs) and Planning Policy Guidance notes (PPGs).

A core principle of the NPPF (paragraph 17) is that the planning system should contribute to conserving and enhancing the natural environment.

The National Planning Policy Framework (NPPF) promotes at paragraph 14 "a presumption in favour of sustainable development". In relation to decision-making, paragraph 14 and footnote 9 nevertheless recognise Areas of Outstanding Natural Beauty (AONB) (amongst other designations) as an exception to the presumption in favour of development where "specific policies in this Framework indicate development should be restricted".

Alongside the statutory duty to conserve and enhance the natural beauty, wildlife and cultural heritage of Areas of Outstanding Natural Beauty<sup>54</sup>, the NPPF expresses Government policy in respect of landscape and National Parks in paragraphs 109, 115 and 116.

Paragraph 109 of the NPPF states that "The planning system should contribute to and enhance the natural and local environment by...protecting and enhancing valued landscapes".

Paragraph 115 states that, when considering development proposals, "great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status protection in relation to landscape and scenic beauty".

Paragraph 114 of the NPPF states that local planning authorities should "maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast, and improve public access to and enjoyment of the coast".

Paragraph 116 states that "planning permission should be refused for major developments in these designated areas except in exceptional circumstances and where it can be demonstrated they are in the public interest".

### National Planning Practice Guidance for the Natural Environment

The National Planning Practice Guidance (NPPG) was published on 6th March 2014 as a web-based resource. The guidance doesn't greatly change or streamline the information in the NPPF in relation to the natural environment, however the updated guidance does state that:

"where appropriate, landscape character assessments should be prepared to complement Natural England's National Character Area profiles".

### Adopted Core Strategies and Local Plans

**Policy CS8.2 Protection and enhancement of landscape and settlement character<sup>55</sup> of the South Lakeland Core Strategy 2010<sup>56</sup>** states that development proposals should be informed by and sympathetic to the distinctive landscape character types identified in the Cumbria Landscape Character Guidance and Toolkit; the Arnside and Silverdale AONB Management Plan; the Historic Landscape Character Assessment; the Arnside and Silverdale AONB Landscape and Seascape Assessment; and features identified in relevant settlement studies and local evidence. In addition, development proposals should demonstrate that their location, scale, and design will protect and conserve:

- "the special qualities of the environment associated with the nationally designated areas of the ...Arnside and Silverdale AONB including their settings;
- the special qualities and local distinctiveness of the area;
- distinctive settlement character;
- the pattern of distinctive features such as hedges, walls, traditional buildings, woodlands, hay meadows, wetlands, valleys, fells and rivers, and their function as ecological corridors for wildlife;
- the setting of, and views into and from the AONB, the National Parks, conservation areas and individual built/manmade features that contribute to landscape and settlement character such as St Anthony's Tower, Kendal Castle and Devil's Bridge in Kirkby Lonsdale".

<sup>53</sup> Department for Communities and Local Government, 2012. *National Planning Policy Framework*. London: The Stationery Office.

<sup>54</sup> National Parks and Access to the Countryside Act 1949; The Countryside and Rights of Way (CROW) Act 2000

<sup>55</sup> Policy CS8.2 supersedes **The South Lakeland Local Plan and Alternations (Final Composite Plan)** (2006) Policy C1 Arnside-Silverdale Area of Outstanding Natural Beauty

<sup>56</sup> South Lakeland District Council, 2010. *The South Lakeland Core Strategy*. South Lakeland: South Lakeland District Council

**Policy CS5** relates to the spatial strategy for 'The East (including Milnthorpe and Kirby Lonsdale)' and states that development proposals within or affecting the setting of the AONB should give high priority to:

- "The conservation and enhancement of the character of the landscape, including its historic dimensions.
- The protection and, where appropriate, enhancement of flora, fauna and geological features.
- Safeguarding these identified attributes from inappropriate change and development".

**Policy E1 of the Lancaster Core Strategy**<sup>57</sup> states that the Council will protect and enhance "nature conservation sites, urban greenspaces, allotments, landscapes of national importance, listed buildings, conservation areas and archaeological sites". **Policy E3 of the Lancaster District Local Plan**<sup>58</sup> expands on Policy E1 by stating that "development both within and adjacent to the... Arnside /Silverdale Areas of Outstanding Natural Beauty...which would either directly or indirectly have a significant effect upon the landscape quality, nature conservation interests or features of geological importance will not be permitted".

## Arnside & Silverdale AONB Development Plan Document

In order to plan in a consistent way across the Arnside & Silverdale AONB both in terms of the identification of sites and development management policies, South Lakeland District Council and Lancaster City Council are working on a joint **Arnside & Silverdale AONB Development Plan Document** (DPD). Preparation of the DPD is currently underway, and the councils are working towards adoption in 2017. The joint AONB DPD will complement the recently adopted AONB Management Plan 2014-2019. The DPD for the AONB will cover land allocations, development management guidance and design guidance.

## The South Lakeland Local Plan Land Allocations Development Plan Document

In December 2013, **the South Lakeland Local Plan Land Allocations Development Plan Document**<sup>59</sup> was adopted. It recognises that approximately 106 dwellings will be required in large villages ('local service centres'<sup>60</sup>) within the AONB by 2025. However, further work will be carried out as part of the Arnside & Silverdale AONB DPD to objectively assess housing need for the AONB as a whole.

