

Adam Donaldson

Arnside & Silverdale

Area of Outstanding Natural Beauty

Statutory Management Plan 2014 - 2019

Ministerial Foreword



Areas of Outstanding Natural Beauty (AONBs) are some of our finest landscapes. They are cherished by residents and visitors alike and allow millions of people from all walks of life to understand and connect with nature.

I am pleased to see that this management plan demonstrates how AONB Partnerships can continue to protect these precious environments despite the significant challenges they face. With a changing climate, the increasing demands of a growing population and in difficult economic times, I believe AONBs represent just the

sort of community-driven, collaborative approach needed to ensure our natural environment is maintained for generations to come.

AONB Partnerships have been the architects of a landscape-scale approach to land management. This approach is a key feature of the Government's Natural Environment White Paper and emphasises the need to manage ecosystems in an integrated fashion, linking goals on wildlife, water, soil and landscape, and working at a scale that respects natural systems.

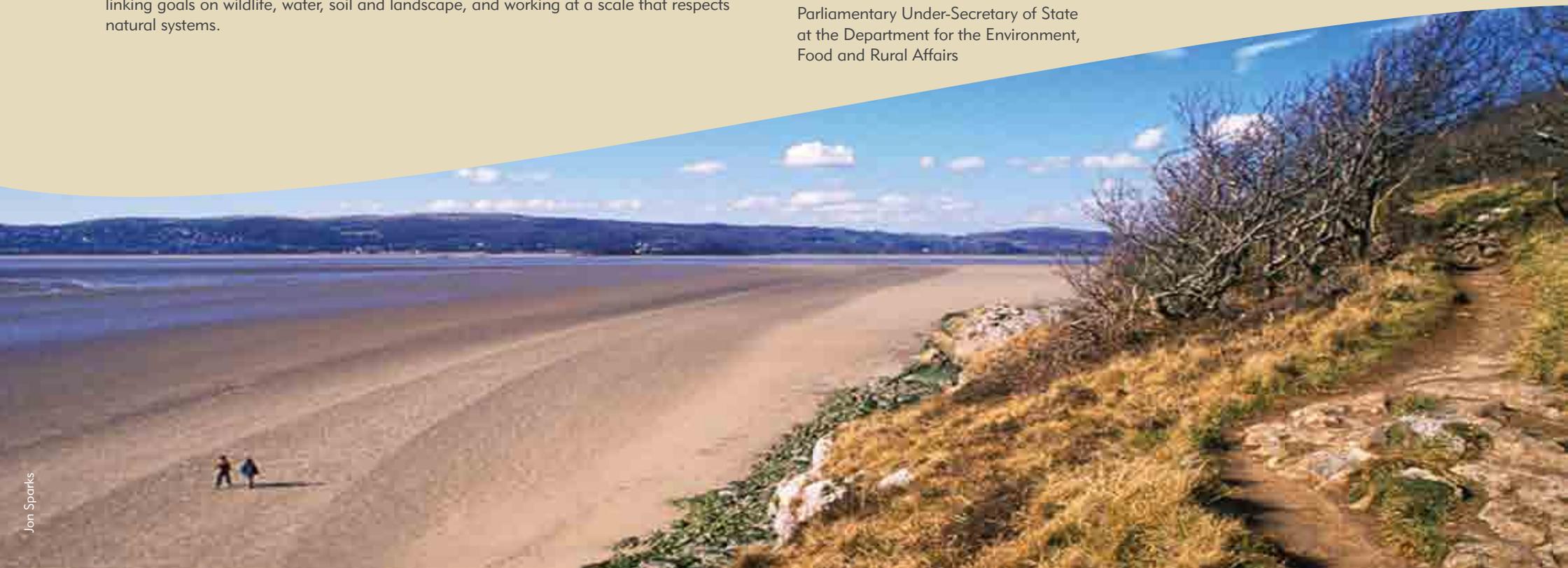
This management plan also makes the important connection between people and nature. I am pleased to hear that local communities have been central to the development of the plan, and will be at the heart of its delivery. From volunteers on nature conservation projects, to businesses working to promote sustainable tourism, it's great to hear of the enthusiasm and commitment of the local people who hold their AONBs so dear.

AONBs are, and will continue to be, landscapes of change. Management plans such as this are vital in ensuring these changes are for the better. I would like to thank all those who were involved in bringing this plan together and I wish you every success in bringing it to fruition.

A handwritten signature in black ink that reads "Rupert de Mauley". The signature is written in a cursive, flowing style.

Lord de Mauley

Parliamentary Under-Secretary of State
at the Department for the Environment,
Food and Rural Affairs





Chairman's Foreword



The Arnside & Silverdale Area of Outstanding Beauty is an extraordinary place, recognised for its amazing diversity of habitats, and of plants, birds and butterflies. The stunning limestone pavements, ancient woodlands, intimate orchards and meadows and an impressive coastline make this area one of England's finest landscapes.

The area's future is dependent on people working together to conserve and enhance it. This Management Plan sets out how the AONB Partnership will do this over the next five years and builds on previous significant achievements in caring for this special place.

The comprehensive consultation process carried out whilst preparing this Plan validated much of the activity that the AONB Partnership is already engaged in and has helped identify new issues and areas of activity. Many thanks to all those who took part!

The Plan reflects a number of significant changes which have occurred over the last five years including publication of the Natural Environment White Paper, adoption of the National Planning Policy Framework and major initiatives such as creation of the Morecambe Bay Limestones and Wetlands Nature Improvement Area and development of Local Nature Partnerships.

Partnership working is playing an ever-increasing role in delivering the AONB Management Plan and the AONB Partnership is well placed to meet the challenges and opportunities that lie ahead. Everyone has a role to play in looking after the Arnside & Silverdale AONB, from local communities and farmers to businesses and individuals. Working together we can make a real difference for this area and its future.

CIlr Brian Meakin

AONB Partnership Chairman



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Jon Sparks

1. Introduction

Areas of Outstanding Natural Beauty

Areas of Outstanding Natural Beauty (AONBs) are particularly special landscapes whose distinctive character and natural beauty are so outstanding that it is in the nation's interest to safeguard them. AONBs are unique and irreplaceable national assets and along with National Parks represent our finest countryside.

There are 46 AONBs throughout England, Wales and Northern Ireland, covering 18% of the land area.

Purpose and context

The primary purpose of AONB designation is to conserve and enhance the natural beauty of the area¹. In pursuing the primary purpose, account should be taken of the needs of agriculture, forestry, other rural industries and of the economic and social needs of local communities. Particular regard should be paid to promoting sustainable forms of social and economic development that in themselves conserve and enhance the environment. Promoting opportunities for recreation is not an objective of designation, but the demand for recreation should be met so far as this is consistent with the conservation of natural beauty and the needs of agriculture, forestry and other uses.

AONBs were brought into being by the National Parks and Access to the Countryside Act 1949. The Countryside and Rights of Way (CRoW) Act 2000 (Section 89) subsequently strengthened the earlier legislation and placed a statutory duty on local authorities to act jointly to produce Management Plans for AONBs within their boundaries and review them every five years.

AONBs are also within a worldwide category of protected areas, designated by the International Union for Conservation of Nature (IUCN) as Category V – Protected Landscape/Seascapes – *'protected areas where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value'*.

Natural beauty

The natural beauty of an AONB landscape is partly due to nature and is partly the product of many centuries of human modification. It encompasses natural and human factors that together make an area distinctive and special: geology, climate, soil, plants, animals, communities, archaeology, buildings, settlements, historic features, people and the perceptions of those who visit it.

The special qualities that make an area worthy of designation are also vulnerable to a wide range of pressures, for example from development, recreation, changes in woodland management and agricultural practices, and the effects of climate change. Positive management is therefore required to conserve and enhance their distinctive character.



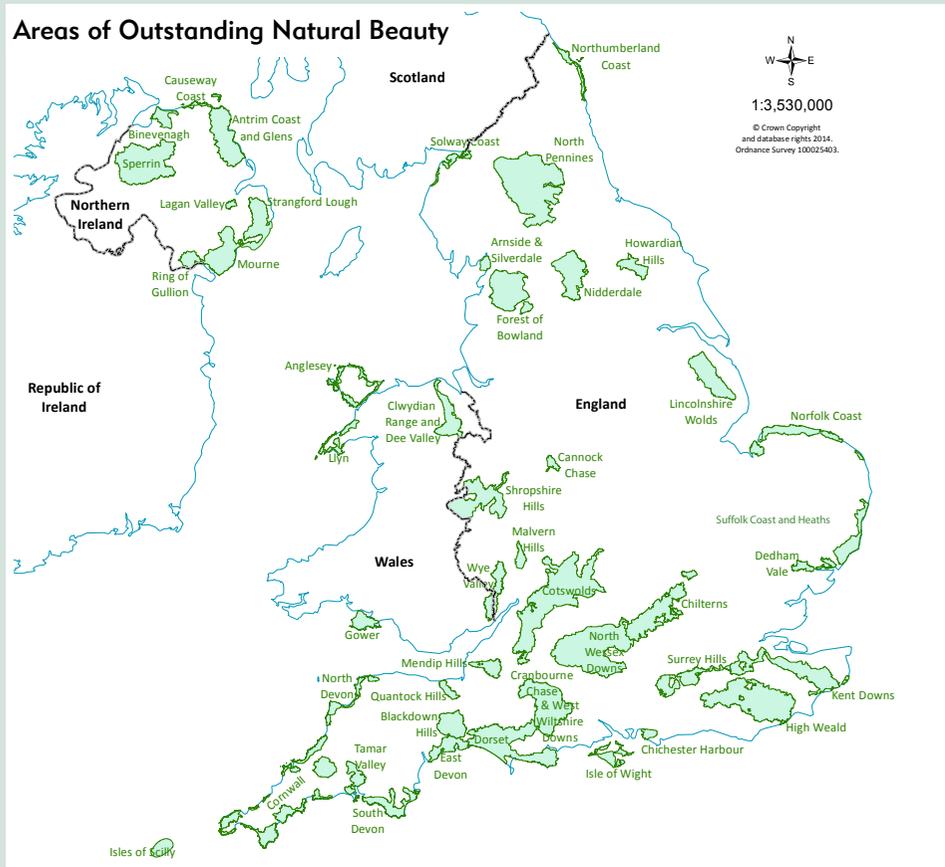
The AONB Family

AONB Partnerships from across the country work together as the AONB Family, sharing experience, promoting good practice and fostering collaboration.

The National Association for AONBs (NAAONB) is the voice of the AONB Family and represents AONB Partnerships on national issues including policy and advocacy, communications, training and securing resources. The Arnside & Silverdale AONB Partnership is a member of the NAAONB, supporting the AONB Family and contributing to and participating in national initiatives. Further information can be found at www.landscapesforlife.org.uk



¹National Parks and Access to the Countryside Act 1949; confirmed by Section 82 of the Countryside and Rights of Way Act 2000



Arnside & Silverdale AONB

Arnside & Silverdale AONB is a unique landscape of national importance. It was designated in 1972 and covers an area of approximately 75km² in south Cumbria and north Lancashire, including around 30km² of intertidal sand and mudflats.

Recognised as one of England's finest landscapes, the AONB is especially celebrated for its wealth of plants, birds and butterflies. The area boasts an extraordinary range of diverse habitats, and the mosaic of stunning limestone pavements, low limestone hills, ancient woodlands, mosses, orchards and meadows, along with an impressive coastal setting affording magnificent views over Morecambe Bay, make this a truly special place.

The intricate nature of many parts of the area, an exceptional variety of features occurring in such a small place, creates a sense of intimacy and discovery. This fine-grained landscape character then contrasts in every way with the vast openness of the Bay.

Arnside & Silverdale Area of Outstanding Natural Beauty



Arnside & Silverdale AONB Partnership

Effective joint working is needed to conserve and enhance the AONB for future generations. Coordination is provided by the AONB Partnership, a statutory partnership made up of the four responsible local authorities - Cumbria County Council, Lancashire County Council, Lancaster City Council and South Lakeland District Council - statutory agencies, voluntary bodies, parish councils, businesses, user groups, landowners and farming representatives working together to deliver the duties and obligations arising from Part IV of the Countryside and Rights of Way Act 2000. A full list of AONB Partnership members is shown in Appendix 1. Each organisation appoints a representative to sit on the AONB Executive Committee. The partnership structure of the AONB is a particular strength and enables communication and understanding between many different interested parties and the delivery of sustainable, shared solutions.

The AONB Team is the staff team employed for, and on behalf of, the AONB Partnership by Lancaster City Council as host local authority, delivering nationally agreed core functions and making a significant contribution to the implementation of the AONB Management Plan. The AONB Team also works at a national level through the National Association for AONBs.

The responsibilities of the AONB Team include:

- managing the AONB Partnership
- coordinating action to conserve and enhance the AONB at both a local and strategic level
- developing, reviewing and publishing the AONB Management Plan
- securing funding and resources
- developing and delivering a series of projects to implement the Management Plan
- advising upon, facilitating and coordinating implementation by others
- providing landscape related planning advice
- involving local communities in managing and conserving the area
- raising awareness of the national importance of the area and its special qualities
- promoting understanding and enjoyment of the area
- working with local businesses to support sustainable development of the local economy
- developing education resources
- facilitating research about the area
- running an active volunteer programme
- monitoring and reporting on progress

The AONB Team works to a rolling three-year Business Plan which sets out how the AONB Team will contribute to achieving delivery of the Management Plan. The Business Plan sets out priorities and detailed actions to guide the Team's day-to-day activities. It is reviewed and updated annually.

There are two small, voluntary bodies dedicated to supporting the purposes of the AONB: the Arnside/Silverdale AONB Landscape Trust (the Landscape Trust), a charity with over 900 members and the Bittern Countryside Community Interest Company (BCCIC), a social enterprise. Both contribute to delivery of the AONB Management Plan.

Whilst successful delivery of the Management Plan is shared across the AONB Partnership, the AONB Team plays a vital role in driving forward successful delivery at all levels. A key consideration for this Plan is to ensure long term support for AONB management structures by partners and the relevant authorities.



The AONB Management Plan

The AONB Management Plan is a statutory plan which sets out a shared Vision for the next 20 years. It describes the broad range of issues we face in this area and how we will manage them to conserve and enhance the area for future generations.

As this is the AONB Partnership's Management Plan, we use words such as 'we' and 'our' to mean the AONB Partnership's collective ambition and not the sole view of the AONB Team.

In order to achieve effective conservation and enhancement of the area, working together in partnership is crucial; local authorities, communities, organisations, landowners/managers and businesses must work jointly to successfully implement the Plan.

The aims of the Management Plan, which reflect the AONB purposes, 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
- meet the recreational needs of local residents and visitors alike - where these are compatible with the purpose of AONB designation.

The Management Plan forms a key part of the strategic framework for action by the many organisations working in and around the AONB, including the local authorities jointly responsible for the area, and by the local community.

The Management Plan consists of two documents: the Management Plan and Delivery Plan.

The Management Plan document sets out:

- the context of the Plan
- the special qualities of the AONB
- the natural and cultural benefits derived from this special landscape
- a Vision for the AONB landscape of 2035 and the outcomes we want to see
- management challenges and opportunities
- objectives for the next 5 years to move towards achieving the Vision for the AONB.



The Delivery Plan details actions to be carried out to meet the objectives; this is a stand-alone document to enable annual reviews and updates as necessary.

The Management Plan is supported by a separate report 'What is special about Arnside & Silverdale AONB?' which describes the special qualities in detail.

In carrying out our work, the AONB Partnership tries to take a multi-objective approach. Certain actions carried out may help to deliver a number of objectives and delivering one objective may help address more than one issue.



How the Management Plan has been produced

This Management Plan has been produced by the Arnside & 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. A Review Working Group comprising representatives from the four local authorities, Natural England, the AONB Team, the AONB Executive Committee and the Landscape Trust, supported and oversaw this process. The Management Plan has been informed by extensive public and stakeholder consultation.

The Management Plan has been subject to a Strategic Environmental Assessment, a Habitats Regulations Assessment and an Equalities Impact Assessment.



What's new?

There have been a number of important changes since publication of the last Management Plan in 2009, which have a significant impact on the conservation and enhancement of natural beauty in Arnside & Silverdale AONB. This changed context includes:

- Significant changes in the planning system with the adoption of the **National Planning Policy Framework**, adopted **Core Strategies** and developing **Local Plans** for Lancaster and South Lakeland districts and the decision to prepare a dedicated Development Plan Document (DPD) for the AONB.
- **Making Space for Nature**, the independent review chaired by Professor Sir John Lawton to consider whether England's collection of wildlife areas represented a coherent and robust ecological network that would be capable of responding to the challenges of climate change and other pressures. Published in September 2010, the review summarised what needed to be done in four words: more, bigger, better and joined-up.
- Publication of the 2011 **Natural Environment White Paper (NEWP)**, *The Natural Choice: securing the value of nature* which sets out the Government's vision for the natural environment, shifting the emphasis from piecemeal conservation action towards a more integrated landscape-scale approach. The AONB Partnership contributes to delivery of three of the four ambitions: to protect and improve our natural environment, grow a green economy and reconnect people and nature.
- Publication of **Biodiversity 2020: A strategy for England's wildlife and ecosystem services**. Building on the NEWP, the mission for the strategy for the next decade is: *'to halt biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people'*. To show what achieving this overarching objective by 2020 will mean in practice, the strategy sets out high level outcomes. The AONB Partnership is well placed to contribute to the delivery of these outcomes and help meet Biodiversity 2020 targets.
- An increasing emphasis on taking an **ecosystem approach** to landscape management. Outcome 1C of *Biodiversity 2020* is of particular relevance to AONBs and sets out the challenge we are helping to meet: *'By 2020, at least 17% of land and inland water, especially areas of particular importance for biodiversity and ecosystem services, conserved through effective, integrated and joined up approaches to safeguard biodiversity and ecosystem services including through management of our existing systems of protected areas and the establishment of nature improvement areas'*.
- Establishment of **Morecambe Bay Limestones and Wetlands Nature Improvement Area (NIA)**. NIAs, aimed at enhancing and reconnecting nature on a significant scale, were introduced in the NEWP and a competition launched to fund twelve initial areas in the period 2011 to 2015. Morecambe Bay was announced as one of England's first NIAs in March 2012. The successful

bid was led by the AONB Partnership working with other organisations and has secured over £800,000 of investment to fund projects aimed at connecting the area's special wetland, limestone, grassland and woodland habitats, inspiring community action and supporting sustainable farming, woodfuel and wildlife tourism businesses. Over 1000ha of habitat will be restored or enhanced through delivery of NIA projects. Data collected will provide a significant amount of information relating to the AONB and the wider Morecambe Bay area, informing management decisions and allowing improved targeting of funding and activities.

- Creation of **Local Nature Partnerships (LNP)** in July 2012. LNPs were proposed in the NEWP to strengthen local action and to raise awareness about the service and benefits of a healthy natural environment. The AONB Partnership is taking a leading role in the Morecambe Bay Local Nature Partnership and working in a complementary way with the Cumbria and Lancashire Local Nature Partnerships.
- Common Agricultural Policy (CAP) reform, the end of the Rural Development Programme for England (RDPE) 2007 - 2013 and the development of a **new environmental land management scheme**.
- **Think big: ecological recovery in Protected Landscapes** – the AONBs' and National Parks' response to *Making Space for Nature* which recognised that protected landscapes have huge potential to form the core

of coherent and resilient ecological networks, and that, in order to achieve this, habitat improvement and creation becomes part of sustainable land management systems and businesses, and provides adequate reward for land managers.

- Recent economic downturn, continuing pressure on public sector finances and the Government's growth agenda.
- **Marine and Coastal Access Act 2009**. The Act creates a strategic marine planning system aiming at more sustainable use and protection of marine resources, sets up the Marine Management Organisation to deliver the Government's objectives for the marine environment, strengthens fisheries and environmental management arrangements to conserve marine ecosystems and help achieve a sustainable fisheries sector, and promotes integrated coastal zone management. The Act also enables the creation of an England Coast Path, a continuous, signed and managed route around the coast plus areas of spreading room.
- **Localism Act 2011**. The Act outlines the key measures that underpin the Government's approach to decentralisation and includes provisions regarding strengthening local democracy, community empowerment and neighbourhood planning.
- Major initiatives, including **Headlands to Headspace (H2H)**, **Source to Sea** and **700 days to Transform the Bay**, which will help to deliver elements of the Management Plan.

AONB designation and the planning process

The fundamental principle underlying planning and development management in AONBs is that any new development within the AONB that has a materially adverse impact can only proceed where it is demonstrated that it satisfies an overriding national need. All development is expected to conform to a very high standard of design, to be in keeping with local distinctiveness and should seek to conserve and enhance the AONB's natural beauty.

Section 85 of the Countryside and Rights of Way Act (2000) places a duty on all local authorities, public bodies and statutory undertakers to pay 'due regard' to the purpose of AONB designation in carrying out their functions in relation to, or so as to affect, land in AONBs.

The Government has confirmed that the landscape quality of AONBs and National Parks is equivalent. As such, the protection given by the land use planning system to natural beauty in both types of area should also be equivalent.

Planning policies for AONBs are contained in the National Planning Policy Framework (NPPF), Local Plans and Neighbourhood Plans. The NPPF provides specific guidance

for development planning and decision-making in relation to AONBs. It confirms that *'great weight should be given to conserving landscape and scenic beauty'* and that AONBs *'have the highest status of protection in relation to landscape and scenic beauty'*. The *'great weight test'* is significant and is one of the most stringent legal tests that can be applied under planning law. In specific relation to major development, the NPPF states that planning permission should be refused for major developments in AONBs except in exceptional circumstances and where it can be demonstrated that they are in the public interest.

The NPPF confirms that local planning authorities should set out the strategic priorities for their areas within Local Plans and accordingly deliver the conservation and enhancement of the natural environment, including landscape. The NPPF also confirms that:

- allocations of land for development should prefer land of lesser environmental value (counting AONBs as the highest value)

- local authorities should set evidence and criteria based planning policies against which proposals for any development on or affecting landscape areas will be judged (development affecting AONBs includes impact on their setting) and
- planning should contribute to conserving and enhancing the natural environment.

AONB designation and the AONB Management Plan are material considerations in the planning process. Management Plans are adopted statutory policy of the local authority. A local planning authority has a duty to have regard to the conservation and enhancement of natural beauty and the appropriate management of the area as defined by and set out in the statutory Management Plan.

The Core Strategies of both South Lakeland District Council (SLDC) and Lancaster City Council (LCiC) already contain policies relating to the conservation and enhancement of the Arnside & Silverdale AONB. The development of a dedicated Arnside and Silverdale AONB Development Plan Document (AONB DPD) to act as a companion document to the AONB Management Plan was approved in 2013. It will be prepared jointly by SLDC and LCiC with involvement from the AONB Partnership and Parish Councils. It is included within the Local Development Schemes for both Councils with a timetable agreed to enable adoption in early 2016.



The AONB Development Plan Document

The AONB DPD will properly reflect the purposes of AONB designation and will fulfil the obligations relating to AONBs as set out in the National Planning Policy Framework. The plan will be shaped by evidence gathered by the two local planning authorities and the AONB Partnership. This will include evidence on housing needs, landscape and historical character, employment, tourism and services.

Although this is not an exhaustive list, the AONB DPD will:

- reflect the national importance of the AONB
- contain policies to conserve and enhance landscape quality and character, tranquillity, dark skies, local distinctiveness, settlement character, pattern and local vernacular architecture, habitats and species, geodiversity and the historic environment
- identify appropriate sites for the delivery of housing to meet local community needs demonstrated by a housing needs survey, prioritising affordable housing and use of brownfield sites
- identify appropriate sites to support the delivery of local employment and business opportunities, prioritising use of brownfield sites
- support the development and retention of local services and facilities and advocate the need for local services to support community life and the local tourism industry

- define and conserve areas of important open green space within settlements
- protect the setting of, and views out from, and into, the AONB
- support small-scale renewable energy developments appropriate to the local landscape character
- manage tourism related development such as camping, lodge and caravan development and car parking
- promote appropriate diversification and sensitive re-use of rural buildings
- consider the spatial relationship with surrounding areas, in particular Milnthorpe and Carnforth

It will be important that the AONB DPD complements and cross-references the AONB Management Plan so that, together, both documents provide a comprehensive management approach that delivers both for the special qualities of the area and for sustainable development of local communities.

Planning decisions and enforcement action affecting the AONB will be made by the relevant local authority with reference to the AONB DPD and Management Plan. The role of the AONB Partnership is to provide landscape-related planning advice to assist this process. The statutory consultee for landscape-related planning issues is Natural England and the AONB Partnership liaises with this agency on planning matters.

European Landscape Convention

The European Landscape Convention (ELC) is the first international convention to focus specifically on landscape. Created by the Council of Europe, the convention promotes landscape protection, management and planning, and European co-operation on landscape issues. The ELC came into force in the UK on 1 March 2007. It applies to all landscapes, towns and villages, as well as open countryside, the coast and inland areas, and ordinary or even degraded landscapes, as well as those that are afforded protection.

The ELC defines landscape as: *“an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”* (Council of Europe 2000). It highlights the importance of developing landscape policies dedicated to the protection and management of landscapes and establishing procedures for the general public and other stakeholders to participate in policy creation and implementation.

Natural England (NE) is leading the implementation of the ELC in England and, together with Defra and English Heritage, produced a framework for implementation, published in October 2007. This framework seeks to further strengthen the protection, management and planning of England’s landscapes, by providing a structure for action plans that will be prepared by any interested partners and stakeholders. It underpins a wide range of activities which, through public engagement and stakeholder involvement, will lead to wider understanding and appreciation of landscapes, improved knowledge and care, as well as a sense of inspiration, wellbeing and connection between people and place. Furthermore the ELC argues that the protection, management and planning of all landscapes in Europe is a task not just for governments but for all sectors of civil society, entailing ‘rights and responsibilities for everyone’.



Core principles

A number of core principles underpin all the different elements of this Management Plan:

Supporting sustainable land management

Landowners and land managers have played a significant role in creating the landscape as we see it today and are continuing to maintain many of the special qualities. Supporting the retention of viable and sustainable livestock farming and active woodland management, maintaining rural livelihoods and local rural skills are vital factors in keeping the area special.

Sustainable development

This means ensuring that development is sound in environmental, social and economic terms, without compromising the ability of future generations to do the same. Within a nationally protected landscape such as the AONB, the landscape and special qualities must be given special consideration in order to achieve sustainable development².

Landscape change

Change in the landscape is inevitable and need not be unwelcome. In the context of AONB designation and the conservation and enhancement of natural beauty, the challenge is to manage change in an integrated and sustainable way, so that it can make a positive contribution both to the social and economic needs of local communities and to the special qualities of the landscape that justify its designation, while ensuring that irreplaceable natural and historic assets are protected.

Taking an ecosystems approach

By bringing together three principles of the ecosystem approach, we can ensure that the benefits we derive from the natural environment (ecosystem services) are safeguarded and enhanced. The principles are:

- The natural systems that operate within the AONB are complex and dynamic, and their healthy functioning should not be taken for granted.
- Those that live and work in and visit the AONB benefit from services provided by the natural environment. These services underpin social and economic wellbeing and have a value – both monetary and non-monetary.
- Those that benefit from the services provided by the AONB and those who are involved in the management of them should play a central role in making decisions about them.

Using the ecosystem approach is how we, together with partners, will work locally to deliver 'bigger, better, more, joined-up' biodiversity, with greater ecological connectivity and enhanced landscapes that benefit wildlife and people.

Climate change adaptation and mitigation

In responding to climate change, there is a need to understand and adapt to the impacts such change is likely to have on the landscape and to seek ways in which CO₂ emissions can be reduced. Ensuring that adaptation and mitigation measures do not adversely affect natural beauty and maximising opportunities to improve resilience, such as improving habitat condition and enhancing connectivity, will be a priority.

Community involvement and engagement

Local people are at the heart of the AONB and are encouraged and supported to become engaged in its management through volunteering and developing projects and initiatives that help to conserve and raise awareness of natural beauty. This involvement is highly valued and an important factor in securing the area's future.

Accessible to all

There should be equality of opportunity for everyone to enjoy what this area has to offer. Barriers such as access to public transport, the need for better information and better infrastructure remain and need to be better understood. Enhancing intellectual and physical access to the AONB should be supported wherever possible.



²The Sandford Principle, applicable in National Parks and AONBs, states that, "where irreconcilable conflicts exist between conservation and public enjoyment, then conservation interest should take priority".



David Morris

2. What is special about Arnside & Silverdale AONB?

What is special about Arnside & Silverdale AONB?

Arnside & Silverdale AONB is an extraordinary place. From the simple beauty of the Lady's-slipper Orchid to the shining sands of Morecambe Bay, the area is simply awe-inspiring - full of natural spectacles, stunning views and a surprise to be discovered around every corner.

We need to be clear about what makes the area particularly special so that we can put in place effective management to conserve and enhance these qualities for the future.

Together, the special qualities of Arnside & Silverdale AONB make the area nationally important and give it a strong 'sense of place':

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 small-scale yet complex nature of the landforms gives an intimate feeling within valleys and woodlands which contrasts with the open nature and expansive views from higher ground and along the coast.



Unique limestone geology

Rare and distinctive Carboniferous limestone geology underpins the natural beauty 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.

The Carboniferous limestone bedrock was deposited more than 300 million years ago, when the region was located near the equator. 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 Arnside and Silverdale
- cave systems which have developed through solution-weathering of the limestone
- exposed palaeokarst formations
- extensive folding and faulting including the 'Silverdale Disturbance'
- notable fossil assemblage sites, particularly along the coastal margin



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 (310km²) of mud and sand - a kaleidoscope of water and light; sea and sky; sound, texture and colour.

The coast is dominated by open skies that create an ever-changing backdrop: clear blue skies; swift-blown clouds on a windy day; blackening clouds before a storm; shafts of light shining through a gap in the cloud cover; or vivid sunsets which fill the sky and reflect on the shallow waters of the mudflats. Shining sandbanks, mudflats and constantly changing channels are alive with the evocative calls of curlews and flocks of waders and wildfowl keeping time with the ebb and flow of the tide.



Rare and precious habitats

One of the most striking features of the AONB is its incredible biodiversity. The outstanding number and mix of priority habitats, within a small area, create a mosaic that is home to an amazing diversity of wildlife. The variety and importance of wildlife in relation to the small size of the area is a unique quality of this AONB.

Of particular significance, for their extent and value, are:

- **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 reedbed at Leighton Moss being the most extensive area of reedbed in North West England
- **limestone pavement**, notably at Gait Barrows National Nature Reserve (NNR) 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.



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 rare³ High Brown Fritillary, the nationally scarce⁴ 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 which is found nowhere else in the world other than around Morecambe Bay, the Purple Ramping Fumitory which has a worldwide distribution restricted to the west of Britain, the east coast of Scotland and the east of Ireland, and the nationally scarce Blue Moor-grass which dominates the AONB's unimproved grasslands.

Notable breeding birds include several reedbed specialists which are found at Leighton Moss such as Bittern, Marsh Harrier and Bearded Tit. Others, such as Marsh Tit, are found throughout the limestone and wet woodlands, with the AONB being a stronghold for this Red List species. Internationally significant numbers of Oystercatcher can be found at high tide roosts on the coast each autumn and the intertidal flats are an important feeding station for long distance migrant wading birds such as Black-tailed Godwit, Knot and Dunlin.

³ Occurring in 15 or fewer hectads (10km squares) in Great Britain

⁴ Taxa which are recorded in 16-100 hectads (10km squares) but not included in one of the Red List Categories

Rich sense of history

The 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.

Numerous small abandoned quarries can be found which were worked by individual farmers or local communities, whilst other quarries developed into large-scale extraction industries that are highly visible reminders of past and current industrial activity. As well as being used for construction of distinctive stone buildings and field-boundary walls, locally quarried limestone was fired in limekilns and used for mortar, lime-wash and as a soil conditioner. There are 36 known limekiln sites in the AONB, most of which are substantial limestone-built structures and important landscape and industrial heritage features.

Historic designed landscapes at Leighton Hall, Hazelwood Hall and Hynning Park are of significance and the registered parkland at Dallam Park is nationally important.



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 presence of date stones, small 'fire windows', hood mouldings constructed over windows and 'slobbered masonry' used to weatherproof limestone rubble-wall buildings, demonstrate a strong local tradition that continued to be used by later generations, developing a local style of building that remains a key characteristic of the AONB.

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.

Strong community and culture

Vibrant communities exist within each of the villages and 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. There are numerous local groups and societies that provide activities based on, and which support interest in, the AONB, such as natural history, local history, ornithology, sustainability and walking groups and societies. There is high community awareness of the area's unique qualities and of its designation as an Area of Outstanding Natural Beauty.

The AONB has become an important locus for scientific investigation and education due to its outstanding wildlife and geology. Many artists and crafts people choose to live and work in the area, attracted by its scenic beauty, wildlife and quality of light. Cultural events with a distinct AONB focus, such as Greenwood Fairs and Apple Days, have flourished and Festivals promoting increased understanding of and connection to the area's special qualities have become annual calendar fixtures.

The historic crossing of the Morecambe Bay sands is unique; the route is extremely hazardous due to quick-sand, moving channels and fast incoming tides, and led to the royal appointment of the first official guide in 1548. The 'Queen's Guide to the Sands' still regularly guides groups safely across the sands today.

The Furness Railway line influenced local settlement development and still provides an important transport link which reinforces economic and social connections to neighbouring areas.

Opportunities to enjoy the countryside

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.

Existing access to the coast enables visitors to experience the strong contrast between the landscape and the seascape and this will be enhanced by the future development of the England Coast Path.

Attractions, such as Leighton Hall, RSPB Leighton Moss Reserve and the Wildlife Oasis draw people to the AONB and enhance the visitor experience.



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 make 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.

A highly designated area

A measure of how important the area is for its biological, geological and historical interest is provided by the number and extent of locally, nationally and internationally designated sites which lie within the AONB:

- 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 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, 114 Listed Buildings, and 1 Registered Park and Garden
- 3 village Conservation Areas have also been identified for their built heritage value

The special qualities are described in more detail in a report which accompanies the Management Plan. Consultation has been carried out on the above special qualities.





Tony Riden

3. Natural, cultural and social benefits from our special landscape

Natural, cultural and social benefits from our special landscape

The special qualities of Arnside & Silverdale AONB provide a wide range of benefits to society.

Farmers produce food through the breeding of store lambs, suckled calves and, increasingly, finished lamb and beef. Fruit is produced in orchards, timber from forestry operations and woodfuel and wood products through active coppice management. Functioning mossland in and around the AONB is an active carbon store and work to rewet areas of moss will help boost carbon sequestration.

The extensive rights of way network, giving access to important wildlife sites and places of historical and geological interest, provides excellent recreational opportunities and supports the health and wellbeing of both residents and visitors. The landscape aids the dispersal and cycling of nutrients and pollination and is a source of clean air, tranquillity and freedom from noise and light pollution. The area also has the potential to provide renewable energy resources, given careful consideration of the technology used and site location.



Valuing ecosystem services

The benefits derived from nature are often described as 'ecosystem services' and sustainable economic growth relies on them. Some products like food and timber have a known financial value, but in other cases, we are only just beginning to fully understand the benefits and value that are provided, such as the role of bees in pollinating crops or the storage of carbon in woodland and wetlands.

Understanding the wide range of benefits provided to society by the special landscape of the AONB and their value both in monetary and non-monetary terms can help us design, plan and prioritise appropriate management activity to ensure that our natural resources and systems are more effectively recognised, supported and valued in the future.

Many of the objectives set out in this Plan influence the management of land and natural systems to help sustain and improve the range and quality of benefits or ecosystem services that are provided.

Appendix 2 categorises and describes the range of ecosystem services relevant to the AONB and gives links to relevant objectives in the Management Plan.