## Arnside & Silverdale AONB Statutory Management Plan 2014-2019

The **Arnside and Silverdale AONB Management Plan 2014-2019**<sup>61</sup> has been produced by the Arnside and Silverdale AONB Partnership on behalf of the four responsible local authorities: Cumbria County Council, Lancashire County Council, Lancaster City Council, and South Lakeland District Council. The Arnside & Silverdale AONB Statutory Management Plan 2014-2019 sets out a framework for the future management and priorities of the AONB over the next 20 years. The aims of the Management Plan are to:

- conserve and enhance the natural beauty and special qualities of the AONB;
- promote and support sustainable agriculture, forestry and other rural industries;
- promote the social and economic wellbeing of people living within the AONB;
- increase public understanding and enjoyment of the AONB; and,
- meet the recreational needs of local residents and visitors - where these are compatible with the purpose of AONB designation.

## The Cumbria Landscape Character Guidance and Toolkit

The Cumbria Landscape Character Guidance and Toolkit<sup>62</sup>, published in 2011, was prepared jointly between the Cumbrian Local Planning Authorities<sup>63</sup>. The Cumbria Landscape Character Assessment defines, describes, and maps 13 landscape character types and 34 sub types. In relation to landscape character assessments for Areas of Outstanding Beauty the guidance states:

*"The landscape character assessments for the Areas of Outstanding Natural Beauty provide more local level detail on landscape character types within and adjacent to the AONB boundaries. They also identify unique landscape character areas and provide guidelines for managing change. These guidelines have been developed to build on the county level guidelines and provide more local level detail"* [para.1.19].

<sup>59</sup> South Lakeland District Council, 2013. *The South Lakeland Local Plan Land Allocations Development Plan Document (DPD)*. South Lakeland: South Lakeland District Council

<sup>60</sup> In the South Lakeland Core Strategy, Arnside and Sandside/Storth are identified as local service centres.

<sup>61</sup> Arnside and Silverdale AONB Partnership, 2014. *Arnside & Silverdale AONB Statutory Management Plan 2014-2019*. Arnside: Arnside and Silverdale AONB Partnership

<sup>62</sup> Cumbria County Council et al., 2011. *Cumbria Landscape Character Guidance and Toolkit*. Cumbria: Cumbria County Council.

<sup>63</sup> Cumbria County Council; Allerdale Borough Council; Barrow Borough Council; Carlisle City Council; Copeland Borough Council; Eden District Council; and South Lakeland District Council.

**Appendix 1** outlines guidelines for each landscape character type relevant to the AONB "to help encourage and plan action that will protect, manage, enhance, restore and create landscapes that will be able to change over time but still retain the characteristics that make them distinctive" [para. 3.2].

## A Landscape Strategy for Lancashire

A Landscape Strategy for Lancashire, published in 2000, comprises two separate reports, a Landscape Strategy<sup>64</sup> and a Landscape Character Assessment<sup>65</sup>. The Lancashire Landscape Character Assessment defines, describes, and maps 21 landscape character types and 81 landscape areas.

The recommendations for each landscape character type relevant to the AONB, as provided for in the Strategy, are outlined in **Appendix 1**.

## The Arnside & Silverdale AONB Special Qualities Report

The Arnside & Silverdale AONB Special Qualities Report<sup>66</sup>, published in May 2014, provides a definitive list of Special Qualities for and of the Arnside & Silverdale Area of Outstanding Natural Beauty. The special qualities of Arnside & Silverdale AONB are listed in **Appendix 1**.

## National Character Areas

As part of its responsibilities in delivering the Natural Environment White Paper, Biodiversity 2020 and the European Landscape Convention, Natural England revised the National Character Areas (NCAs). Natural England has divided the country into 159 NCAs, of which NCA 20 Morecambe Bay Limestones<sup>67</sup> encompasses the large majority of the AONB. The key characteristics of the Morecambe Bay Limestones National Character Area are outlined in **Appendix 1**.

Statements of Environmental Quality (SEOs) are suggested which offer guidance on critical issues within the NCA:

- **SEO 1:** Protect and enhance the extensive mosaic of high-quality limestone habitats, including pavement, woodland, scrub and grassland, to create a coherent and resilient ecological network, retain a sense of place and maintain the strong relationship between the landscape and its underlying geology.
- **SEO 2:** Ensure the long-term sustainable management of the nationally and internationally designated coastal zone by conserving and managing its habitats, including the extensive sand flats, salt marshes, estuarine landscapes and limestone cliffs, for their wildlife, strong sense of place, inspiration and tranquillity, their diverse range of species, their traditional fisheries, and for their ability to mitigate the effects of climate change through carbon sequestration and coastal flood mitigation.
- **SEO 3:** Ensure the long-term sustainable management of the nationally and internationally designated wetland landscape and its linking, non-designated, habitats by conserving and restoring the lowland raised bogs, fens, rivers and reedbeds for their strong sense of inspiration and tranquillity, their diverse range of species, and for their ability to mitigate the effects of climate change through carbon sequestration.
- **SEO 4:** Conserve and enhance the wider landscape of the NCA as the supporting framework to its distinctive attributes, including features of the drumlin landscape, the settlement character, orchards, recreational identity and heritage features, for their individual importance and the complementary role they play in supporting the local visitor economy and providing enjoyment and education to visitors and residents alike.