Art-image

4. Vision for the future

Vision for the future

Our long-term vision for the AONB in 2035 is:

Arnside & Silverdale Area of Outstanding Natural Beauty is a landscape of international importance, whose distinctive character is conserved and enhanced for future generations.

It is a place that is much loved and highly valued, for its strong sense of place, unique geology, rich wildlife and cultural heritage and the benefits it provides to society.

Its distinctive landscape character - an intimate mosaic of low limestone hills, woodland, wetland, pastures, limestone pavements, intertidal flats, coastal scenery and distinctive settlements - is enjoyed, cherished and conserved by those who live in, work in and visit the area.

The high quality landscape supports and is supported by the area's thriving rural economy and vibrant diverse local communities. There are many and varied opportunities for people to access, enjoy and understand the area's special qualities, and participate in their conservation, creating a strong connection with nature and the landscape.

Challenges and pressures are effectively and sensitively managed in an integrated way through a partnership approach. The area's natural and cultural assets are managed and used wisely for future generations.



To achieve this, the AONB Partnership is aiming for 4 key outcomes which reflect the national objectives of the AONB Family:

- an outstanding landscape, rich in wildlife and cultural heritage
- a thriving, sustainable economy and vibrant communities
- a strong connection between people and the landscape
- a dynamic and successful partnership

In working to deliver these outcomes, we must consider environmental, economic and social objectives. The challenges faced by the area are many and diverse, some are local in nature whilst others are national issues. Some can be relatively easily addressed but others are difficult to resolve. We will work together closely with partners and stakeholders while recognising that:

- different organisations, groups and individuals have different opinions on and priorities for how best to conserve the features and qualities which make this landscape special
- sustaining this exceptional landscape is a major challenge and requires investment





5. What we want to achieve and why

What we want to achieve and why

This section sets out how the AONB Partnership plans to achieve the key outcomes and why, addressing in detail:

An outstanding landscape, rich in wildlife and cultural heritage

- Landscape and seascape
- Biodiversity and geodiversity
- Historic landscape

A thriving sustainable economy and vibrant communities

- Development management
- Supporting rural growth and livelihoods
- Sustainable visitor economy
- Sustainable communities

A strong connection between people and the landscape

- Enjoying and understanding
- Taking action

For each outcome we have identified the challenges and opportunities that exist. This is not an exhaustive list of everything affecting the Arnside & Silverdale area, rather the things most directly linked to the conservation and enhancement of natural beauty, maintaining a sustainable local economy and enabling people to enjoy, understand and take care of the area. We have also identified key recent activity and progress already being made.

A series of reviewed objectives are then set out identifying how we will contribute to achieving each outcome between 2014 and 2019. Delivery of actions (as presented in the Delivery Plan) will often lead to benefits across more than one objective and across outcomes.

Achieving the fourth outcome, a dynamic and successful partnership, is essential and is covered in section 6.





Adam Donsalson

5.1 An outstanding landscape, rich in wildlife and cultural heritage

An outstanding landscape, rich in wildlife and cultural heritage

Landscape and seascape

- Landscape and seascape character
- Agricultural change
- Coastal management
- Commercial scale renewable energy
- Power infrastructure
- Adapting to climate change

Biodiversity and geodiversity

- Habitats and species
- Invasive non-native species and plant diseases
- Water quality
- Shellfishing
- Geodiversity

Historic landscape

- Historic and cultural heritage



5.1a LANDSCAPE AND SEASCAPE

Landscape and seascape character

Facts and challenges

The quality of the landscape and seascape is what gives the AONB its particular character, setting it apart from the wider countryside and leading to its designation as a nationally protected landscape. The distinctive character is determined not simply by the presence of natural elements or their rarity value, but by the way in which they combine to form a mosaic of landscape types which also reflects the influence of a rich cultural and historical heritage.

Natural England has divided the country into 159 National Character Areas (NCAs). Each NCA is a landscape, recognisable at a strategic scale, for which management guidance and policy priorities can be set. NCA 20, Morecambe Bay Limestones, encompasses the large majority of the AONB.

Both Lancashire and Cumbria County Councils have carried out landscape character assessments^{5 6}, which provide a valuable resource in terms of describing the distinctive qualities of the counties, including the AONB. They also provide guidance on how to conserve the various landscape quality types.

The AONB Partnership undertook a Landscape and Seascape Character Assessment of the AONB in 2012. This is a detailed local level assessment⁷ that links in with the wider framework of county level studies. From this work the main landscape character types that make up Arnside & Silverdale AONB are defined as:

- Intertidal flats
- Saltmarshes and lagoons
- Lowland moss
- Coastal limestone pasture
- Inland pasture and parkland
- Wooded limestone hills and pavements

Two landscape character types forming part of the setting of the AONB are also defined:

- Drumlin farmland
- Low coastal drumlins

There are many forces for change affecting our landscape and seascape including development pressures, agricultural change, land management (trees and woodlands, water bodies, habitats and species), climate change and natural processes.

As well as AONB designation, over two thirds of the AONB is subject to additional statutory protection for its international or national biodiversity, geological or heritage importance (for example Sites of Special Scientific Interest) or is designated for its local importance as a local wildlife or geological site. However, the remaining area, including important habitat, non-registered historic features and non-registered parks and gardens, does not enjoy any additional protection, leaving these areas and features potentially more vulnerable to change. It is important to consider the AONB landscape and seascape in an integrated way and not just focus on the parts covered by designations. Care must be exercised in the management of these areas and features so that incremental change does not harm the overall special qualities of the area.

Key recent activity and successes

- Completion of the draft Arnside & Silverdale AONB Landscape and Seascape Character Assessment.
- Update of the Cumbria Landscape Classification Strategy by Cumbria County Council.

- Completion of the Morecambe Bay NCA profile update by Natural England.
- Under the programme of Undergrounding for Visual Amenity, 510 metres of overhead cable has been removed and replaced by underground cable at Bela Bridge, Milnthorpe.

Opportunities

- There are many opportunities to conserve and enhance the special and distinctive character of our landscapes by managing development, supporting and encouraging appropriate land management and supporting the retention and conservation of distinctive landscape features such as in-field trees, hedgerows, drystone walls, ponds and limekilns. Projects which work to remove elements that adversely affect the landscape, such as overhead cables and litter, should also be supported.



⁵ A Landscape Strategy for Lancashire, Lancashire County Council Environment Directorate (2000)

⁷ Arnside & Silverdale AONB Landscape and Seascape Character Assessment (draft), LUC (2012)

⁶ Cumbria Landscape Character Guidance and Toolkit, Cumbria County Council (2011)

5.1a LANDSCAPE AND SEASCAPE

Agricultural change

Facts and challenges

Farming

Just over 70% of the terrestrial area of the AONB was registered as agricultural land in 2010⁸ with the large majority of this being pasture for livestock grazing; there is very little arable farming or horticulture. Sheep are the main livestock type (79% of stock) whilst cattle (dairy and beef) make up around 19%. Between 2000 and 2010 there was an increase in cattle numbers of 7% and a significant increase of 42% in sheep numbers.

Environmental Stewardship and reform of the Common Agricultural Policy

The Rural Development Programme for England (RDPE) 2007-13 provided funding for Environmental Stewardship, an agri-environment scheme that supports farmers and other land managers in England to deliver effective environmental management on 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.

In developing the scheme, Defra is aiming to build on and enhance what has already been delivered through Environmental Stewardship, Catchment Sensitive Farming and the English Woodland Grants Scheme. With what is likely to be a constrained budget, it will be necessary for spending to be tightly targeted and deployed where it will have most impact. The key drivers behind this are expected to be priority policy objectives (e.g. for Biodiversity 2020 and the Water Framework Directive). The final detail of the new environmental land management scheme will be formally agreed with the EU later in 2014. The eventual changes to the support mechanisms for the farming industry as a result of CAP reform are as yet unclear and could have a profound impact on the management of habitats, species and the landscape of the AONB (see also Maintaining and supporting rural livelihoods, page 50).

Changes in agricultural management

With steady agricultural intensification there tends to be a decline in biodiversity and a loss of characteristic landscape features. Intensification of the agricultural management of farmland has led to a decline in the condition and a progressive loss of characteristic habitats such as species-rich grasslands and landscape features such as hedgerows, walls and mature in-field and boundary trees. The 'improvement' of hay meadows and pastures, including intensified management for silage production leads to a decline in the species diversity of grasslands for both plants and animals. Diffuse agricultural pollution of water courses and water bodies can result in deterioration of water quality. The loss and fragmentation of species-rich hedgerows through intensive mechanised cutting can prevent the effective use of hedgerows as wildlife corridors.

Grazing by livestock is a traditional land use. It affects the habitats grazed and both under and over grazing can cause deterioration of habitats. Achieving grazing regimes that enable livestock farming to continue and allow habitats to flourish can be a challenge

but getting this right promotes the provision of ecosystem services such as local produce, biodiversity and improved water quality from farmed land in a sustainable way.

Management of land under environmental land management schemes, management plans and other appropriate mechanisms offer opportunities to promote and financially support sensitive management to enhance the landscape.



5.1a LANDSCAPE AND SEASCAPE

Soil Management

Soil sustains much of the area's special landscape and biodiversity and stores water and carbon. Intensive agricultural production and pollution can degrade soils through erosion due to wind and rainfall, the loss of organic material and compaction. These factors reduce soil productivity and water infiltration and, through higher levels of runoff, increase flood risk. Intensive agricultural production can also overload the nutrient status of soils leading to nutrient-rich runoff and soil community shifts, further decreasing soil function. Soil erosion can also have impacts on water quality and aquatic habitats through sedimentation of watercourses.

Climate change has the potential to increase erosion rates through hotter, drier conditions that make soils more susceptible to wind erosion, coupled with intense rainfall events that can wash soil away. UK soils store over 10 billion tonnes of carbon in the form of organic matter⁹. The size of this store means soil has a vital role to play in helping to combat climate change.

Preventing emissions from soil and exploring how to increase existing stores of soil carbon in the AONB could make a contribution to meeting the Government's emission reduction targets introduced by the Climate Change Act 2008.

Farm diversification

Diversification in farming such as the provision of holiday cottage accommodation and camping, the use of land for sporting activities, 'hobby farming', horse grazing and equestrian activities leads to changes in the agricultural landscape, but can play an important role in maintaining viable agricultural businesses. As the nature of farming alters within the AONB, changes to the character of the landscape will occur. The number of farms within the AONB has reduced in recent times¹⁰. Grazing animals and pasture are a key element in maintaining the rural landscape so supporting farming and retaining vital farming infrastructure such as farmsteads and surrounding barns is very important in conserving rural landscape and historic building character (see also Maintaining and supporting rural livelihoods, page 50).



Key recent activity and successes

- Significant uptake of Environmental Stewardship within the AONB (58% of the Utilisable Agricultural Area within the AONB is managed under agri-environment schemes¹¹).
- All three Landscape Trust reserves are managed under Higher Level Stewardship agreements.

Opportunities

- Ensuring farmers continue to be encouraged and supported to carry out sustainable land management through the new environmental land management scheme will be crucial for maintaining and enhancing the landscape of the AONB.
- Working together to achieve appropriate grazing regimes on a network of key sites offers an opportunity to achieve sustainable management.



⁹ Safeguarding our Soils. A Strategy for England, Defra (2009) ¹⁰ Defra Agricultural Census, 2000-2010

¹¹ © Natural England copyright (2013)

5.1a LANDSCAPE AND SEASCAPE

Coastal management

Facts and challenges

Changing recreational and commercial use of Morecambe Bay, enhanced coastal access as a result of the Marine and Coastal Access Act 2009, allowing the right of access around all of England's coast (see also Maintaining and improving access, page 64), changes due to the natural dynamic cycles of erosion and accretion and coastal squeeze as a result of sea level change, all result in conflicting demands on the coastal zone which need to be carefully managed. Sea level change may result in the need for some coastal realignment and engagement in any realignment and habitat creation studies along the AONB coast will be important.

Key recent activity and successes

- Engagement with Morecambe Bay Partnership, North West Coastal Forum and Partnership of Irish Sea Coast & Estuary Strategies (PISCES).
- Publication of 'Shoreline Management Plan 2' (SMP2) by the North West England and North Wales Coastal Group which covers the coastline from Great Orme's Head in Wales to the Scottish Border on the Solway Firth. SMP2 provides a framework for sustainable future coastline management around Morecambe Bay.

Opportunities

- Marine planning is a new approach to the management of the UK's seas which was set out in the Marine and Coastal Access Act 2009. Marine plan areas will physically overlap with that of terrestrial plans and the AONB coast falls within the North West Plan area. The timescale for production of the North West Plan is not yet known. The aim of marine planning is to ensure a sustainable future for coastal and offshore waters through managing and balancing the many activities, resources and assets in the marine environment. Through engagement with the Marine Management Organisation during the preparation of the North West Plan, the AONB Partnership has the opportunity to ensure integrated coastal zone management is delivered along the AONB Coast.
- Engagement in coastal fora such as the North West Coastal Forum, Morecambe Bay Partnership and PISCES will also enable integrated planning and management of change along the AONB and wider Morecambe Bay coastline.



5.1a LANDSCAPE AND SEASCAPE

Commercial scale renewable energy

Facts and challenges

Wind energy development

Pressure for commercial scale wind energy development, both terrestrial and offshore, remains strong in the area surrounding the AONB. Turbines can be visually intrusive, particularly if seen against the skyline, and have the potential to significantly affect views within and out from the AONB. Cumulative impacts and potential impacts on sensitive habitats and species must also be considered.

Bioenergy

The potential for the development of bioenergy (biofuels derived from agriculture eg. miscanthus, and other biomass sources such as short-rotation coppice) within the AONB is limited but could lead to larger-scale agricultural operations taking over some permanent pastureland. This would need to be sensitively managed to avoid detrimental impacts on landscape, habitats and species.

Tidal

Proposals for a Morecambe Bay tidal energy generation scheme appear to have been halted but should such a project be reinstated, the landscape/seascape, biodiversity and cultural impacts could be significant.



Key recent activity and successes

- Cumbria Wind Energy Supplementary Planning Document guides wind energy development in Cumbria and 'Planning guidance for renewable energy' has been produced for Lancashire.
- Work under way by Natural England on developing Zones of Potential Visual Impact for England's Protected Landscapes.
- Work to promote the AONB as a low carbon landscape and encourage installation of microgeneration technologies demonstrates how this protected landscape can contribute to carbon reduction targets while retaining character.
- A hydro-electric scheme has been installed at Heron Corn Mill, Beetham.

Opportunities

- The AONB Development Plan Document will contain policies to manage renewable energy developments.
- Cumulative Landscape & Visual Impact of Vertical Infrastructure – Assessment & Guidelines are currently being prepared by Cumbria County Council. Best practice guidance on wind energy visualisation standards is currently under review. The relevant planning authorities are monitoring this, in order to ensure that an approach which gives the most accurate representation of a proposed development is adopted locally.

Power infrastructure

Facts and challenges

National Grid is currently carrying out research and consultations on how best to connect a number of new energy projects to the national electricity network including several offshore windfarm projects in the Irish Sea and the proposed new nuclear power station near Sellafield, West Cumbria. There is currently a need to upgrade and develop the existing electricity transmission network to provide these connections. The route of this network is not now likely to pass through the AONB but further work is required to ensure that the potential impact on the setting of the AONB and views out from the area is minimised.

Key recent activity and successes

- AONB Team actively engaged in National Grid: North West Coast Connections Project - Stakeholder Reference Group and helped to highlight the significant impacts associated with routing the network via the AONB, prompting the option to be dropped.
- National Grid intend to carry out extensive consultations on other potential route corridors during 2014.

Opportunities

- Continued engagement in the Stakeholder Reference Group to ensure impacts on the setting and views from the AONB are minimised.

5.1a LANDSCAPE AND SEASCAPE

Adapting to climate change

Facts and challenges

Climate change is predicted to have a major impact on the landscape and habitats and species of the AONB over the coming decades. As a result of increases in average temperature some species may disappear from the AONB and others may start to appear. There is the possibility of new pests and diseases being introduced. Timings of biological events may also alter; flight times of butterflies are already thought to be altering in the AONB.

Increases in the frequency of extreme weather events are likely. Frequent summer droughts could lead to changes in species composition within the woodlands of the AONB and changes in grassland communities. Where there are already concerns over diffuse pollution, such as at Leighton Moss, reduced flows could exacerbate the existing problems. Storm surges could lead to an increased risk of coastal flooding and the inundation of freshwater habitats, such as at Leighton Moss, by salt water. More severe erosion of saltmarsh could also result.

Sea level rise will result in coastal squeeze and potential loss of intertidal habitats and important bird breeding sites e.g. at Warton Saltmarsh where the railway line limits habitat migration inland, and also in direct loss of freshwater habitat such as the reed beds at Leighton Moss and other low lying mosses (see also Coastal management, page 30).

There is also the increased likelihood of damage to foundations of both historic buildings and agricultural boundary walls through winter waterlogging and heavier rain events and of new pest species which may affect the integrity of individual sites. Adaptation of buildings for alternative energy sources may have an effect on historic buildings and on the historic landscape character.

The full extent of climate change impacts on the AONB will not be known in the short term and the full range of measures required for adaptation and mitigation are also not yet known. There is therefore the potential for conflict which will need to be managed carefully in any future delivery.

Maintaining and enhancing the resilience of the area's ecological network by ensuring that habitats are bigger, better and joined-up will increase the ability of the landscape to adapt (see also Habitats and species, page 33).

Key recent activity and successes

- Of the total SSSI area within the AONB, almost 65%¹¹ was in favourable condition in 2013 compared with just under 50% in 2009. In 2013, 99.8% was in favourable or recovering condition, compared with 73% in 2009. Restoration and enhancement of woodland/grassland and wetland habitats through the NIA programme will increase resilience and provide connections to surrounding areas.
- Morecambe Bay Limestones Climate Change Adaptation study was completed in 2010.

Opportunities

- Ensuring the favourable condition of habitats and heritage assets and maintaining and expanding networks of natural habitats will be an essential part of climate change adaptation planning within the AONB.
- Ensuring the successful delivery of the Nature Improvement Area, Headlands to Headspace and Catchment Restoration Fund projects as well as ongoing habitat enhancement work through volunteer programmes will be crucial in delivering more resilient ecological networks.
- Working with partners to implement actions to address coastal squeeze as part of delivery of the Shoreline Management Plan 2 will also be an important element of climate change adaptation within the AONB.
- The Coastal Biodiversity and Ecosystem Services project is currently studying the ecosystem services provided by coastal habitats such as saltmarsh, including impacts of and resilience to climate change. One of the Morecambe Bay study sites is Warton.



5.1b BIODIVERSITY AND GEODIVERSITY

Habitats and species

Facts and challenges

Priority habitats and species and wildlife designations

The AONB supports an exceptionally diverse range of species and habitats of local, national and international importance. Priority habitats and species, and key species and sites of local importance need to be maintained and enhanced.

Priority habitats occurring within the AONB:

- Deciduous woodland
- Lowland wood pastures and parkland
- Traditional orchards (see page 41)
- Lowland heathland
- Lowland meadows
- Lowland calcareous grassland
- Purple moor grass and rush pasture
- Lowland fen
- Reedbed
- Coastal and flood plain grazing marsh
- Coastal saltmarsh
- Maritime cliff and slopes
- Mudflats
- Limestone pavement
- Hedgerows
- Oligotrophic lakes
- Ponds
- Rivers
- Inland rock outcrop and scree habitats
- Estuarine rocky habitats
- Wet woodland

A significant proportion of the AONB (54%) is covered by SSSI, Special Area of Conservation (SAC) and Special Protection Area (SPA) designations. Continuing to improve the condition of nationally designated sites should remain a priority along with ensuring that any plans or projects do not have a significant adverse effect on the important features of SACs/ SPAs (Natura 2000 sites). Local Wildlife Sites cover 20% of the terrestrial AONB (12% of the whole AONB). Positive management of these sites is essential to ensure their favourable condition, support the SSSI network and maintain AONB character; information on current management and condition, however, is limited and needs to be improved.

Over 100 species included on the list of England's priority species are known to occur regularly within the AONB. Of particular note are the Bittern and the Lady's-slipper Orchid. Maintaining and enhancing habitats and improving ecological networks are the core means to conserve species and integrating the requirements of species into habitat management (the Mosaic Approach) will be crucial. However, specifically tailored and targeted action is required for some species for example, the High Brown Fritillary butterfly.

Developing ecological networks

Developing robust ecological networks through habitat enhancement, expansion and the creation of buffer zones, linear corridors and 'stepping stones' to link habitats will help improve species diversity, make the area more resilient to the effects of climate change, and allow better species migration as temperatures change. This work is required both within the AONB and its linked surrounding areas.

Grassland management

Limestone grasslands support important priority species assemblages and make up nearly 20% of the terrestrial SSSI area within the AONB, with the majority in favourable or recovering condition. To maintain biological diversity and to prevent succession to scrub and woodland it is essential that scrub clearance work continues and appropriate grazing regimes are maintained. Other grassland management techniques such as seasonal cutting are also important. Fertiliser application alters the species diversity in fields; the most characteristic species do not tolerate excess nutrients.



5.1b BIODIVERSITY AND GEODIVERSITY

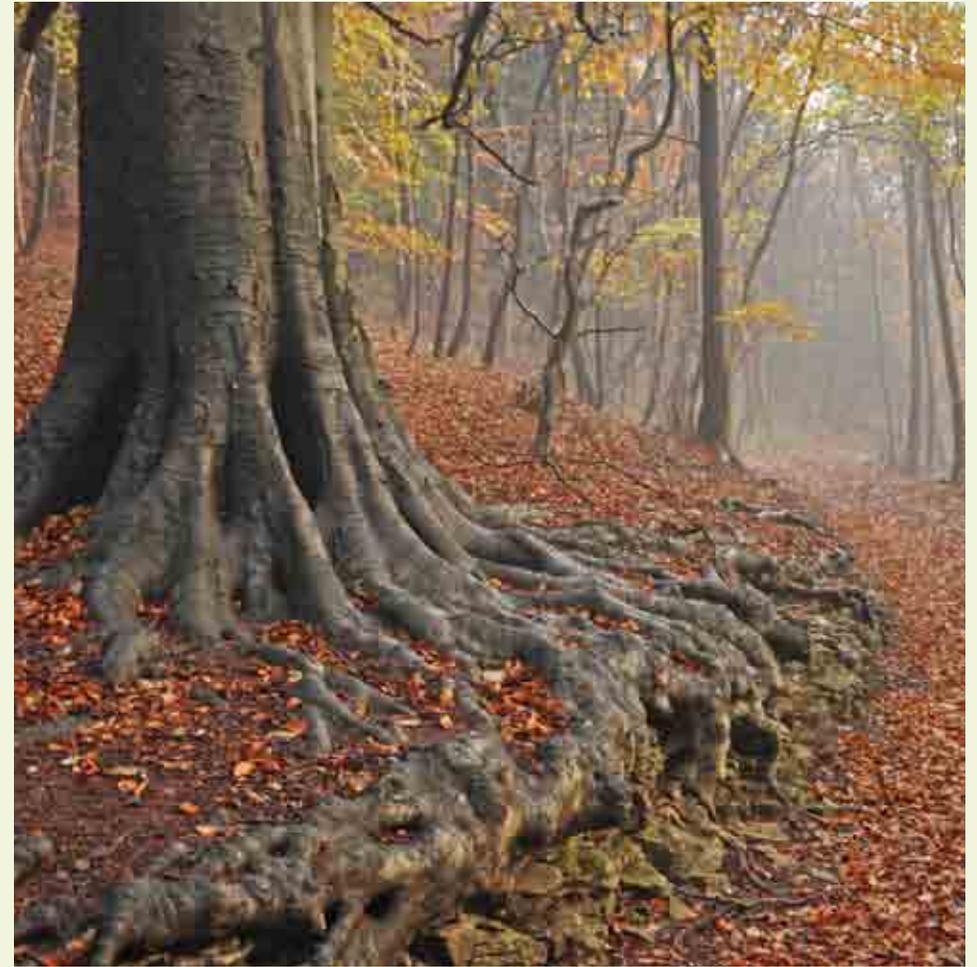
Woodland management

Woodland is a key component of the Arnsdale & Silverdale landscape, covering around a third of the terrestrial AONB. Semi-natural ancient woodland is very important in the area and the AONB has 45 plantations on ancient woodland sites (PAWS). Much of the woodland is on difficult to manage and sensitive sites, in particular limestone pavement. Carrying out management of these sensitive sites in low impact ways can be a challenge and may require the use of small scale machinery and other techniques such as horse logging.

The majority of the woodland SSSI area is in favourable or recovering condition. Active woodland management has increased over recent years but 46% of the total woodland area is currently unmanaged¹². The English Woodland Grant Scheme, which has provided funding for sustainable woodland management, has been an important factor in securing this increase. Restoring conifer plantation sites to native woodland has been undertaken by the Forestry Commission at sites within the AONB including at Underlaid Wood.

Management work produces timber, woodfuel and coppice products, an important driver in securing long term sustainable management (see also Maintaining and supporting rural livelihoods, page 50). Continuing and expanding work such as coppicing, selective thinning and felling, establishment of rides and glades and localised planting to underpin regeneration will also be crucial in maintaining and improving the landscape and biodiversity value of the area's woodlands, and providing vital habitat for specialist birds, such as Hawfinch¹³ and Marsh Tit, and butterflies such as High Brown Fritillary.

The damage caused by grey squirrels and excessive numbers of deer in preventing natural woodland regeneration remains an issue (particularly for commercial interests). The long-term lack of management of traditional boundary walls has been partly addressed through Environmental Stewardship and the AONB Limestone Heritage Project but there is still much work to be done to address the poor condition of walls around woodland. As woodlands are brought into more active management, account should also be taken of the needs of particular species dependent on the retention of dead wood and mature trees within woodland.



¹² © Forestry Commission copyright (2013). Figure includes all woodland supported by a range of incentives offered by the Forestry Commission, or with a felling licence or is part of Public Forest Estate Land owned and/or managed by the FC.

¹³ The Silverdale / Haweswater area of the AONB is the only confirmed breeding area for Hawfinch in Lancashire - White, S.J. (Ed.), McCarthy, B., Dunstan, S., Martin, S.J., Harris, R.J., Hulme, G. and Marsh, P.J. (2013). The State of Lancashire's Birds: An atlas survey of the breeding and wintering birds of Lancashire and North Merseyside, 2007-2011. Lancashire and Cheshire Fauna Society, Rishton

5.1b BIODIVERSITY AND GEODIVERSITY

Coastal habitats

33% of the AONB is regularly covered by the tidal waters of Morecambe Bay and the Kent Estuary. These areas are characterised by grazed saltmarsh and broad expanses of mud and sandflats, which support large numbers of migratory and breeding wildfowl and wading birds. Low limestone cliffs are a further important element of the coastal environment of the AONB. Loss of saltmarsh within the innermost part of the foreshore as a result of natural dynamic cycles of erosion and accretion within Morecambe Bay is likely to continue and certain areas of saltmarsh habitat are at risk from coastal squeeze.

Impacts on coastal habitats as a result of recreational access, such as disturbance, need to be carefully managed and considered as part of implementation of the England Coast Path. The saltmarsh, sand and mudflat habitats of the AONB are heavily influenced by the quality of the water draining from upstream catchments into the Kent Estuary and wider Morecambe Bay. The intertidal estuarine mud and sandflats support a range of shellfish, including cockles, which are a primary food source for oystercatchers and are subject to commercial fishing.



Freshwater wetlands

The wetlands which have developed within the low-lying basins separating the limestone hills of the AONB form part of the great expanse of lowland peat deposits which fringe Morecambe Bay and the Lancashire coast. The freshwater wetland habitats of the AONB are of special nature conservation value as they support habitats that represent truly natural successions from open water to woodland, and associated priority species such as Bittern. Diffuse agricultural pollution and point source pollution are impacting on the condition of the wetland habitats at Leighton Moss and Hawes Water (see also Water Quality, page 38). There is increased likelihood of high tide salt water incursion into Leighton Moss and other low lying mosses, due to rising sea levels and increased storm surges. Restoration projects both within and outside the AONB have the potential to increase the connectivity of freshwater wetland habitats around Morecambe Bay.

5.1b BIODIVERSITY AND GEODIVERSITY

Key recent activity and successes

- Within the AONB, 99.8% of the SSSI area is now in favourable or recovering condition; 64.6% is in favourable condition¹⁴, and 35.2% is in recovering condition, requiring work to bring into favourable condition. Habitats provide a range of ecosystem services and when habitats are in favourable condition they provide better quality and more of these services.
- Active coppice management is being delivered in some areas within the AONB supported by the Sustainable Development Fund (SDF). A local Coppice Cooperative operates within the AONB.
- Conservation grazing takes place in key locations using native cattle and ponies.
- The AONB volunteer programme carries out extensive practical conservation work throughout the AONB including scrub clearance, much of it on undesignated sites, making a significant contribution to the maintenance of habitat networks.
- The Landscape Trust owns three small nature reserves and manages them for conservation with the help of volunteer groups.
- Key species-based projects are being delivered, for example, delivery of the High Brown Fritillary conservation project and the Lady's-slipper Orchid species recovery programme (reintroduction at Gait Barrows National Nature Reserve and other key sites).
- The restoration of reedbed habitats by RSPB at Leighton Moss for breeding Bittern and the creation of new reedbeds at Barrow Scout Fields and Silverdale Moss.
- Morecambe Bay Limestones and Wetlands announced as one of England's first Nature Improvement Areas in March 2012.
- Morecambe Bay Local Nature Partnership established in July 2012 to coordinate and deliver large-scale initiatives in a strategic way, adding value and resulting in better outcomes.
- The Deer Management Group coordinates deer management in the area. The Deer Initiative carried out a deer survey in March 2013 to further inform their work.



- Headlands to Headspace Landscape Partnership Scheme, led by the Morecambe Bay Partnership with support from the AONB Team and other partners, successful in securing funding from the Heritage Lottery Fund to deliver landscape scale restoration of coastal marshes, wet grasslands and headlands and create a resilient, coherent network of coastal habitats. Programme delivery started in 2014.
- Source to Sea programme secured £1.1m from the Government's Catchment Restoration Fund. Led by the RSPB with support from the AONB Team and other partners, it will start to address the reasons for failure identified in the Water Framework Directive on many of the rivers and catchments that flow into Morecambe Bay. Two projects will directly benefit freshwater bodies within the AONB: Leighton Moss Resource Protection and Pan-Morecambe Bay Wetlands and Waterbodies Restoration.
- Arnside & Silverdale Forest Design Plan completed.

Opportunities

- There are significant opportunities to contribute to the delivery of Biodiversity 2020, the Government's Strategy for England's wildlife and ecosystem services. The Strategy promotes taking a landscape-scale approach to nature conservation which benefits wildlife, people and the wider economy. The majority of the SSSIs within the AONB are in favourable or recovering condition. Maintaining

these sites remains a priority but, in addition, we need to look beyond these sites and at the wider environment. A landscape-scale approach involves considering the whole landscape, managing it appropriately to make it more ecologically coherent and integrating a range of different land uses in a way that is sympathetic to the environment, in order to benefit both wildlife and people¹⁵. The NIA and H2H scheme are existing examples of where the AONB Partnership is contributing directly to landscape-scale delivery. The creation of the Morecambe Bay Local Nature Partnership provides an opportunity to build on this success.

- Integrating better the needs of wildlife into land use decisions and management is likely to benefit not just wildlife but our economy and society as a whole through the provision of ecosystem services.
- Networks of well managed and healthy habitats allow species to move more easily and make the landscape more adaptable to change. This will become increasingly important with climate change. Well managed mosslands and woodlands, for example, are valuable for biodiversity and absorbing and storing carbon.
- The National Planning Policy Framework and developing national thinking regarding biodiversity offsetting and payments for ecosystem services provide an opportunity to investigate how such schemes could potentially enhance ecological networks at a local level.

¹⁴ © Natural England copyright (2013)

¹⁵ Think BIG How and why landscape-scale conservation benefits wildlife, people and the wider economy, Natural England, (June 2011)

5.1b BIODIVERSITY AND GEODIVERSITY

Invasive non-native species and plant diseases

Facts and challenges

There is anecdotal evidence that a number of invasive non-native species are now present within the AONB: Giant Hogweed has been noted at Guard Hill and also *Crassula helmsii* in some ponds. Himalayan Balsam has been recorded upstream of Milnthorpe on the Bela and at Hawes Water, and Japanese Knotweed is growing at Dallam. Cotoneaster and buddleia have been recorded at various SSSIs within the AONB and both the Chinese mitten crab and Signal crayfish, although not found within the AONB, have been recorded locally. Invasive non-native species (INNS) can displace or prey upon native species, by destroying habitats or by introducing new diseases or parasites. Monitoring and recording will be essential to ensure that the presence of invasive non-native species within the AONB remains limited and their spread is effectively controlled.

Chalara dieback of ash is a serious disease of ash trees caused by the fungus *Chalara fraxinea* (*C. fraxinea*). The disease causes leaf loss and crown dieback in affected trees, and usually leads to tree death. Ash woodlands are the dominant woodland type within the AONB and the impact of the spread of this disease on the landscape could be very significant.

Recently, a fungus-like pathogen called *Phytophthora austrocedrae* has been discovered locally, which causes dieback and mortality of juniper. The spread of this disease could also cause significant impact. *Phytophthora ramorum* is another fungus-like pathogen that causes extensive damage and mortality to trees and other plants, now present in northern England.

Also of note are the populations of grey squirrels in the AONB. Grey squirrels compete more successfully than red squirrels for food and habitat. They can also carry squirrelpox virus which causes severe clinical disease and mortality in red squirrels without causing any symptoms in the grey carriers. There have been no confirmed sightings of red squirrels in the AONB since autumn 2009.



Key recent activity and successes

- The Cumbria Freshwater Invasive Non-Native Species (CFINNS) Initiative launched in April 2010 with the appointment of a county coordinator. The initiative aims to provide a strategic approach to the coordination and eradication of INNS within Cumbria. A Biosecurity Plan has been developed for the county to address freshwater non-native species.
- Funding has been secured to produce an INNS Rapid Response Plan.
- Continued engagement with Forestry Commission and Cumbria Tree Health Group.



Opportunities

- The CFINNS Initiative coordinates action throughout Cumbria. The INNS officers have experience of surveying and monitoring, raising awareness and of developing management strategies and biosecurity plans for catchments. There is an excellent opportunity for the AONB Partnership to develop links with the INNS officers and to take advantage of the expertise to develop a strategy for INNS management within the AONB.
- The AONB Partnership is well placed to contribute to monitoring and managing tree health in the area as part of local and national action plans.
- Funding has been secured through the H2H scheme to implement a programme to eradicate cotoneaster and buddleia on coastal margins.
- Opportunities exist to work with Red Squirrels Northern England to contribute to the delivery of a recognised red squirrel conservation strategy.



5.1b BIODIVERSITY AND GEODIVERSITY

Water quality

Facts and challenges

In the AONB, particularly in the Hawes Water and Leighton Moss catchments, agricultural diffuse pollution and septic tank outflows are continuing to impact on water quality and contribute to eutrophication (excessive growth of plant life in aquatic and terrestrial habitats). The water quality status of Leighton Beck has not yet been fully established as comprehensive monitoring has only recently commenced. It is likely, however, to be subject to the same types of pollution as Hawes Water and Leighton Moss.

Pollution of freshwater sources can subsequently influence estuarine habitats and coastal waters, and pollution and sedimentation from within the AONB may be continuing to affect the water quality of the Kent Estuary and Morecambe Bay.

Key recent activity and successes

- The Leighton Moss and Hawes Water Diffuse Water Pollution Plan approved by NE and the Environment Agency (EA) in 2010 and reviewed in 2014. Under the Plan the EA has visited sites in the AONB to check whether sewage treatment infrastructure is contributing to reduced water quality.