The predominant ecosystem services provided in the Morecambe Bay Limestones NCA are outlined in **Appendix 1**.

<sup>64</sup> Lancashire County Council, 2000. *A Landscape Strategy for Lancashire – Landscape Strategy*. Lancashire: Lancashire County Council.

<sup>65</sup> Lancashire County Council, 2000. *A Landscape Strategy for Lancashire – Landscape Character Assessment*. Lancashire: Lancashire County Council.

<sup>66</sup> Skelcher, G., 2014. *Arnside & Silverdale Area of Outstanding Natural Beauty Special Qualities Report* [pdf]. Available at: [http://www.arnsidesilverdaleaonb.org.uk/images/stories/pdfs/mp\\_specialqualitiesreport.pdf](http://www.arnsidesilverdaleaonb.org.uk/images/stories/pdfs/mp_specialqualitiesreport.pdf) [Accessed 04 July 2014]

<sup>67</sup> Natural England, 2013. *National Character Area profile: 20: Morecambe Bay Limestones* [pdf]. Available at: <http://publications.naturalengland.org.uk/file/5996870786613248> [Accessed 04 July 2014]

## Arnside and Silverdale AONB Historic Designed Landscape Research Report

The Arnside and Silverdale AONB Historic Designed Landscape Research Report<sup>68</sup> published in 2013, on behalf of Lancashire City Council and the AONB Partnership details the historic designed landscapes within the Arnside and Silverdale AONB. The report builds on the study undertaken by Bennis and Dyke in 1998 entitled Historic Designed Landscapes of Lancashire, Research Report.

Dallam is the only designated historic landscape within the AONB and is listed on English Heritage's National Register of Parks and Gardens (<http://www.english-heritage.org.uk/caring/listing/registered-parks-and-gardens/>).

The study covers 63 sites within the AONB, and categorises each site according to its level of historic importance. Twenty-eight validation forms were prepared, however some sites were considered to be too insignificant to justify a form, while others have been grouped together due to location, period of design, and overall impact.

Eleven sites are categorised as Level A sites which are those of exceptional interest and quality. These are regionally significant and in some cases may be considered to be of international or national importance. Nine sites are classified as Level B sites which are particularly important and of county and regional significance, and 7 sites are within category Level C which are of local special interest.

Six sites are classified as being of exceptional interest and quality (Level A): Ashton (Beetham), Bleasdale House (Silverdale), Hazlewood (Silverdale), The Hyning (Warton), Leighton Hall (Carnforth) and Ridgeway Park (Silverdale). These sites compare favourably with those on English Heritage's National Register of Parks and Gardens. The other five sites within the Level A category are also exceptional and are nationally/regionally significant: Ash Meadow (Arnside), Beachwood (Arnside), Challan Hall (Silverdale), Cove House (Silverdale), and Woodlands (Silverdale).

Nine validation forms were completed for sites categorised as Level B, however, it contains approximately 35 sites in total due to group value. Sites within Level B include The Promenade (Arnside), High Knott Road (Arnside), and Cove Road (Silverdale) which are extremely important in providing strong visual features in the landscape and are significant contributors to regional and local identity. Individual properties such as Hillcrest (Silverdale) and Oakfield Lodge (Arnside) are exceptional examples of late 19th and early 20th century garden design. Other sites categorised as Level B are Yealand Manor (Yealand Conyers), Wood Close (Arnside), Windyridge (Silverdale), and St Oswald's Vicarage (Warton).

Sites categorised as Level C have gardens which are valuable in enhancing local character and identity. Sites include The Birks (Arnside), Friend's Meeting House (Yealand), Mount Lindeth (Silverdale), Stankelt Road (Silverdale), The Shieling (Silverdale), The Tower (Silverdale), and West Lindeth (Silverdale).

Stoneycroft (Arnside) has been recorded however it is designated as 'not rated'. It is an example of where much of the original landscape has been lost to later development and the site is a primary example of a villa that has lost its setting and context.

## Conservation Area Appraisals

Within the Arnside and Silverdale AONB, three village Conservation Areas have been identified for their built heritage value, namely Beetham, Warton and the Yealands, with up to date Conservation Area Appraisals now in place for both Beetham and Warton.

## England Coast Path

The Marine and Coastal Access Act 2009 enables the creation of an England Coast Path, a continuous, signed and managed route around the coast plus areas of spreading room. It is anticipated that work on the England Coast Path which will pass through the Arnside and Silverdale AONB will commence in 2015/2016<sup>69</sup>.

<sup>68</sup> Barker, S., Bennis, E., Breeton, S., Neil, N., Riley, J., Taylor, E., & Thurnhill, R., 2013. *A local list of Lancashire's Unregistered Historic Designed Landscapes* [pdf]. Available at: <http://www.lancsgt.org.uk/llr4.613.pdf> [Accessed 06 July 2014]

<sup>69</sup> Natural England, 2014. Coastal Access [online]. Available at: <http://www.naturalengland.org.uk/ourwork/access/coastalaccess/default.aspx#map> [Accessed 11 July 2014]

## RDPE and CAP

The Rural Development Programme for England (RDPE) 2007-2013 provided funding for Environmental Stewardship, an agri-environment scheme that supports farmers and other land managers in England to deliver effective environmental management of their land. Arrangements for a 'transition' year between the end of the current Rural Development Programme and the start of the next in 2015 are underway.

Political agreement on the future Common Agricultural Policy (CAP) has now been reached at a European level, although the final agreement still needs to be formally adopted by the European Parliament and by the Agriculture Council. Nationally, work is being carried out on the design for a successor to the current RDPE (2007-2013) and the design of a new environmental land management scheme.

## The Cumbria Wind Energy Supplementary Planning Document

Paragraph 1.16 of the **Cumbria Wind Energy Supplementary Planning Document Part 1**<sup>70</sup> states that developments within AONBs "have to show that their scale, form, design, materials and cumulative impacts can be satisfactorily assimilated into the landscape or built environment and wouldn't harm their appearance. They must also be shown not to impact on the local community, economy, nature conservation or historic interests. In these areas wind schemes requiring more than one turbine or a turbine with a ground to hub height of 25 meters or more is unlikely to be acceptable".

**Cumbria Wind Energy Supplementary Planning Document Part 2**<sup>71</sup> identifies the following landscape character types for the Arnside and Silverdale AONB:

Landscape Character Type	Importance
<b>Landscape Character Type 1: Estuary and Marsh</b> Part of 1a Intertidal Flats and 1b Coastal Marsh at head of Kent Estuary in Morecambe Bay	National Importance: Conservation and enhancement of natural beauty attributable to its: scenic qualities including the distinctiveness of its Carboniferous limestone; mosaic of contrasting landscape character types; dramatic views over Morecambe Bay; wildlife resources; cultural, archaeological and historic heritage; intimate scale and tranquillity.
<b>Landscape Character Type 3: Coastal Limestone</b> All of sub type 3b Wooded Hills and Pavements	

Particular sensitivities in relation to Landscape Character Type 1: Estuary and Marsh include:

*"contribution to tranquil and picturesque compositions with fells in the Lake District NP and limestone hills of the Arnside and Silverdale AONB around the southern estuaries". [p 42]*

Particular sensitivities in relation to Landscape Character Type 3: Coastal Limestone include:

- *"contribution of the open pavements and farmland to picturesque compositions between the Lake District NP and the Arnside and Silverdale AONB across the Kent Estuary visible from popular public viewpoints such as Hampsfell, Scout Scar and Arnside Knott and coastal edge of the AONB*
- *open prospects across the coastal plain between the eastern side of the Arnside and Silverdale AONB and Farleton Fell and from the Limestone Link recreation route between them*
- *contribution of the open pavements and farmland to picturesque coastal limestone landscapes which extend south from within the Lake District NP and to dramatic contrasts between the imposing limestone escarpments and flat drained mosslands around the Kent and Lyth valleys as viewed from the major A590 and A591 'gateways'". [p. 48]*

<sup>70</sup> Cumbria County Council et al., 2007. *Cumbria Wind Energy Supplementary Planning Document – Supporting the Local Development Frameworks of Cumbria – General Planning Guidance*. Cumbria: Cumbria County Council.

<sup>71</sup> Cumbria County Council et al., 2007. *Cumbria Wind Energy Supplementary Planning Document – Supporting the Local Development Frameworks of Cumbria – Landscape and Visual Considerations*. Cumbria: Cumbria County Council.

## Shoreline Management Plan 2

The publication of the **Shoreline Management Plan 2**<sup>72</sup> (SMP2) by the North West England and North Wales Coastal Group covers the coastline from Great Orme's Head in Wales to the Scottish Border on the Solway Firth. It provides a framework for sustainable future coastline management around Morecambe Bay. The Arnsdale and Silverdale AONB forms part of 'sub-cell 11c' which runs from Rossall Point to Hodbarrow Point.

The objectives of the SMP2 are to:

- set out the risks from flooding and erosion to people and the developed, historic and natural environment within the SMP2 area;
- identify opportunities to maintain and improve the environment by managing the risks from floods and coastal erosion;
- identify the preferred policies for managing risks from floods and erosion over the next century;
- identify the consequences of putting the preferred policies into practice;
- set out procedures for monitoring how effective these policies are;
- inform others so that future land use, planning and development of the shoreline takes account of the risks and the preferred policies;
- discourage inappropriate development in areas where the flood and erosion risks are high;
- meet international and national nature conservation legislation and aim to achieve the biodiversity objectives; and,
- highlight areas where there are gaps in knowledge about the coast and produce an action plan to address these gaps.

## Cumulative Impact of Vertical Infrastructure

The Cumulative Impact of Vertical Infrastructure (CIVI) is recognised as an increasingly relevant issue in parts of Cumbria and Lancashire. In response, Cumbria County Council, in partnership with Lancashire County Council, Allerdale Borough Council, Carlisle City Council and the Lake District National Park Authority, undertook work to objectively assess the impact. The results of this work are published on Cumbria County Council's website<sup>73</sup> and include an assessment of the cumulative effects of vertical infrastructure and guidance on using the assessment and applying it in practice to new proposals for developments with vertical elements.

The CIVI work seeks to:

- Assess how existing and proposed developments involving the introduction of vertical elements into the landscape are resulting in cumulative effects on landscape character and visual amenity.
- Identify the degree to which cumulative effects of vertical infrastructure developments upon landscape character may be considered a constraint on further such developments.
- Provide evidence base to support local policy.