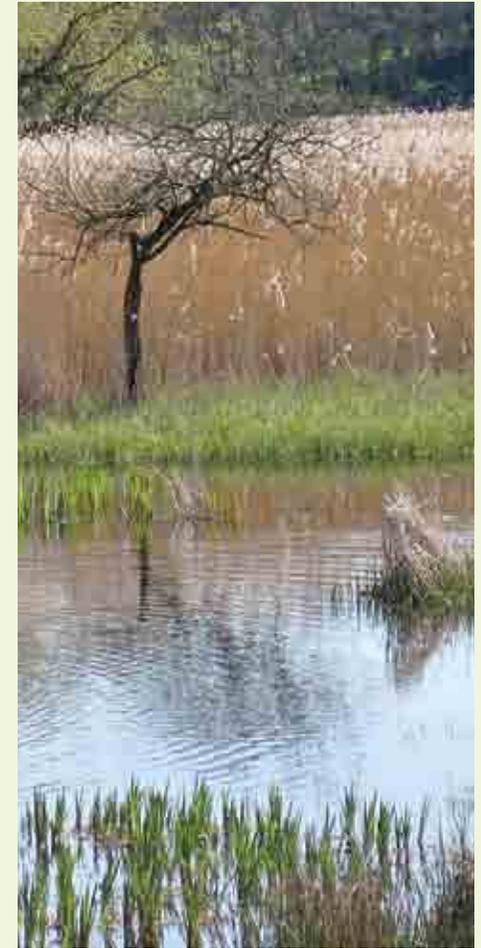


- Catchment Sensitive Farming initiative is tackling agricultural diffuse and point source pollution in target areas.
- Source to Sea programme secured £1.1m from the Government's Catchment Restoration Fund. Delivered by the RSPB and other partners, it will start to address the reasons for failure identified in the Water Framework Directive on many of the rivers and catchments that flow into Morecambe Bay. Three projects will directly benefit water bodies within the AONB: Leighton Moss Resource Protection and Pan-Morecambe Bay Wetlands and Waterbodies Restoration and Love my Beach campaign.
- Waste Water Treatment Works at Grange recently upgraded which will improve the condition of the coastal waters.
- Water quality monitoring of Leighton Beck by the EA started.



Opportunities

- There have been a number of developments in the understanding of the water environment and the science behind assessing it since the publication of the first round of River Basin Management Plans in 2009. There are opportunities during the preparation and subsequent delivery of the second North West River Basin Management Plan to achieve further improvements in water quality in and around the AONB.
- Delivery of the NIA and, in particular, Source to Sea programmes will help reduce diffuse pollution, especially from agriculture, and help improve water quality within the AONB and Morecambe Bay.
- Funding through the Catchment Sensitive Farming initiative will continue to help to implement measures to improve water quality in target areas.



5.1b BIODIVERSITY AND GEODIVERSITY

Shellfishing

Facts and challenges

Warton Sands cockle bed is located in the south west corner of the AONB but cockle fishing is carried out across various locations within Morecambe Bay. Damage to saltmarsh habitat and the mudflats within the AONB could be caused by accessing the Warton Sands cockle beds and by unsustainable harvesting methods, and disturbance of birds may also occur. Oystercatchers are reliant on the productivity of the cockle beds and reductions in the cockle population could impact on the AONB's important oystercatcher population. Since 2007/8 there have been no commercial stocks of cockles in Morecambe Bay and therefore the beds have not been open.

Key recent activity and successes

- Application made by the North Western Inshore Fisheries and Conservation Authority (NWIFCA) to Defra for a Hybrid Fishery Order for Morecambe Bay (covering cockles and mussels), which allows for restriction of the number of fishing licences.
- Project Inshore underway to support scientific research into inshore fisheries.

Opportunities

- The Hybrid Fishery Order represents a significant opportunity to achieve a sustainable cockle fishery in Morecambe Bay.
- Opportunities exist through the new Morecambe Bay European Marine Site Management Scheme Action Plan 2012-2015 and the Management Group and through direct liaison with NWIFCA to manage shellfishing activity in Morecambe Bay.



5.1b BIODIVERSITY AND GEODIVERSITY

Geodiversity

Facts and challenges

There are 2 nationally important geological sites within the AONB, designated as SSSIs for their geological interest - Trowbarrow Quarry and Hale Moss Caves. There are 7 Local Geological Sites covering nearly 6% of the AONB and there are 16 Limestone Pavement Orders covering over 15% of the AONB.

Sites and features of geological interest are under occasional threat from development and inappropriate land management. The extensive limestone pavements, prominent erratic boulders and fossil assemblages along the coast are key examples. Scrub removal is an ongoing issue at Trowbarrow Quarry SSSI to ensure that the important geological features remain visible from the rest of the quarry.

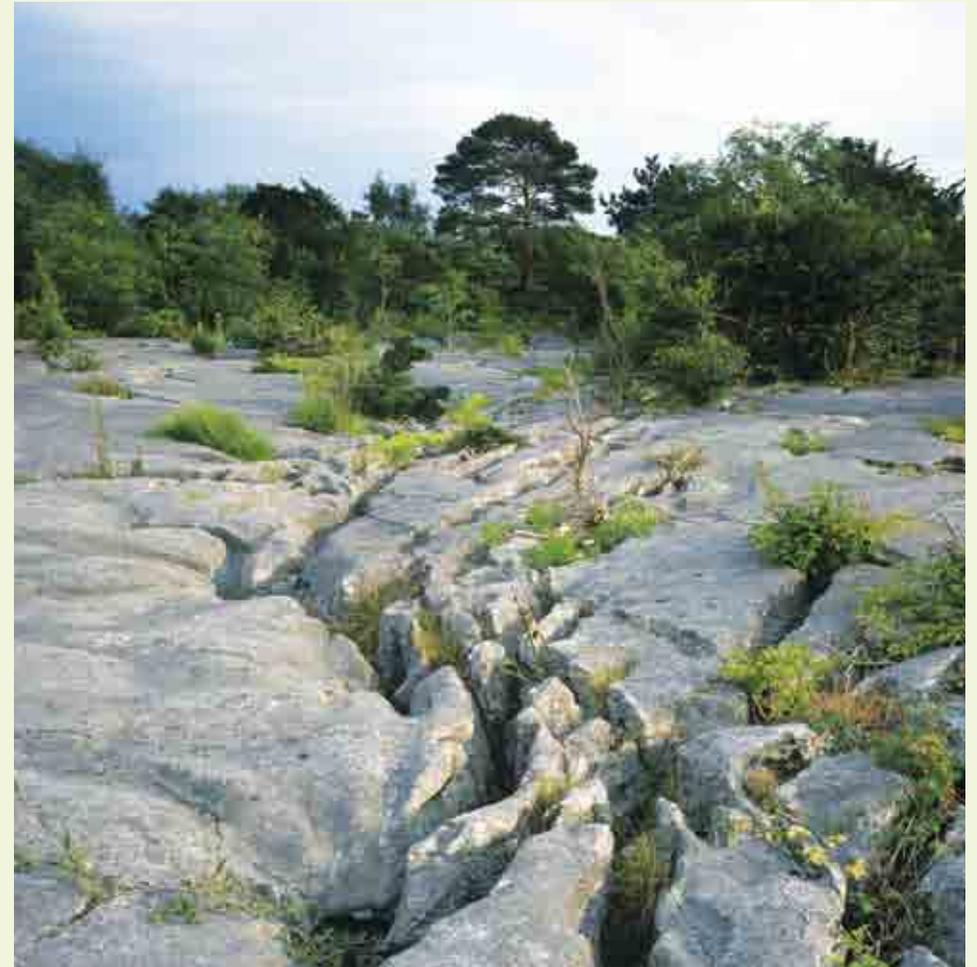
Sandside Quarry is the only remaining active quarry within the AONB and is due for closure in 2020. It will be important to ensure that appropriate restoration plans are in place following cessation of working at the site.

Key recent activity and successes

- 100% of the SSSI geological features assessed are in favourable or recovering condition¹⁶.
- One new Local Geological Site has been designated at Sandside.
- All the Local Geological Sites are in positive management.
- Storth Geological Trail developed by the Landscape Trust in 2013.

Opportunities

- The development of a Geodiversity Action Plan for the AONB will enable increased awareness and understanding of the AONB's geodiversity resource and how it has led to the evolution of the distinctive landscape and biodiversity. The education and learning opportunities provided by the geology and geomorphology of the AONB should be explored as part of this work including the opportunity to develop further geotrails.
- Opportunities provided by the restoration of Sandside Quarry should also be explored. Middlebarrow Quarry ceased working in 2000 and future opportunities may exist for geological conservation and education.
- Adopting a landscape-scale approach to nature conservation, as promoted in Biodiversity 2020, will also help achieve conservation of geodiversity.



5.1c HISTORIC LANDSCAPE

Historic and cultural heritage

Facts and challenges

Conservation of historic assets

The AONB contains a wealth of historic buildings and sites and the conservation of these is essential to the maintenance of local settlement character and the sense of history of the area. Five sites are on English Heritage's, 'Heritage at Risk Register 2012'. Although progress has been made at Slackwood Farm and Beetham Hall over recent years, Arnside Tower, Hazelslack Tower and the Iron Age fort on Warton Crag remain in poor condition. All require positive conservation management.

Non-scheduled features, including ponds, wells, limekilns, traditional boundary walls, hedgerows, and historic pathways (such as the Coffin Route) are important and distinctive features of the historic landscape which can be threatened by removal, neglect, under-management or lack of appreciation and inconsistent recording. The ancient field pattern that occurs in the eastern part of the AONB is at risk from gradual loss or fragmentation resulting from the removal and erosion of field boundaries due to intensification of farming.

Parkland, designed landscapes and gardens within the AONB are at risk through lack of succession planning, change of management, lack of recognition through the Register of Parks and Gardens and shifts to a purely agricultural management focus. Many of the trees that contribute to the special character of the parkland are mature or over-mature and replacement planting will be needed.

Orchards have been a feature of the landscape for hundreds of years. There are no commercial orchards within the AONB but more than 90 orchards and gardens, growing a wide range of apple, plum, damson and pear varieties, were visited as part of a recent research project¹⁷. The condition of many older orchards has deteriorated over the years and many are in need of concentrated restoration work although some new planting of fruit trees by individuals has been carried out. Further work is required to conserve and enhance local orchards and promote the AONB as a historical fruit growing area.

The industrial heritage of the AONB is also a key element of the landscape; prior to the building of the railway, the AONB was a thriving industrial as well as agricultural landscape. The identification and recording of features such as limekilns, quarries, mineral railways, copper/iron mining and processing sites, commercial port facilities and shipbuilding is required along with appropriate maintenance and restoration measures.

Before conversion of redundant historic buildings such as farmsteads and barns to new uses takes place, surveys should be undertaken to record their historical interest and build a good knowledge base in the AONB. Appropriate priority species surveys should also be undertaken prior to any work being carried out.



¹⁷ Orchards of the Arnside & Silverdale AONB, published by the Arnside & Silverdale AONB 2007

5.1c HISTORIC LANDSCAPE

Historic landscape conservation

Piecemeal consideration of the historic environment as a series of isolated sites and features divorces these from their context and other aspects of land and heritage management. There is a need to ensure that landscape-scale conservation of the historic environment is prioritised alongside that of biodiversity and landscape character. Development of Local Heritage Lists would support this.

Recording of social and cultural history

Information on social and cultural aspects of the AONB such as historic land management practices and the local history and development of the villages is at risk of being lost as people get older and if it is not formally recorded in some way.



Key recent activity and successes

- Some conservation work carried out at both Slackwood Farm and Beetham Hall, improving their condition, although both remain on the Heritage at Risk Register.
- Uptake of Environmental Stewardship options including stone wall and hedgerow maintenance and restoration, maintenance of traditional farm buildings, management of archaeological features on grassland, maintenance and restoration of wood pasture and parkland, restoration of historic buildings, resulting in some positive outcomes for the historic environment.
- Active conservation of heritage features through the AONB volunteer programme, for example the restoration of a water trough at Waterslack, vegetation clearance at Woodwell and limekiln sites, and maintenance of stone walls and hedgerows.
- Rapid Coastal Zone Assessment completed 2012.
- English Heritage National Archaeological Identification Survey nearing completion. A number of sites have now been added to the Historic Environment Record (HER) within the AONB (currently 655 entries).
- Group established in Arnside to take forward an archiving project.
- The Mourholme Local History Society has carried out significant research in the area.
- Implementation of English Heritage's National Heritage Protection Plan.

Opportunities

- Both SLDC and LCiC plan to prepare Local Heritage Lists. This provides an opportunity for sites of local importance within the AONB to be recognised and recorded.
- Funding attracted for the H2H programme to deliver heritage based projects around Morecambe Bay including sites within the AONB such as at Warton Crag hill fort and Jenny Brown's Point.
- English Heritage is to fund 15 pilot surveys as part of a programme to consider how Grade II listed buildings at risk from neglect, decay and damaging alterations, can be included on the Heritage at Risk Register. The condition of Grade II listed buildings within the AONB may benefit from this work in the future.
- English Heritage's National Archaeological Identification Survey is providing additional information for the HER within the AONB.
- AONB historic designed landscapes study completed, with recommendations for future action.



- There is a real opportunity to develop new projects to record, conserve and enhance the historic environment in the area, working to increase community awareness and involvement.
- An oral history initiative is underway as part of Leighton Moss's 50th anniversary.
- Supporting community history and archiving schemes looking at new and innovative ways to record, interpret and present information.

Management Plan Objectives

To achieve an outstanding landscape, rich in wildlife and cultural heritage, the AONB Partnership will work towards the following objectives:



Landscape and seascape

- Objective 1:** Conserve, enhance and improve understanding of landscape and seascape character and features which contribute to the special qualities and setting of Arnside & Silverdale AONB
- Objective 2:** Deliver Integrated Coastal Zone Management within Morecambe Bay, ensuring conservation and enhancement of the natural beauty of the AONB coast
- Objective 3:** Understand and plan for the impacts of climate change on the special qualities of the AONB and deliver appropriate actions to mitigate and adapt to these impacts

Biodiversity and geodiversity

- Objective 4:** Enhance, restore and improve understanding of ecological networks at a landscape scale within the AONB and across the wider Morecambe Bay area
- Objective 5:** Make a significant contribution to Biodiversity 2020 outcomes by delivering conservation, enhancement, restoration and connectivity of the AONB's characteristic mosaic of habitats including woodlands, grasslands, and coastal and freshwater wetlands and taking targeted action for key priority species
- Objective 6:** Prevent introduction of, halt the spread of and where appropriate eradicate, invasive non-native species and plant diseases
- Objective 7:** Make a significant contribution to delivery of the Water Framework Directive by improving water quality in and around the AONB and Morecambe Bay
- Objective 8:** Conserve geodiversity and increase awareness and understanding of how it has led to the evolution of the AONB's distinctive landscape and biodiversity

Historic landscape

- Objective 9:** Enhance, restore and improve understanding of historic landscape character and features and the area's cultural heritage without a significant adverse impact on natural beauty



Barry Stacey

5.2 A thriving, sustainable economy and vibrant communities

A thriving, sustainable economy and vibrant communities

Development management

- Development management and planning
- Affordable housing and local services

Supporting rural growth and livelihoods

- Sustainable rural economic growth
- Maintaining and supporting rural livelihoods

Sustainable visitor economy

- Sustainable tourism
- Recreational pressure

Sustainable communities

- Low carbon living
- Sustainable and integrated transport
- Community and culture



5.2a DEVELOPMENT MANAGEMENT

Development management and planning

Facts and challenges

Housing development – new build and conversions

There is a recognised need for affordable housing within the AONB (see also Affordable housing and local services, page 47). It will be very important to ensure that, in meeting these needs, detrimental impacts upon the character of individual settlements and the landscape character of the AONB are minimised. Development of infill plots for residential housing and extension of settlements can lead to loss of important semi-natural habitat and greenspace and can have an urbanising effect on villages. New development should consider local settlement character including housing layout, scale, design, vernacular tradition and materials. Development of brownfield sites can lead to enhancement of settlements.

Conversion of buildings continues within the AONB. Inappropriate repair or insensitive conversion or modification of vernacular buildings can result in features associated with the building's original use being lost and the proliferation of features which detract from their setting, all of which can contribute to a gradual erosion of settlement character. In rural locations where conversions of redundant agricultural buildings result in the intensified use of a site, there can be detrimental effects on character and tranquillity.

Tourism related development

The growth of tourism brings pressures for the development of new facilities such as car parks, the expansion of caravan and camping sites and second home ownership. Whilst some developments can be sensitively accommodated, a clear development planning and management approach which restricts insensitive development is required.



Commercial development within and outside the AONB

Any commercial development within the AONB must be appropriate to the AONB designation in nature and appearance.

Development just outside the AONB such as large scale holiday complexes and further commercial development along the A6/M6 corridor, has the potential to adversely affect the setting and views out from the AONB, particularly on the eastern margins.

The importance of the setting of the AONB is recognised. However, given its strategic location adjacent to the M6 corridor, built and renewable energy development is likely to be proposed in areas close to the AONB boundary, which are predominantly rural in character. The AONB Partnership and local planning authorities must work together to support appropriate development, while ensuring that through design, siting and mitigating measures such development respects the importance of this area as the setting of a nationally important landscape.

The winning of shale gas by hydraulic fracturing (fracking) is currently under consideration for potential development in the northwest of England. Any development would be subject to consent from the relevant County Council as Minerals and Waste authority, and subject to stringent checks and regulation through the Health and Safety Executive, the Environment Agency and the Department of Energy and Climate Change. The AONB designation would be considered in this process as appropriate.

Urbanisation of villages and rural roads

The rural nature of the AONB and its villages is an important element of the special landscape character of the area. Gradual urbanisation of settlements and rural roads through, for example, increased road signage and road markings and inappropriate street furniture should be avoided.

Light and noise pollution

Freedom from light and noise pollution are key components of the area's tranquillity. Increased lighting and noise can also have detrimental effects on wildlife. Minimising light and noise pollution from development and recreation should remain a priority.