<sup>72</sup> Halcrow, 2010. *North West England and North Wales Shoreline Management Plan SMP2*. Report prepared by Halcrow Group Ltd for the North West and North Wales Coastal Group [pdf]. Available at: <https://www.gov.uk/government/publications/shoreline-management-plans-smpls/shoreline-management-plans-smpls> [Accessed 09 July 2014]

<sup>73</sup> Cumulative Impact of Vertical Infrastructure, Cumbria County Council, October 2014 <http://www.cumbria.gov.uk/planning-environment/countryside/countryside-landscape/civi/civi.asp>

## Appendix 3 Survey Sheet Example

### **VOLUNTEERS FIELD SURVEY FORM - Arnside and Silverdale Landscape and Seascape Character Assessment**

**NAME**.....**ORGANISATION** .....**DATE** .....

**WEATHER** .....**TIME**.....

**SURVEY LOCATION**.....  
.....

<b>DRAFT LANDSCAPE/ SEASCAPE CHARACTER TYPE</b> (see map):
<b>DRAFT LANDSCAPE/ SEASCAPE CHARACTER AREA</b> (see map):

**PHOTOGRAPHS (also mark location on a map)**

Grid Ref	Location	Direction/ Notes

**Note words and phrases which describe the features and character of the landscape/ the sea/ and views in the area - what do you like/dislike about the landscape/sea?**

**Natural features**.....  
.....  
.....

**Man made features**.....  
.....  
.....

**Historic features**.....  
.....  
.....

**Views**.....  
.....  
.....

**Note if they are in good/reasonable or poor condition (maintained/ getting better or getting worse/ neglected):**

**Natural features**.....  
.....

**Man made features**.....  
.....

**Historic features**.....  
.....

**Views (attractive/unattractive)**  
.....  
.....

**PHYSICAL INFLUENCES - GEOLOGY AND SOILS (tick as appropriate)**

**Rock**

- Limestone
- Shale
- 
- 

**Soils**

- Sand/gravel/silt
- Peaty soil
- Clay soil
- Mud/sand in estuary

**Land Forms and Features**

- Limestone pavement
- Drumlins/low rounded hills

**ELEVATION - LAND AND SEA (tick as appropriate)**

- Sea level (0m)
- Flats (< 10m)
- Lowland (10- 50m)
- Low hills (over 75m)

**LANDFORM/ SEASCAPE**

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Flat    | <input type="checkbox"/> Floodplain |
| <input type="checkbox"/> Rolling | <input type="checkbox"/> Slopes     |
| <input type="checkbox"/> Hills   | <input type="checkbox"/> Cliffs     |

**Other.....**

- |   |   |
|---|---|
| <input type="checkbox"/> Shallow valley | <input type="checkbox"/> Flat sands/ mudflats |
| <input type="checkbox"/> Flat mosses    | <input type="checkbox"/> Flat salt marsh      |
| <input type="checkbox"/>                | <input type="checkbox"/>                      |

**WATER FEATURES**

- |   |                                  |                                      |                                      |
|---|----------------------------------|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> Rivers/streams | <input type="checkbox"/> Ditches | <input type="checkbox"/> Lakes/ponds | <input type="checkbox"/> Bogs/mosses |
|---|----------------------------------|--------------------------------------|--------------------------------------|

**VISIBLE FEATURES** Tick if present. Make note if seen in another area beyond.

**Communications**

- Main road
- Rural road/lanes
- Tracks
- Railway/station
- Bridleway/footpath
- Cycleway

**Buildings**

- Farm buildings
- Hall/parkland
- Tower
- Chimney
- Ruins
- Church

**Settlement/Industrial**

- Suburb/town edge
- Village/hamlet
- Quarry
- Caravan/campsite
- Wind farms
- Masts/poles

**Other**

- Hill Forts
- Ridge and furrow
- Historic field boundary.
- Nature reserve
- Bird reserve
- Car park

**LAND USE/LAND/VEGETATION COVER** (including the sea). Tick if present. Make a note on the form if seen in another area beyond.

**Land use**

- Rough grazing
- Permanent pasture
- Flood meadow
- Arable
- Paddocks
- Historic parkland
- Heathland
- Wetland /moss
- Saltmarsh
- Mudflats

**Woodland**

- Deciduous woods
- Yew in woods
- Wind bent trees
- Coppiced woods
- Scrub
- Orchard
- Parkland trees
- Tree avenues
- Scattered trees
- Belt/copse of trees

**Settlement**

- Houses
- Bungalows
- Recreational**
- Fishing
- Golf course
- Campsite/caravan
- Holiday camp
- Swimming pool
- Car park
- Visitor centre

**Commercial**

- Farms
- Industrial units
- Active quarry
- Disused quarry
- Plant nursery
- Shops
- Workshops
- Residential care

**Anything else?** .....

**FIELD PATTERNS AND BOUNDARIES** Tick if present. Make a note on the form if seen in another area beyond.

<b>Rural boundaries</b>	<b>Settlement boundaries</b>	<b>Field shape</b>	<b>Field size</b>
<input type="checkbox"/> Narrow fields	<input type="checkbox"/> Walls –mortared	<input type="checkbox"/> Geometric	<input type="checkbox"/> Small
<input type="checkbox"/> Ditches/drains	<input type="checkbox"/> Fence – post & wire	<input type="checkbox"/> Irregular	<input type="checkbox"/> Medium
<input type="checkbox"/> Walls – dry stone	<input type="checkbox"/> Railing	<input type="checkbox"/> Unenclosed	<input type="checkbox"/> Large
<input type="checkbox"/> Hedges	<input type="checkbox"/> Hedges - ornamental	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Fences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SETTLEMENT WITHIN THE LANDSCAPE** Tick if present. Make a note on the form if seen in another area beyond.

<b>Pattern</b>	<b>Density</b>	<b>Materials/style</b>	<b>Era/age/style</b>
<input type="checkbox"/> Linear	<input type="checkbox"/> Dense	<input type="checkbox"/> Stone walls	<input type="checkbox"/> Traditional/old
<input type="checkbox"/> Dispersed	<input type="checkbox"/> Low density	<input type="checkbox"/> Render walls	<input type="checkbox"/> Georgian/Victorian
<input type="checkbox"/> Compact	<input type="checkbox"/>	<input type="checkbox"/> State roof	<input type="checkbox"/> Post war/Modern

**Relationship of settlement to the landscape and sea** (e.g. note if facing onto estuary, down the slope etc.)

.....

**PERCEPTIONS AND FEELINGS THE LANDSCAPE GIVES YOU**

Circle the words that best sum up the ‘nature’ and ‘feel’ of the landscape in your eyes

LANDFORM	Vertical/ sloping/angular/ rolling/ straight Straight/ angular/ curved/ sinuous
GRAIN	Strong orientation of landform/apparent/weak/none
LANDSCAPE SCALE	Intimate/ small/ large/ vast
ENCLOSURE	Tight/ enclosed/ open/ exposed
DIVERSITY	Unified/ simple/ diverse/ complex
TEXTURE	Smooth/ textured/ rough/ very rough
COLOUR	Natural/ colourful/ garish (clashing)
BALANCE	Harmonious/ balanced/ discordant/ chaotic
MOVEMENT	Dead/ still/ calm/ busy
PATTERN	Random/ organised regular/ formal
TRANQUILLITY	Silent/ peaceful/ noisy/ disturbed
NATURALNESS/WILDNESS	Wild/natural/tamed/man modified
HISTORIC FEATURES	Lots/a few/none
NATURAL FEATURES	Lots/a few/none
SCENIC BEAUTY	Beautiful landscape/attractive/dull/boring/ugly/spoilt
ARTIFICIAL LIGHTING	Absent/ apparent/ evident/ dominant
NUMBERS OF PEOPLE	Few/ localised/ dense/ everywhere
HUMAN EFFECTS	None/ limited/ widespread/ continuous

**Note any other words to describe how the landscape feels to you?**

.....  
 .....  
 .....

**VIEWS - where can you see to? Do any particular areas or features stand out in the view?**

.....  
.....  
.....

**WHAT CHANGES HAVE YOU NOTICED IN THIS LANDSCAPE SINCE YOU HAVE WORKED HERE/ LIVED HERE OR VISITED IT?**

**Natural factors** (e.g. how have woodlands/habitats/salt marshes etc changed):

.....  
.....  
.....

**Human factors** (e.g. how have land (including quarries)/sea use, settlement, field boundaries, historic features changed):

.....  
.....  
.....

**Other factors including views** (e.g. how have naturalness, openness, wildness, tranquillity (note changes in traffic), and the views changed):

.....  
.....  
.....

**What can you see now which you could not see before?** (e.g. how have views changed, note from where and to where):

.....  
.....  
.....

**KEY ISSUES/ PRESSURES AFFECTING THE AREA**

**Visible past changes** (note past development, past management etc.):

.....  
.....  
.....

**Visible present change** (note any recent development and changes due to changes in management (e.g. neglect) etc.):

.....  
.....  
.....

.....  
**WHAT DO YOU WANT THIS LANDSCAPE TO BE AND TO LOOK LIKE IN THE FUTURE?**  
.....

**What would you like to keep the way it is?.....**  
.....  
.....

**What would you like to change and how?.....**  
.....  
.....

**WHAT IN YOUR OPINION DOES THIS LANDSCAPE NEED TO KEEP IT OR TO MAKE IT THE WAY YOU WOULD LIKE TO SEE IT?** (note any aspirations or needs, including maintenance)  
.....  
.....

**What should be restored or repaired** (list any specifics apparent to you e.g. restore elements of degraded landscapes/dead vegetation/derelict buildings/convert drained areas to wetlands):  
.....  
.....

**DO YOU HAVE ANY OTHER COMMENTS REGARDING ISSUES IN THIS AREA?**  
.....  
.....

**What do you like about the area.....**  
.....  
.....

**What do you dislike about the area.....**  
.....  
.....  
.....

# Appendix 4 Landscape/Seascape Condition and Sensitivity Assessment Methodology

## Landscape/Seascape Condition

Landscape/Seascape condition is a term based on judgements about the physical state of the landscape/seascape, and about its intactness, from visual, functional and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place.

An assessment of any landscape/seascape's ability to accommodate change without compromising its key characteristics requires an analysis of the overall quality/condition, i.e. the integrity, robustness or condition of elements which contribute to landscape character.

The following factors were considered during desk and field study for each Landscape/Seascape Character Type:

- Age structure and robustness of tree cover.
- Extent of semi-natural habitat survival.
- State of key coastal features, e.g. salt marsh, cliffs
- Survival of cultural pattern, e.g. field boundaries, patterns of village development, intactness of historic features.
- Impact of land use change, e.g. loss of greenspace due to urban sprawl, loss of features due to changing agricultural methods.