5.2a DEVELOPMENT MANAGEMENT

Key recent activity and successes

- Proposal put forward and agreement reached by SLDC and LCiC to prepare a dedicated Development Plan Document (DPD) for the AONB.
- Landscape related planning advice is provided as a core function of the AONB Team. All planning applications relevant to the AONB are assessed according to the planning protocol and formal responses made when necessary.
- Up to date Conservation Area Appraisals are now in place for two of the three designated building Conservation Areas within the AONB.
- Consideration of AONB designation by Highways Authorities.



Opportunities

- SLDC and LCiC will prepare a dedicated Development Plan Document for the AONB which will cover land allocations, development management guidance and design guidance. The Plan will be developed in close cooperation with the AONB Partnership, Parish Councils and local communities, with a target date for adoption in early 2016. This process offers a significant opportunity to develop a joint development management approach that properly reflects the purposes of AONB designation.



Affordable housing and local services

Facts and challenges

Provision of affordable housing to meet local need

Affordable housing is that which is described in the National Planning Policy Framework (NPPF) as 'social rented, affordable rented and intermediate housing' and is defined as that which is 'provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision.' (see glossary in NPPF).

The continued higher cost of local housing in the area compared with average earnings means that provision of affordable housing for local need remains a significant issue within the AONB. The affordability ratio (average house price to household income) within the AONB is significantly higher than the national average¹⁸. A Local Housing Needs survey is to be carried out to provide evidence on housing needs within the AONB^{19,20}; identifying appropriate locations for affordable housing which will not have significant detrimental impact on landscape character is a priority. Opposition to new housing in some communities is a challenge to meeting housing needs and therefore close working with local communities will be an important element in the development of the AONB DPD.

Retention of local services

Local services and facilities, including schools, doctors' surgeries, shops, post offices, garages and pubs, all contribute to the quality of life of the AONB's communities and are also important to the visitor economy.

To maintain the vibrancy of local communities, identified as one of the special qualities of the AONB, retention of these services, alongside provision of affordable housing, is vital. Minimising the distances people have to travel to access services also contributes to reducing CO₂ emissions.

Key recent activity and successes

- Consultations carried out on Local Plans by SLDC and LCiC including Land Allocations and Development Management Development Plan Documents.
- Proposal put forward and agreement reached by SLDC and LCiC to prepare a dedicated joint Development Plan Document for the AONB.

Opportunities

- Preparation by SLDC and LCiC of a dedicated DPD for the AONB offers an opportunity to support the delivery of new homes to meet local need in a way that is appropriate to the purpose of the AONB.

¹⁸ Mean house price to household income in Arnside and Beetham ward is 8.2; comparative national figure is 5.9, Cumbria Observatory. ¹⁹ See also Lancaster City Council's Housing Requirements Study (2013) which sets out the scale of housing development needed to meet market and affordable housing needs over the period 2011-2031 and ²⁰ South Lakeland District 2011 Strategic Housing Market Assessment

5.2b SUPPORTING RURAL GROWTH AND LIVELIHOODS

Sustainable rural economic growth

Facts and challenges

Supporting sustainable growth in the local rural economy

The government's Rural Economy Growth Review in 2011 confirmed the substantial contribution made by rural areas to the national economy. In the following Rural Statement 2012, the need for rural businesses to make a sustainable contribution to national economic growth was highlighted. Working in partnership with local businesses, landowners and land managers to encourage and support sustainable growth in the local rural economy will be a priority, where it is consistent with the primary purpose of designation.

In pursuing the purpose of AONB designation, account must be taken of the needs of agriculture, forestry, other rural industries and the economic and social needs of local communities and particular regard is paid to promoting sustainable forms of social and economic development that in themselves conserve and enhance the environment. AONBs are protected landscapes but this does not preclude change and sustainable forms of development. The interdependent relationship between land management, natural beauty, community and the economy is clear. Therefore, all AONB Partnerships are actively engaged in supporting rural businesses where there is a positive relationship between businesses and the landscape.

Working to conserve and enhance the exceptionally high quality environment of the AONB helps create the conditions for economic growth and prosperity both locally and in the wider region and creates tangible connections between businesses, communities and nature.

Sustainable diverse communities

To take advantage of the economic opportunities presented by the special qualities of the AONB and their conservation, communities need a mix of skills and ages. The AONB has a greater than average older population²¹. Younger people need to be encouraged to stay within the AONB to ensure community vibrancy and sustainability, and to support a successful local economy. Limited job opportunities within the local area and the issue of affordability of housing (see also Affordable housing and local services, page 47) can lead to the progressive loss of young people from the area.



Communications and employment services

Modern telecommunications, including access to superfast broadband and good mobile phone coverage, are vitally important to a successful rural economy and the development of local businesses. Improved services will help foster home working and micro-businesses which are attracted to the area because of the quality of the environment and protected landscape brand identity. Effective roll out of superfast broadband is key to the future prosperity of rural communities, and shared infrastructure has the potential to minimise adverse landscape impacts.

The limited availability, in rural areas, of services such as locally-based job centres and training schemes, business advice and affordable start-up premises can make it difficult to access appropriate training and business support.

Development and promotion of local products

Locally produced food and other products can help to stimulate sustainable land management, reinforce local distinctiveness and add value to the local economy. Local foods of known provenance are becoming increasingly important in the market place, presenting increased opportunities for local producers and value-added processors.



5.2b SUPPORTING RURAL GROWTH AND LIVELIHOODS

Key recent activity and successes

- Ongoing support for local businesses through the AONB Sustainable Development Fund.
- A variety of local products developed, including orchard, coppice and wood products.

Opportunities

- Cross boundary working, particularly with local authorities and Local Enterprise Partnerships, to develop Morecambe Bay as a distinctive socio-economic area which attracts people to live, work and invest, will offer opportunities to attract resources to directly and indirectly support the local economy. The AONB Partnership has wide experience in collaboration and cooperation across disciplines, geographic areas and between different audiences and is well placed to take a leading role in this.
- Well managed landscapes offer a wealth of natural assets that serve as the foundations of rural businesses, including agricultural land and woodland. High quality landscapes also offer a wealth of opportunities for tourism-related businesses.



- This AONB Management Plan guides actions which affect the landscape and provide supporting information for landowners and communities. The AONB Partnership is well placed to produce guidance to assist businesses in harnessing the opportunities provided by our unique landscapes.
- Preparation by SLDC and LCiC of a dedicated DPD for the AONB, as described on page 12, offers an opportunity to support the delivery of small-scale business premises in a way that is appropriate to the purpose of the AONB.
- Developing a local products initiative and supporting local product development will aim to support and promote local businesses.
- Community initiatives such as Broadband 4 the Rural North (B4RN) offer opportunities to achieve enhanced superfast broadband rollout.



5.2b SUPPORTING RURAL GROWTH AND LIVELIHOODS

Maintaining and supporting rural livelihoods

Facts and challenges

Farming

The total number of commercial farm holdings in the AONB in 2010 was 43, most being between 5 and 20ha²². There appears to have been an increase in the number of large farms (>=100ha) since 2000, and a significant shift away from small holdings (<5ha) particularly since 2008. Farms grazing livestock (beef and dairy cattle and sheep) are the predominant farm type. The number of dairy holdings has declined over recent years.

Ownership of farmland within the AONB is changing. In 2000, 35% of the farmed area was rented rather than owned but this figure had risen to 49% in 2010.

Employment in farming within the AONB is steadily declining; although 2006 to 2008 was a period of slightly higher employment, numbers have decreased by nearly 19% between 2000 and 2010. In 2010, 29% of those employed in farming were full time farmers, 45% part time and the remainder full and part time employees and casual workers. Whilst total numbers have decreased, these percentages have changed very little over the ten year period.

Uptake of Environmental Stewardship within the AONB is widespread with the area being effectively targeted for entry into Higher Level Stewardship (HLS). The future of public funding for both environmental and other farming payments is uncertain and is expected to be following a downward trend. This is likely to increase the pressure on the profitability of farms. Increasing fuel prices and changing markets can add additional pressure.

Farming within the AONB has diversified over the years to encompass a range of non-agricultural activities including equestrian uses and the provision of holiday accommodation, campsites and other facilities associated with recreation and rural tourism. Further diversification is likely as wider economic pressures continue to make income from farming unpredictable.



Forestry

Over one third of the terrestrial AONB is woodland but much is currently under managed (see also Habitats and species, page 33). Managing woodlands produces timber, coppice and woodfuel products and supports jobs. The profitability of forestry is dependent on world market prices and the cost of transport, but increasing interest in the use of woodfuel heating and other wood products is creating the potential for the development and growth of a successful local woodfuel economy. Woodlands also play an important role in recreation and tourism, supporting the visitor economy.

Rural skills

Increasing the number of skilled contractors, land managers and volunteers trained in traditional rural management practices, such as hedgelaying and building drystone walls, carrying out coppice management and maintaining traditional orchards will benefit both the landscape and the local economy.

Supporting creative and knowledge-based industries

The AONB, with its high quality landscape, clarity of air, spectacular views and diversity of wildlife attracts artists and crafts people who take inspiration from their environment. The Silverdale & Arnside Art and Craft Trail has expanded rapidly in recent years and now involves over 100 local artists. Educational and knowledge-based businesses and consultancies are increasing. The area is also popular with people who can work remotely through good ICT links.

These businesses can contribute to the tourism offer of the AONB and support the local economy as well as providing local employment and training opportunities.

5.2b SUPPORTING RURAL GROWTH AND LIVELIHOODS

Key recent activity and successes

- Significant uptake of Environmental Stewardship within the AONB (33 Environmental Stewardship agreements across the AONB with a total annual value of £307,654²³).
- The NIA programme is providing bespoke advice and hands on support to landowners and managers to enable them to take advantage of agri-environment and woodland grant schemes.
- Participation in a national social forestry pilot project to support the development and growth of the local woodfuel supply and demand chain is stimulating collaborative working in the sector.
- 6 local businesses have been supported through the AONB Sustainable Development Fund.
- The AONB Team delivered part of the Rural Skills Cumbria “Work the View” project, hosting training and competition events promoting the traditional rural skills of hedgelaying and drystone walling.
- Silverdale & Arnside Art and Craft Trail runs annually.

Opportunities

- Farming, forestry and land management have created much of the special landscape that we see in the AONB today. Conserving and enhancing the AONB cannot be done without farmers and land managers, so providing bespoke advice and hands on support will remain a priority. There are opportunities to ensure that the next phases of EU and UK government investment (including RDPE, Natural Environment White

Paper initiatives) are effectively targeted to support land managers in the AONB. Uptake of the new environmental land management scheme will be supported once this becomes operational.

- Consumer interest in foods and products with local provenance is growing. Strong links can be developed between land management, local products and tourism to support the development of valuable short supply chains.
- There are opportunities for making greater use of under managed woodlands and adding value to locally produced wood products. NIA programme delivery will increase the area of woodland in management to produce timber, woodfuel and boost the local woodfuel market. Continued participation in the national social forestry project will enable local projects to take advantage of national expertise and support.
- A thriving, sustainable wood fuel economy will bring benefits to the local economy and provide local employment opportunities. It would also lead to an expansion of managed woodland within the AONB with resulting benefits to biodiversity.
- Developing a comprehensive traditional rural skills programme offers an opportunity to retain and increase these skills locally.
- Opportunities exist to develop further the tourism potential of the expanding creative industry element of the local economy.



5.2c SUSTAINABLE VISITOR ECONOMY

Sustainable tourism

Facts and challenges

Development and management of sustainable tourism

Tourism is a key component of the local economy. Around 14%²⁴ of businesses are involved in tourism business activity and tourism accounts for nearly a fifth of total employment within the AONB. A sustainable approach to the development and management of tourism in the AONB is required which takes account of the needs of the environment, local residents, local businesses and visitors. The opportunity exists for local businesses to further develop the sustainable tourism industry that draws on, but does not compromise, the area's special qualities.

A shared approach by local authorities, Cumbria Tourism and Marketing Lancashire and a range of other organisations to developing the wider Morecambe Bay area as a sustainable tourism destination is emerging. The AONB is a key part of this wider area.

In the recent Morecambe Bay Visitor Survey²⁵ the most popular reasons for visiting the area were for its beautiful scenery and its peace and tranquillity.



Almost 90% of respondents were interested in visiting places where they can see and/or experience wildlife. 94% agreed that Morecambe Bay was good for nature and scenery; 70% of visitors agreed that the area was good for culture and heritage.

Working with tourism businesses

In order to follow a sustainable approach to the development of tourism in the AONB, close working relationships need to be developed and maintained between tourism businesses, the AONB Partnership and tourism support organisations. An important element of promoting the area as a nature tourism destination is enabling businesses to understand and to work together to promote the wildlife and recreational experiences the area has to offer. A further key element of promoting the AONB as a 'green' destination will be ensuring an environmentally responsible industry. Working with businesses to improve their environmental credentials and working towards increasing numbers of Green Tourism Business Scheme (GTBS) accredited businesses will be important. There are currently 3 GTBS members within the AONB.



Communicating effectively to visitors about the AONB and its special qualities and how to look after them

The tourism offer within the AONB is based on the area's special qualities. Visitors' experiences are enhanced by good quality information being available about the special qualities, and about how people can experience them and support their conservation (see also Enjoying and understanding, page 61). Feedback from the Morecambe Bay Visitor Survey indicates that visitors often found it difficult to find information on places of local interest and events, both online and at tourist information offices. Websites were the most widely used resource for visitors to plan their trips to the Morecambe Bay area. The AONB website was amongst the most popular.

Marketing and promotion of the AONB

For the economic sustainability of the tourism industry within the AONB, marketing and promotion of the area, its special qualities and accessibility, both locally and more widely, is vital. Close working is needed with organisations responsible for carrying out pre-arrival marketing to send out appropriate, accurate and positive messages about the tourism offer in the AONB and wider Morecambe Bay area. In the recent Morecambe Bay Visitor Survey, 77% of visitors were aware of the AONB and 71% had visited.

Facilities for sustainable tourism and recreation

Appropriate forms of tourism in the AONB are those based on the area's special qualities and their appreciation including quiet outdoor recreation (such as walking, cycling, horse riding, fishing and climbing), wildlife and nature, heritage and cultural tourism. Key attractions include RSPB Leighton Moss, Leighton Hall and the Cross Bay Walks.

To enable people to make the most of what the area has to offer, facilities and infrastructure are required such as car parking, toilets and cycle and Trumper hire. The use of public transport including rail and bus services for accessing and travelling within the AONB needs to be further encouraged (see also Sustainable and integrated transport, page 56).

In the Morecambe Bay Visitor Survey, the difficulty in finding parking at Arnside was raised as an area for improvement. Nearly one third of visitors surveyed considered the area to have poor public transport links.

5.2c SUSTAINABLE VISITOR ECONOMY

Key recent activity and successes

- Sustainable tourism work streams are part of the NIA and H2H programmes.
- The remit of the RSPB Futurescapes Senior Officer, funded by the EU Life+ Communications Programme until 2015, is to develop nature tourism opportunities in the Morecambe Bay area.
- Morecambe Bay Nature Tourism Business Network was launched in March 2013 with over 40 businesses taking part, working with Bay Tourism Association as the key delivery partner.
- £490,000 has been successfully secured for '700 Days to transform the Bay', Morecambe Bay's Coastal Communities Fund (CCF) scheme, which aims to develop Morecambe Bay as a world class sustainable tourism destination. The scheme is led by Morecambe Bay Partnership, working with a number of delivery partners, and started in July 2013.



- Morecambe Bay Visitor Survey was completed in 2013.
- Local businesses supported through SDF e.g. Silverdale Cycle Hire.
- 'Understand', 'Enjoy' and 'Enhance' areas of the AONB website developed. Includes information on landscape, wildlife, culture and heritage, where to stay and eat, travel information, what to see and do, downloadable walks and an interactive map.
- An increasing number of businesses are achieving Green Tourism Business Scheme awards.
- The broadcast of BBC Autumnwatch from the AONB, based at Leighton Moss, significantly raised the profile of the area for its wildlife spectacles.



Opportunities

- There are significant opportunities to develop the area as a nature tourism destination because of its variety and abundance of wildlife. Almost 90% of respondents in the Morecambe Bay Visitor Survey said they were interested in visiting places where they can see and/or experience wildlife; however, only 55% visited a nature attraction or nature-rich place on their visit. Red deer, birds and otters were the most popular wildlife that people wanted to see but many people were also interested in seeing butterflies, orchids and wild flowers.
- Successful delivery of the NIA, H2H and CCF programmes will support development of sustainable tourism in the Morecambe Bay area.
- Development of the England Coast Path, a new National Trail, and the Morecambe Bay Cycle Way which will both pass through the AONB, provide further opportunities for enhancing the visitor economy.



5.2c SUSTAINABLE VISITOR ECONOMY

Recreational pressure

Facts and challenges

Managing impacts of tourism growth

Visitor numbers are expected to rise in the AONB over the coming years creating potential adverse impacts on the tranquillity of the area. The potential impacts of large numbers of visitors include physical and noise disturbance of wildlife by people and dogs, erosion and trampling, damage to roadside verges due to car parking, litter and dog fouling.

The growth of tourism brings pressures for the development of new facilities such as car parks and the expansion of caravan sites and can lead to increased traffic and parking on rural roads and in villages. Such growth needs careful management to minimise impacts on landscape character and tranquillity. Parking is already an issue at key sites and the limited nature of official parking within the whole AONB needs to be addressed.

There are some changes occurring in the types of recreational activity people engage in within the AONB. Jet skis are occasionally used on the estuary on a high tide, motorbikes are sometimes used on the foreshore and mountain bikes are sometimes used on footpaths. The level of such activity is not being monitored but disturbance to wildlife, damage to habitats and impacts on tranquillity can result if levels increase and are not carefully managed.

It is important to recognise the essential role that tourism plays in the local economy, and to ensure that recreational pressure is managed effectively at a strategic level to ensure pressures are minimised. Development and management of sustainable forms of tourism and the promotion of quiet recreation should remain a priority.

Litter

Litter can cause harm to both terrestrial and marine species by causing external injury or, if accidentally ingested, suffocation or starvation. Litter can last for long periods of time before degrading and toxic elements can leach into the soil and the aquatic environment. Litter also detracts from the quality of the landscape. Along the Morecambe Bay coast marine litter is an ongoing issue.



Key recent activity and successes

- Morecambe Bay Visitor Survey completed in 2013.
- Regular litter picks along the AONB coast by volunteers.
- Love my Beach Coordinator recently appointed for Morecambe Bay as part of the Source to Sea programme.
- Morecambe Bay wader roost study carried out 2013.

Opportunities

- The development of a sustainable visitor economy strategy for the AONB linking with wider sustainable tourism initiatives and delivery will help support the local tourism industry while ensuring that growth happens in a way which conserves and enhances the special qualities of the AONB.
- Preparation by SLDC and LCiC of a DPD for the AONB provides an opportunity to ensure appropriate tourism development within the AONB.
- Continuing to carry out regular litter picks as part of the volunteer programme and the Beach Care Programme will help to manage the issue of marine litter.
- The H2H Natural Ambassadors project will help tackle disturbance issues.



5.2d SUSTAINABLE COMMUNITIES

Low carbon living

Facts and challenges

The adoption of more sustainable lifestyles is essential in helping to manage better the Earth's natural resources and is a key part of mitigating climate change. Measures which contribute to more sustainable living and reducing carbon emissions and which should be promoted within the AONB include increased water and energy efficiency, waste minimisation, increased use of sustainable transport and use of appropriate small-scale renewable energy systems.

Although some forms of renewable energy are not appropriate for the AONB, small-scale installations in the right locations will enable the AONB to make a significant contribution to carbon reduction targets.

Key recent activity and successes

- The AONB Office and Information Centre was granted the Gold Award under the Green Tourism Business Scheme in 2012. Assessment against a rigorous set of criteria covered areas such as energy and water efficiency, waste minimisation and recycling, use of local produce, supporting public transport and measures taken to increase biodiversity.
- The AONB Office and Information Centre is acting as a good practice case study for local businesses and residents.
- A series of renewable energy advice leaflets were produced by the Bittern Countryside Community Interest Company (BCCIC) in 2012.



- Funded through SDF, Global Link brought their mobile multi-media exhibition about climate change to primary schools in the area and worked with the children on waste reduction, energy saving and renewable energies, transport and food miles, and the importance of buying local produce.
- In partnership with Cumbria Action for Sustainability, the AONB Team ran a successful Low Carbon Living Conference for local residents.
- The BCCIC, as part of its Low Carbon Initiative, is delivering a series of solar photo-voltaic projects for community buildings in the AONB e.g. at Storth Primary School and Leeds Children's Holiday Centre.
- An AONB Low Carbon Landscape project has been completed.

Opportunities

- All members of society need to be involved in developing practical solutions to reducing carbon emissions: from renewable energy and low carbon technologies; to behavioural and lifestyle changes; to better management of our landscapes and natural resources. We all have a part to play in tackling climate change and ensuring our environment and communities are resilient and adapt to the challenges ahead.
- The Low Carbon Landscape project identified a range of opportunities within the AONB for achieving a low carbon landscape including the promotion of subsidy schemes that can benefit individual households, good potential to increase the number of people who work from home, an existing network of public transport with potential to improve connections; opportunities for the land itself to be used as a tool for carbon sequestration (ie. soaking up and storing carbon), developing the area's considerable expanses of woodland as a sustainable resource, and the potential to increase small-scale renewable energy generation (microgeneration) at the level of individual households and communities.



5.2d SUSTAINABLE COMMUNITIES

Sustainable and integrated transport

Facts and challenges

The majority of visitors to the AONB and Morecambe Bay area arrive by private car²⁶. Once in the area, around half of visitors continue to use their own vehicle to travel around with only a very small proportion, less than 5%, using trains, buses and bicycles. There is clearly scope to encourage the use of sustainable transport options such as public transport, cycling and walking as alternative means of getting to and from the AONB and travelling around and enjoying the special qualities of the AONB.

There is frequent and regular access to and from the AONB by public transport. The Furness railway line crosses the area and there are stations at both Arnside and Silverdale and nearby at Carnforth. This line provides connections with the rest of Morecambe Bay such as Lancaster, Grange, Ulverston and Barrow and the wider region, with direct services to Lancaster and Manchester. Passenger numbers at all three stations have increased over the past five years – by 27% at Carnforth, 23% at Silverdale and 10% at Arnside²⁷. The Carnforth Connect initiative provides a local bus service from Carnforth Station to Yealand Redmayne and the Silverdale Shuttle provides a link between the railway station and the village. There are also regular bus services into the AONB from Kendal and Lancaster.

Travel by bus within the AONB can be difficult, with some lack of coordination of services between the Lancashire and Cumbria parts of the AONB and infrequent services. There is no bus service between Arnside and Silverdale. Bus and train timetables are not fully integrated and not all trains stop at both stations.

Information on public transport routes and train and bus times needs to be widely available.

The Furness Line Community Rail Partnership (CRP) aims to increase the use of train services, develop integrated transport links from stations, improve station facilities and bring benefits to businesses and communities.

Key recent activity and successes

- Establishment and successful activity of the Furness Line CRP.
- Public transport promoted in all AONB communications.
- Poster campaign developed with TransPennine Express to promote AONB.
- Wildlife and Woodland Festival events linked to public transport wherever possible.
- Morecambe Bay Cycle Way feasibility study completed, led by Sustrans, to include route through key AONB villages, and funding approved for delivery of this through CCF scheme.

Opportunities

- Developing and promoting the railway as a key public transport link and stations as visitor arrival and information hubs is included as part of the H2H and CCF projects.
- Working with CRP to support future electrification of this valuable main line with interregional services will reduce carbon emissions and increase capacity and quality of train travel around the Bay and into the AONB.
- There are opportunities to develop a range of sustainable transport initiatives such as electric bike networks and park and ride schemes.



²⁶ Morecambe Bay Visitor Survey, 2013

²⁷ Furness and Lakes Line Community Rail Partnership and Office of Rail Regulation. The impact of the 16 week disruption because of the rebuilding of the Kent Viaduct at Arnside needs to be taken into account in the Arnside figures for 2011/12

5.2d SUSTAINABLE COMMUNITIES

Community and culture

Facts and challenges

Sustaining the vibrant communities of the AONB and retaining a feeling of shared identity is very important. There is a concentration of local societies and groups that share interests in the special qualities of the AONB. Awareness of the designation in the local community is considered to be high, although there are still residents who know little about the area and its protected landscape status. Supporting the community to take part in managing and making decisions about the future conservation and enhancement of the area is essential in building sustainability of the AONB Partnership.

The contribution to local community life made by all kinds of volunteer activity across a broad spectrum of interests and activities is widely recognised. Encouraging continued and wider voluntary involvement by residents in supporting the conservation and enhancement of the AONB through, for example, the AONB Volunteer Programme and the Landscape Trust, will be an important element in supporting community vibrancy.

There are many events held which celebrate the culture of the local area and provide good opportunities for developing greater community interest in the AONB and reinforcing the strong sense of community and of place.



Key recent activity and successes

- Long-standing Parish Council representation on AONB Executive Committee.
- Support for community groups and societies.

Opportunities

- There are numerous opportunities to support the area's local groups and societies enabling people to meet, talk and share experiences of the area and for local communities to become involved in decision-making in the area. Vibrant, active and engaged communities are at the heart of delivering the AONB Management Plan.
- Encouraging community participation in decision making about the AONB offers an opportunity to strengthen involvement and community ownership. Community engagement in the development of the AONB DPD will be welcomed.



Management Plan Objectives

To achieve a thriving, sustainable economy and vibrant communities, the AONB Partnership will work towards the following objectives:



Development management

Objective 10: Implement a development planning approach that delivers services, infrastructure and affordable housing to meet local community need while conserving and enhancing landscape character and the special qualities of the AONB

Supporting rural growth and livelihoods

Objective 11: Maximise opportunities for the AONB's designation, special qualities and management to both drive and support sustainable rural economic growth

Objective 12: Support and encourage sustainable production and use of local products, especially those linked to natural beauty

Objective 13: Provide opportunities to access training and employment and build the skills base in sectors related to the purposes of designation such as land management and sustainable tourism

Objective 14: Actively support landowners and managers to sustainably manage the landscape, delivering environmental and economic benefits for themselves and the wider community

Objective 15: Encourage infrastructure improvements to achieve superfast Broadband and mobile phone signal coverage for the whole of the AONB without a significant adverse impact on natural beauty

Sustainable visitor economy

Objective 16: Develop the AONB and Morecambe Bay area as a sustainable tourism destination where visitors can have high quality experiences of nature, culture and quiet recreation, and tourism contributes to the conservation of the area's special qualities

Objective 17: Coordinate action to minimise both terrestrial and marine litter

Objective 18: Monitor and manage recreational pressure to avoid and/or reduce detrimental impacts on the special qualities of the AONB

Sustainable communities

Objective 19: Support local communities in moving towards sustainable low carbon living

Objective 20: Increase opportunities for visitors and local people to maximise their use of sustainable and integrated transport

Objective 21: Foster community vibrancy and culture linked to the AONB's strong sense of place



Art-image

5.3 A strong connection between people and the landscape

A strong connection between people and the landscape

Enjoying and understanding

- Effective communication
- Learning and celebrating
- Health and wellbeing
- Maintaining and improving access
- Safe and responsible access

Taking action

- Community involvement



5.3a ENJOYING AND UNDERSTANDING

Effective communication

Facts and challenges

Improving awareness and understanding of the special qualities of the AONB and helping people to understand the benefits (ecosystem services) provided by the landscape will help people better understand the importance of effective management of the area and lead to greater appreciation and enjoyment of the special qualities of the AONB and action to conserve them. The opportunity to access information about the AONB should be available to all.

Residents and visitors need high quality information, interpretation and communications about the special qualities of the area and opportunities for enjoyment such as walking, cycling and bird watching in a range of formats to enable them to make the most of what the area has to offer and to enable them to help support its conservation.



Key recent activity and successes

- AONB communications strategy developed.
- AONB website redesigned, providing a comprehensive resource for communities, partners and visitors. Strong social media presence developed.
- AONB office developed as an Information Centre dealing with hundreds of enquiries each month.
- Waymarker, the AONB e-newsletter, produced every 2 months and circulated to over 650 people.
- AONB Discover guide updated, AONB Butterfly Guide produced, downloadable routecards available on website.
- Keer to Kent magazine published three times a year by the Landscape Trust.
- Production by BCCIC of AONB Atlases and Guides to the flora of the AONB.
- Arnside Youth Group '40 Views' project supported by SDF aimed at introducing local children to the local landscape.



- Station art project delivered to improve interpretation at Arnside, Silverdale and Carnforth stations.
- Parish Notice Board project delivered.
- A wide number of positive media stories are generated each year.

Opportunities

- The growth and variety in electronic media will continue to offer many opportunities for presenting information and in helping to reach new audiences.
- There are opportunities to further develop the AONB website to provide additional information on the special qualities and how to enjoy them and also about the benefits (ecosystem services) that they provide for different audiences.
- The AONB landscape, with its wide range of biodiversity, geodiversity and excellent access, provides a wealth of opportunities for events and educational visits.



5.3a ENJOYING AND UNDERSTANDING

Learning and celebrating

Facts and challenges

Life-long learning

Whilst education is often associated with schools, colleges and universities, learning is really a life-long process. The AONB has huge potential as an educational and life-long learning resource which has yet to be fully realised but there are constraints to delivery which include available sites, trained leaders and sufficient funding resources. The range of educational activity already facilitated and delivered by the AONB Partnership is broad:

- working with local Primary Schools by hosting educational visits
- providing opportunities for participation in practical countryside management activities
- supporting work experience placements within the AONB Team for Year 10/11 students
- enhancing University field trips to the AONB with lectures and presentations
- organising training events to promote rural skills and good practice land management
- presenting specialist subject talks to local groups and societies
- responding to research queries from graduate and post graduate students
- promoting site study visits for both amateur and professional audiences
- encouraging interest in the AONB by members of organisations such as U3A

Events

Events and festivals play a valuable role to enable people to enjoy, learn about and celebrate the special qualities of the area, connecting people with nature and encouraging participation and engagement. Partner organisations organise a vibrant programme of events throughout the year for all age groups including walks, talks, activities, festivals and the Landscape Trust's 'villages of the AONB' weekends. They are usually well attended. An AONB Annual Conference is held.



Key recent activity and successes

- Continuing links with the Department of Geography and Planning at the University of Liverpool, supporting annual field trips with talks to student groups on protected landscapes, legislation, AONB Management Plans and the importance of the AONB designation.
- Development and delivery of a wide range of educational opportunities for schools and other groups within the area including the education programme at RSPB Leighton Moss, educational visits to Warton Crag Local Nature Reserve and a regular schools programme at Arnside Youth Hostel.
- Feasibility study completed for development of a Forest Schools programme. Pilot Forest Schools activities held at Trowbarrow Local Nature Reserve.
- Biennial Apple Days held. Around 1,000 visitors attended the Apple Day in 2013 to celebrate the orchards of the AONB, the wildlife they support and the associated local produce.
- Wildlife and Woodland Festivals organised and promoted by AONB Partnership in 2012 and 2013.
- Bay Discovery Day organised by the AONB Partnership in 2010 attracting over 700 people.
- Annual events programmes delivered by partner organisations including the National Trust, RSPB and Natural England.
- Established links with local primary schools, providing an artist in residence to participate in classroom sessions with children on environmental art projects in the run up to both the AONB Apple Days and the Bay Discovery Day.
- Lady's slipper-Orchid viewing weekend held annually.
- Popular annual talks, walks and events programme delivered by the Landscape Trust.
- AONB Annual Conference held.
- Community engagement programme delivered through NIA programme.

Opportunities

- Extending work with local primary and secondary schools, colleges, universities and other groups.
- Using AONB events and educational visits to encourage participation and engagement by young people, helping develop their voice in setting future policy for conserving and enhancing the AONB.
- Developing an AONB Forest Schools programme in conjunction with existing school programmes in term time or as stand-alone activities during holiday times.
- Working with universities to facilitate high quality research in the area.
- Opportunities exist to provide and promote a more integrated events programme.

5.3a ENJOYING AND UNDERSTANDING



Health and wellbeing

Facts and challenges

Better health and wellbeing are major social and economic benefits that can be secured through good management of the natural environment. Active outdoor activity such as walking, running, cycling, and conservation work, has been shown²⁸ to benefit both mental and physical health and wellbeing. Good access to the countryside is key to delivering these benefits and the AONB offers a range of opportunities to enjoy the countryside through Public Rights of Way, access land, other paths and coastal access. The AONB Volunteer Programme, and the volunteer activities run by the Landscape Trust and other partners (see also Community involvement, page 66) provide valuable opportunities to participate in active sociable tasks which make a real difference on the ground. The wide range of opportunities to enjoy the countryside represents one of the special qualities of the AONB.

Key recent activity and successes

- 'Enjoy' area of the website developed including 'AONB Active' page promoting cycling in the AONB and wider area, and 'Walks' page with downloadable walks.
- Very successful volunteer programme being delivered by AONB Team providing opportunities for local people to engage in practical conservation management tasks.
- Volunteer programmes delivered by other conservation partners including National Trust and RSPB.
- Over 500 people took part in the AONB Walking Festival in 2011.
- Walking for Health initiative delivered at RSPB Leighton Moss.

Opportunities

- The AONB Partnership is very well placed to contribute to public health and wellbeing through its work to conserve and enhance the natural environment of the AONB and through the management and promotion of opportunities to access and enjoy it.
- There are opportunities to engage with the health and wellbeing agendas promoted by Government and to build new partnerships with the health sector during the lifetime of the Management Plan.



²⁸ Mind: (2007) Ecotherapy: The green agenda for mental health.

5.3a ENJOYING AND UNDERSTANDING

Maintaining and improving access

Facts and challenges

Maintaining and improving access

There is an extensive network of over 110km of Public Rights of Way (PRoW) within the AONB including footpaths and bridleways, over 17km of permissive routes and also included as part of this network, 18km of easy access walks. Significant areas of the AONB are also openly accessible to the public such as Local Nature Reserves, National Nature Reserves and National Trust-owned land. The outstanding level of access within the AONB is one of the special qualities of the area. Retaining this high quality access network and ensuring that it is maintained and promoted will ensure that residents and visitors can continue to access and enjoy the area fully.

The contribution of the PRoW network to the local economy should be recognised and appropriate resources allocated to their maintenance and development.

Delivery of the England Coast Path, as this is rolled out to north Lancashire and south Cumbria, while ensuring no adverse impact on the interest features of the Morecambe Bay European sites (SAC, SPA, Ramsar) will be a key priority over the Management Plan period.

Increasing access for all

Public Rights of Way should be easy to use by all legal users and, wherever reasonable, access should be available to people with a wide range of mobility difficulties.

Encouraging access, improving the opportunities for people with disabilities and improving the quality and enjoyment of the recreational experience for all should be a priority.

Key recent activity and successes

- Regular maintenance of PRoW network by Lancashire and Cumbria County Councils.
- AONB Volunteer Programme carried out ongoing footpath maintenance work and access improvements.
- Signage project delivered to increase awareness of AONB designation and promote the Countryside Code.
- Purchase of a Trampler for hire supported by SDF.
- Provision of a warden service at Warton Crag and Trowbarrow Local Nature Reserves by LCiC.

Opportunities

- The implementation of the England Coast Path will provide opportunities to enhance coastal access within the AONB in a sustainable way.
- The development of a footpath and cycleway link from Arnside to Grange across the viaduct would provide a key strategic access link and a significant new visitor attraction.
- There are some opportunities to extend access for disabled users, horse riding and cycling in ways that are not detrimental to the special qualities of the AONB.
- Delivery of the Morecambe Bay Cycle Way and improvement of village storage facilities would help improve access for cyclists.
- Keeping the PRoW network in good condition and working to retain permissive paths offers a very valuable resource to both local people and visitors.