The evaluation of landscape/seascape condition culminates in an assessment of overall condition ranging from poor to moderate to good. This information is then used to identify areas with good landscape condition which should be conserved and those with poor condition where positive change should be encouraged.

## Landscape and Seascape Sensitivity Assessment

### Methodology

The analysis of Arnside & Silverdale AONB's landscape/seascape sensitivity has involved professional judgement informed by good practice. The judgements made recognise that landscape sensitivity is essentially a function of two key elements:

- a) the landscape/seascape as a whole, in terms of its overall character, its quality and condition, the aesthetic aspects of its character, and also the sensitivity of individual elements.
- b) the landscape's/seascape's general visibility and the potential scope to mitigate the visual effects of any change that might take place. Visibility is affected by climate, landform and the presence of potentially screening land cover, especially trees, woodland and buildings. It will also be a reflection of the numbers of people who are likely to perceive the landscape and any changes that occur in it, whether they are residents or visitors.

The judgements made on landscape/seascape sensitivity are not absolute since they have been based on the relatively broad-brush 'District level' analysis undertaken at 1:25,000 scale for this Study. The level of sensitivity across a Landscape/Seascape Character Type can vary, particularly at a more localised local level due to topographical, ecological and cultural factors. It must also be borne in mind that the sensitivity of a particular Character Type to change or development varies. Therefore, it must be recognised that the judgements made for this Study are indicative of overall inherent sensitivity only. Detailed landscape sensitivity assessments for specific types of development were considered to be beyond the scope of this Study.

In recognition of the broad-brush level of the study, it should be noted that an identification of high landscape sensitivity for a particular Character Type does not necessarily rule out all forms of development in that area. High sensitivity indicates that the characteristics of that landscape/seascape will generally be such that development would not be appropriate. There may be areas where the absence of key features or exceptional combinations of features result in a locally lower level of sensitivity which may permit some forms of development. Similarly, a finding of lower sensitivity does not infer that all of the Landscape/Seascape Character Type concerned will be equally appropriate for development.

**This broad brush assessment of sensitivity should not replace a comprehensive on-site investigation and analysis in respect of any development proposal within Arnside & Silverdale AONB.**

Informed by the guidance referred to above, a set of criteria was produced to determine the sensitivity of Arnside & Silverdale AONB's Landscape/Seascape Character Types.

The following criteria were used:

**1. Landscape/Seascape Sensitivity**

**a) Natural/Geological Factors**

- Vegetation types
- Tree cover type/pattern
- Extent and pattern of semi-natural habitat
- Coastal topography/form/pattern

**b) Cultural Factors**

- Land use
- Settlement
- Enclosure
- Time depth

**c) Landscape Quality/Condition**

- Intactness
- Representation of typical Character
- State of repair of individual elements

**d) Aesthetic Factors**

- Scale
- Wild/remote/isolated
- Complexity
- Texture
- Pattern
- Colour
- Form/Line
- Balance
- Movement

## 2. Visual Sensitivity

### a) General visibility

- Land form influences
- Tree and woodland cover

### b) Population

- Numbers and types of residents
- Numbers and types of visitors

### c) Mitigation Potential

- Scope for mitigating potential visual impacts

Following a Desktop and field based analysis of the Arnside & Silverdale AONB Landscape/Seascape Character Types using the methodology and criteria referred to above, judgements have been made on the level of overall sensitivity of each Type, e.g. High, Moderate – High, Moderate, Moderate – Low and Low.

**Any Landscape/Seascape Character Types judged to have a Moderate and above level of overall inherent sensitivity is deemed to be vulnerable to the effects of development and great care should be exercised when considering development proposals within them.**

# Appendix 5 Glossary of Terms

## Area of Outstanding Natural Beauty – AONB

Natural England, the body responsible for designating Areas of Outstanding Natural Beauty (AONBs) define them as “*areas of high scenic quality that have statutory protection in order to conserve and enhance the natural beauty of their landscapes*”<sup>75</sup>. There are currently 33 AONB designations within England.

## Bathymetric

The depth of a body of water and its measurement (bathymetry). Maps showing depths of water above the floor use lines of equal depth (isobaths) in a similar way to contours on a land surface.

## Ecosystem Services

These are services provided by the natural environment, that benefit people, e.g. food, fibre and fuel provision, regulation of the climate, purification of the air and water, flood protection, soil formation and nutrient recycling<sup>76</sup>.

## Geographical Information System (GIS)

A system that captures, stores, analyses, manages and presents data linked to location. It links spatial information to a database.

## Historic Designed Landscape – HDL

Any pre late twentieth century landscape of historic significance which was created with a clear intention to alter or manipulate landscape features for specific aesthetic and/or functional purposes.

## Historic Landscape Characterisation - HLC

Historic landscape characterisation and historic land use assessment is the identification and interpretation of the historic dimension of the present day landscape or townscape within a given area. It is term given to a range of approaches that have been developed to contribute to a rounded understanding of place.

## Key Characteristics

The combination of elements which create a landscape’s character and help to give an area its particularly distinctive sense of place.

## Landscape

An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.

## Landscape Capacity

The degree to which a particular landscape character type or area is able to accommodate a certain amount of change without unacceptable adverse effects on its character. Capacity varies according to the type and nature of the change being proposed.

## Landscape Character

Landscape character is created by distinct and recognisable patterns of elements that occur consistently in a landscape. These patterns are created by combinations of geology, landform, soils, vegetation, land use and human settlement. It is landscape character which creates the locally distinctive ‘sense of place’ that different areas have.

## Landscape Character Areas

These are single unique areas which are the discrete geographical areas of a particular landscape type. Each has its own individual character and identity, even though it shares the same generic characteristics with other types.

<sup>75</sup> Natural England, 2014. *Areas of Outstanding Natural Beauty* [website]. Available at: <http://www.naturalengland.org.uk/ourwork/conservation/designatedareas/aonb/default.aspx> [Accessed 06 August 2014].

<sup>76</sup> Department for Environment Food & Rural Affairs 2007. An introductory guide to valuing Ecosystem services.

## **Landscape Character Assessment – LCA**

An established technique used to identify, understand, classify and describe the character of a landscape in a consistent and essentially objective way. Within the current national Landscape Character Assessment Guidance<sup>77</sup>, the purposes of LCAs are defined as a means to *"help us to understand, and articulate, the character of the landscape. It helps us identify the features that give a locality its 'sense of place'"*.

LCA uses statistical analysis and an application of structured landscape assessment methodologies. LCAs are carried out at different scales, providing more detailed descriptions and analysis at a local level but always within the framework of National Character Areas (see below).

## **Landscape Character Types**

These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern.

## **Landscape Condition**

The physical state of the landscape based on the intactness of its features. It also reflects the state of repair of individual features and elements which make up the character in any one place.

## **Landscape Effects**

Change in the elements, characteristics, character, and qualities of the landscape as a result of natural processes and/or man-made development.

## **Landscape Elements**

The natural and man-made components of the landscape, e.g. trees, woodland, ponds, roads and buildings.

## **Landscape Features**

Prominent eye-catching elements, e.g. wooded hill tops, and church spires, drumlin hills, scarp slopes, dramatic landscape topography.

## **Landscape Patterns**

Patterns are formed from the combination of landscape elements, e.g. hedgerows, field boundary walls and stream patterns.

## **Landscape Quality**

A term used to describe the aesthetic or perceptual and intangible characteristics of the landscape such as scenic quality, tranquillity, sense of wildness or remoteness. Cultural and artistic references may also be described here.

## **Landscape Sensitivity**

The degree to which the landscape is robust, in that it is able to accommodate change without adverse impacts on its key environmental features and views.

## **Landscape Value**

The relative value or importance attached to a landscape or view (often as a basis for designation or recognition), which expresses national or local consensus, because of its quality, scenic beauty, cultural associations or other conservation issues. A given designation does not imply value across the whole of the designated area, or that there are not similarly high quality landscapes elsewhere – it reflects areas which have been recognised by people and where protection is enforced through policy

## **Mitigation**

Measures including any process, activity, or design to avoid, reduce, remedy or compensate for the adverse environmental effects of development proposals. This can include measures embedded in the proposal itself, e.g. avoiding sensitive areas, use of local building materials and vernacular or additional mitigation measures such as earth mounding or screen planting.

<sup>77</sup> Countryside Agency and Scottish Natural Heritage, 2002. *Landscape Character Assessment: Guidance for England and Scotland* [pdf]. Available at: <http://publications.naturalengland.org.uk/file/2672917> [Accessed 06 August 2014].

## **National Character Areas**

At a national level, England has been divided into areas with similar landscape character - National Character Areas (NCAs). These NCAs provide the terms of reference for finer grained Landscape Character Assessment such as the Arnside and Silverdale AONB Landscape Character Assessment. Further information on England's NCAs is available at <http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx>

## **National Parks**

Extensive designated areas of countryside which have statutory protection to conserve and enhance their natural beauty, wildlife and cultural heritage and to promote opportunities for the public understanding and enjoyment of their special qualities.

## **Protected Landscape**

Areas deemed to be of particular landscape value are usually designated as protected landscapes including National Parks and Areas of Outstanding Natural Beauty (England).

## **Seascape**

An area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land with sea, by natural and/or human factors.

## **Seascape Character**

Seascape character is created by distinct and recognisable patterns of elements that occur consistently in marine areas. These patterns are created by the actions and interactions of land with sea, by natural and/or human factors. It is seascape character which creates the locally distinctive 'sense of place' that different areas of sea and coastline have.

## **Seascape Character Area**

These are single unique geographical areas of a particular seascape character type. Each has its own individual character and identity, even though it shares the same generic characteristics with other seascape character areas of the same type.

## **Seascape Character Type**

These are distinct types of seascape that are relatively homogeneous in character. They are generic in nature in that they may occur in different locations but wherever they occur, they share broadly similar combinations of geology, bathymetry, ecology, human influences and perceptual and aesthetic attributes.

## **Seaward Limits (of a Seascape Character Assessment)**

The distance out to sea that the Seascape Character Assessment will extend. A seascape character assessment does not necessarily rely on there being a coastal component as part of the study area, and as such a study area can be entirely out at sea.

## **Sense of Place (genius loci)**

The essential character and spirit of an area: genius loci literally means 'spirit of the place'.

## **Time depth**

The 'imprint' of the past on the present day landscape as a result of long term interaction between human activity and natural processes. Time depth enhances our appreciation of how landscapes have changed through time or survived through continuity.