5.3a ENJOYING AND UNDERSTANDING

Safe and responsible access

Facts and challenges

Safe access

The coastal area of the AONB can be dangerous, with shifting quicksands and fast running tides. Information regarding safe access on the coast needs to be widely available and widely promoted. Increased coastal access and the loss of saltmarsh along the AONB coast due to natural erosion is likely to lead to increased risk of more people using the intertidal sandflats for recreation.

Away from the coast and on the AONB's network of rural roads, the impact of increasing visitor numbers and increasing volume and speed of road traffic on road safety needs to be managed.

Responsible access

Encouraging responsible use of the countryside is a priority. The potential exists for conflict between public access to the countryside, particularly with dogs, and other land uses such as sheep and cattle grazing of farmland, which is so important both for the rural economy and wildlife on sensitive sites protected for their biodiversity value. Access to particular areas, such as Warton and Kent Estuary saltmarshes, needs to be restricted to avoid disturbance to breeding and roosting birds.

Encouraging responsible behaviour helps minimise adverse impacts such as physical and noise disturbance of wildlife by people and dogs, cycling on footpaths, damage to roadside verges due to car parking, litter and dog fouling. This is a challenge and increasing awareness of potential impacts is key.

It is important that any wildlife crime is tackled in a coordinated way.



Key recent activity and successes

- Bay Discovery Day held by the AONB Partnership included a quicksand rescue demonstration by Arnside Coastguard.
- Morecambe Bay safety leaflet, part funded by SDF and produced by Silverdale Primary School, distributed widely in local outlets and to all local schools in conjunction with Arnside Coastguard.
- Coastal safety information included in 'Enjoy' area of the website.
- Safety on the Sands campaign promoted by the Westmorland Gazette and supported by SLDC, LCiC, Bay Search and Rescue, Ulverston Inshore Rescue and the Maritime and Coastguard Agency.
- Increased promotion of Countryside Code in all relevant communications.

Opportunities

- The Countryside Code offers a nationally recognised framework with which to promote responsible use of the countryside through sensitive signage and in communications and publicity materials.
- In developing and implementing coastal access every opportunity should be taken to promote safety on the sands.



5.3b TAKING ACTION

Community involvement

Facts and challenges

Community involvement in the conservation and enhancement of the AONB

The positive role played by volunteering programmes delivered by partner organisations such as the AONB Team, the Landscape Trust, the National Trust, the Wildlife Trusts, RSPB, Butterfly Conservation, Natural England and other partners in supporting practical management work provides an important focus for community involvement in the conservation and enhancement of the AONB. Wherever possible opportunities for people to get involved, learn about and actively participate in the conservation of the area should be supported, expanded and widely promoted. Numerous community-led groups and societies such as Arnside and District Natural History Society and the Mourholme Society play an important part in providing opportunities to learn about and understand the area.

Arnside/Silverdale AONB Landscape Trust

The Arnside/Silverdale AONB Landscape Trust is a registered charity with over 900 members, run entirely by volunteers, and plays an important role in raising awareness of and achieving conservation of the AONB. The Landscape Trust owns three nature reserves which it manages for conservation through Higher Level Stewardship, publishes Keer to Kent magazine and organises a popular annual events programme, all of which are instrumental in helping the public understand more about the AONB and the importance of managing it well.

Bittern Countryside Community Interest Company

The Bittern Countryside CIC is a social enterprise, run entirely by volunteers, that seeks to promote a more sustainable future by delivering a programme of community-based sustainable development initiatives with local communities, businesses and agencies active in and around the AONB.



Key recent activity and successes

- Running of a successful AONB Volunteer Programme providing opportunities to engage in practical conservation management tasks, monitoring, administration and event support amounting to thousands of hours of volunteer time every year dedicated to achieving AONB objectives.
- Successful volunteer programmes delivered by partner organisations.
- The Landscape Trust Reserve Management Group established.
- Successful delivery of BCCIC projects such as the AONB Atlases and Guides to the flora of the AONB, and installation of solar panels at Storth School and the Leeds Children Holiday Centre under the Low Carbon initiative.
- NIA Community Engagement officer carrying out a programme of coordinated volunteering tasks to involve new and existing volunteers.
- Successful delivery of Arnside Big Volunteer Day and Arnside Bioblitz.
- Good participation in AONB Management Plan consultation process.



Opportunities

- There is tremendous scope for local people to take an active role in conserving the character of the AONB and there are many local groups across the AONB which come together as communities of place or interest. Where these are connected to the purposes of the AONB designation, every effort should be made to build capacity of and support for these organisations and to work collaboratively to develop appropriate initiatives and projects.
- Further opportunities exist to establish and support community-led volunteer groups to take action to conserve and enhance key sites.
- Encouraging community participation in decision making about the AONB offers an opportunity to strengthen involvement and community ownership. Community engagement in the development of the AONB DPD will be welcomed.



Management Plan Objectives

To achieve a strong connection between people and the landscape, the AONB Partnership will work towards the following objectives:



Enjoying and understanding

- Objective 22:** Provide high quality information and communications to enable people to enjoy and understand the special qualities of the AONB and the work of the AONB Partnership
- Objective 23:** Provide a series of opportunities for people to enjoy, learn about and celebrate the AONB's special qualities in a sustainable way
- Objective 24:** Maintain, improve and promote access and quiet recreational opportunities in a sustainable way for a diverse range of people
- Objective 25:** Encourage and promote responsible and safe enjoyment of the coast and countryside

Taking action

- Objective 26:** Support and build the capacity of community-led organisations which directly support the conservation of the AONB
- Objective 27:** Provide a series of opportunities for people to volunteer and get actively involved in looking after and supporting the conservation of the AONB's special qualities



Art-image

6. Delivering the Plan

The Delivery Plan

In order to achieve the objectives stated in Section 5, a series of actions is presented in the Delivery Plan.

The Delivery Plan sets out:

- the objectives
- actions to achieve each objective
- the initial lead organisation(s) that will begin to make things happen
- the partners who will be involved
- the timescale for implementation
- a priority level – 1 high, 2 medium or 3 lower

The Delivery Plan will present the initial actions proposed but it will be reviewed annually. The annual review will reflect progress towards achievement of the objectives and allow for the insertion of new actions which might implement the objectives more fully, or add weight to what has already been achieved. All actions will be carried out so that there is no significant adverse impact on Natura 2000 sites.

It is acknowledged that considerable financial resources will be required for successful implementation of the Delivery Plan. In the context of the current period of austerity, priorities for actions have been carefully assessed and the Plan is considered to be realistic. However, it may be that over the five year period of the Management Plan, some flexibility is required to accommodate changes in funding and financial circumstances and this will be done through the annual review.

A dynamic and successful partnership

Dynamic and successful partnership working is critical to enable delivery of the Management Plan and to create a strong and resilient AONB Partnership. The AONB Team plays an essential role in this process: providing management and leadership; making things happen on the ground, translating vision and national policy into local action; stimulating collaboration and delivering results; and providing value for money by accessing funding and resources.

Partners believe that:

- the long-term resourcing of the AONB Team is a critical success factor in the delivery of this Management Plan
- AONB management structures should be strongly supported by partners and relevant authorities
- the statutory requirement to produce Management Plans provides an important opportunity to strengthen partnerships and achieve better outcomes
- security and flexibility of funding for AONBs will deliver better outcomes

Implementation of the objectives and actions of this AONB Management Plan needs the support and involvement of many organisations and individuals who play an important role in the future of the area.

Sustaining the exceptional landscape of Arnside & Silverdale AONB is a major challenge and requires investment. In order to successfully deliver many of the actions, additional resources will need to be secured. It will therefore be a key priority for the AONB Team to secure additional funding from a range of external sources.





Jon Sparks

7. Monitoring

Monitoring

The Management Plan is not an end in itself. Monitoring is required in order to identify whether or not the Plan is achieving the purpose of designation – to conserve and enhance the natural beauty of the AONB.

Monitoring has been undertaken in response to previous AONB Management Plans and this data provides the evidence on which this Management Plan is based and forms a baseline for monitoring over the next 5 years.

Monitoring will take two forms:

- Monitoring performance: to establish how well the Partnership is progressing in delivering the Plan's objectives and actions; and
- Monitoring condition: to establish whether the special qualities/features of the AONB are in favourable condition, showing no change or deteriorating and hence whether the aim of conserving and enhancing the AONB is being achieved.

Monitoring performance will be done by reviewing progress on actions in the Delivery Plan. An AONB Annual Review will be produced detailing and evaluating progress in implementing the Plan and summarising achievements of the AONB Partnership.

Monitoring condition will make the best use of data collected by a range of organisations and interest groups. It is important that change in condition is monitored against a baseline set of evidence, and a number of indicators for which data is available will be used for this process. As new issues present themselves, new indicators may be needed and an initial baseline will need to be established.

The Biodiversity Action Reporting System (BARS 2) is an integrated web-based information system for entering and reporting information about biodiversity action within the UK. BARS 2 will be used for recording actions completed by the AONB Partnership and other partners and will provide evidence for delivery of the Management Plan.

Indicators that will be used for monitoring implementation of the Management Plan are shown in Appendix 3.



Glossary

AONB

Areas of Outstanding Natural Beauty are areas of high scenic quality that have statutory protection in order to conserve and enhance the natural beauty of their landscapes. AONBs are designated solely for their landscape qualities, for the purpose of conserving and enhancing their natural beauty (which includes landform, geology, plants, animals, landscape features and the history of human settlement over time).

Appropriate

Within the AONB Management Plan the word “appropriate” is generally used to mean “appropriate to the AONB statutory purpose and designation and the AONB’s special qualities” unless it is being quoted from another source, document or policy statement etc.

Biodiversity

The variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Biomass

Biomass is any organic material which has stored sunlight in the form of chemical energy. As a fuel it may include wood, wood waste, manure and many other by-products from a variety of agricultural processes.

Bioenergy (biomass energy)

Renewable energy made available from materials derived from biological sources.

Buffer zone

Areas between core protected areas and the surrounding landscape or seascape which protect the network from potentially damaging external influences and which are essentially transitional areas.

Calcareous

Mostly or partly composed of calcium carbonate, calcium or limestone.

Carbon sequestration

The process of capture and long-term storage of atmospheric carbon dioxide (CO₂).

Carboniferous period

Geological time period dated 385 - 300 million years before present.

Carboniferous limestone

Sedimentary rock laid down in a warm tropical sea some 340 - 320 million years ago.

Conservation Area (building)

Conservation Areas are places of special architectural or historic interest where it is desirable to preserve and enhance the character and appearance of such areas.

Catchment Sensitive Farming

A joint project between the Environment Agency and Natural England, funded by Defra and the Rural Development Programme for England, Catchment Sensitive Farming delivers practical solutions and targeted support to enable farmers and land managers to take voluntary action to reduce diffuse water pollution from agriculture to protect water bodies and the environment.

Corridor

Way of maintaining physical linkages between core areas for vital ecological or environmental connectivity.

Ecosystem

A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.

Ecosystem services

The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other non-material benefits.

Environmental Land Management Scheme

A scheme that will provide funding to farmers and other land managers in England to deliver effective environmental management on their land. Defra is currently developing a new scheme, which will be funded through the successor to the Rural Development Programme for England 2007-13. Defra aims to build on and enhance what has already been delivered through Environmental Stewardship, the English Woodland Grant Scheme and Catchment Sensitive Farming.

Environmental Stewardship

Environmental Stewardship is a scheme that provides funding to farmers and other land managers in England to deliver effective environmental management on their land.

Favourable condition

Favourable condition means that the SSSI land is being adequately conserved and is meeting its ‘conservation objectives’; however, there is scope for the enhancement of these sites. Unfavourable **recovering condition** is often known simply as ‘recovering’. SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time. The condition of the SSSI land in England is assessed by Natural England, using categories agreed across England, Scotland, Wales, and Northern Ireland through the Joint Nature Conservation Committee.

Geodiversity

The diversity of minerals, rocks (whether “solid” or “drift”), fossils, landforms, sediments and soils, together with the natural processes that constitute the Earth’s topography, landscape and the underlying structure.

Geology

Science of the Earth (and other planets), including origin, structure, composition, development and history (including the

development of life), and the processes that have given rise to their present state.

Glacial processes

The processes of erosion and deposition of land arising from the presence and/or movement of an ice mass on a landscape

Green Tourism Business Scheme

A national sustainable tourism certification scheme.

Karst

Water-worn limestone scenery, where erosion has principally occurred through the percolation of groundwater and underground streams rather than surface run-off and typically includes the development of limestone pavements and cave systems.

Limestone pavement

Continuous areas of exposed limestone consisting of rock blocks (clints) interspersed with cracks/clefts (grikes).

Localism

Involving people, wherever possible, in the decisions that affect their life, and devolving to officers, members and civil society, power to make those decisions at the lowest possible level, so the real needs of local communities and individuals are met.

Local Nature Reserve

Land owned by a local authority can be established as a Local Nature Reserve by that local authority in consultation with Natural England.

Local Wildlife Sites

Commonly known as County Biological Heritage Sites in Lancashire and as County Wildlife Sites in Cumbria, these sites are of local or regional importance for biodiversity. These sites do not enjoy direct statutory protection but are the subject of specific Local Plan policies aimed at ensuring their wellbeing.

Mosaic Approach

The Mosaic Approach is about integrating the requirements of species into habitat management, ensuring that plants and wildlife have the places they need to live and reproduce. Most species require a range of elements within a site or a wider landscape in order to complete their life cycle. Many of these elements, such as small patches of bare ground, tall flower-rich vegetation, or scattered trees and scrub, are often absent from the English landscape. This has contributed to serious declines in many species, with some now close to extinction. Providing a mosaic of these elements in the landscape would go a long way towards meeting the needs of many of these species, enabling them to thrive once again.

National Nature Reserve

Areas of national and sometimes international importance for wildlife and/or geology which are owned or leased by Natural England or, in some cases, bodies approved by them.

Natura 2000

An EU-wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation designated under the Habitats Directive, and also incorporates Special Protection Areas designated under the 1979 Birds Directive.

Nature Improvement Area

Nature Improvement Areas were introduced by the Government's Natural Environment White Paper, 2011 to 'enhance and reconnect nature on a significant scale' in England.

Oligotrophic lakes

Oligotrophic lakes are water bodies which are characterised by their low nutrient levels and low productivity.

Palaeokarst

Whilst "karst" is a general term for geologic features formed by the dissolution of soluble rocks, "paleokarst" is the general term for ancient karst features that have been fossilized or preserved.

Priority habitats and species

UK BAP priority species and habitats were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original list of UK BAP priority species was created between 1995 and 1999. In 2007, however, a revised list was produced, following a 2-year review of UK BAP processes and priorities, which included a review of the priority species and habitats lists. As a result of new drivers and requirements, the 'UK Post-2010 Biodiversity Framework', published in July 2012, has now succeeded the UK BAP. The UK BAP lists of priority species and habitats remain, however, important and valuable reference sources. Notably, they have been used to help draw up statutory lists of priorities in England. The Natural Environment and Rural Communities Act came into force on 1st Oct 2006. Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

Resilience

In the field of ecology, resilience means building the capacity of a system to withstand shocks and to rebuild and respond to change, particularly unanticipated change. The Resilience Alliance defines resilience as the capacity of a system to absorb disturbance, undergo change and still retain essentially the same function, structure, identity and feedbacks. Climate change resilience is the capacity of an individual, community or institution to respond dynamically and effectively to shifting climate impacts circumstances while continuing to function at an acceptable

level. Simply put it is the ability to survive and recover from the effects of climate change. It includes the ability to understand potential impacts and to take appropriate action before, during and after a particular consequence to minimise negative impacts and maintain the ability to respond to changing conditions.

Setting

The landscape of the Arnside & Silverdale Area of Outstanding Natural Beauty does not exist in isolation; it is nested within a larger landscape that can be visible from within the AONB and when looking towards it. It is this surrounding landscape, which provides the 'setting' to the AONB. The landscape setting is an important aspect of the AONB as the surroundings contribute to how the AONB is experienced, understood and appreciated.

Sites of Special Scientific Interest

Sites of national importance for their plants, animals, or geological or physiographical features designated by Natural England under the Wildlife and Countryside Act 1981.

Special Areas of Conservation

Areas that are protected under the EC Habitats Directive. They are sites of community importance for habitats or species listed under the Directive where a 'favourable conservation status' is to be maintained or restored.

Special Protection Areas

Areas that are protected under the EC Birds Directive 1979 for vulnerable species listed on Annex 1 of the Directive and also regularly occurring migratory species.

Stakeholders

Those individuals or organisations which are vital to the success or failure of an organisation or project. Primary stakeholders are those needed for permission, approval, implementation and financial support and also those who are directly affected by the activities of the organisation or project. Secondary stakeholders are those who are indirectly involved or affected.

Superfast Broadband

Broadband connections with speeds of over 24Mbps (Megabits per second) download speed – though Ofcom are suggesting that we move into line with the EU common standard of 30Mbps download speed. Upload rates are always lower, substantially lower in some cases, with current technology.

Sustainable Development/growth

A widely accepted definition is: 'development/growth which meets the needs of the present without compromising the ability of future generations to meet their own needs'.

Sustainable Development Fund

The Arnside & Silverdale AONB Sustainable Development Fund is a local grants scheme, to enable individuals, groups or businesses to deliver projects that will improve the Arnside & Silverdale AONB both now and in the future. The Fund is coordinated and managed by the Arnside & Silverdale AONB Partnership.

Sustainability

The ability to maintain a certain process or state. It is now most frequently used in connection with biological and human systems. In an ecological context, sustainability can be defined as the ability of an ecosystem to maintain ecological processes, functions, biodiversity and productivity into the future.

Water Framework Directive

The European Water Framework Directive came into force in December 2000 and became part of UK law in December 2003. The purpose of the Directive is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. It provides an opportunity to plan and deliver a better water environment through river basin management planning, focusing on ecology.

Abbreviations

AONB	Area of Outstanding Natural Beauty	LNR	Local Nature Reserve
BCCIC	Bittern Countryside Community Interest Company	LNP	Morecambe Bay Local Nature Partnership
BARS2	Biodiversity Action Reporting System 2	LPO	Limestone Pavement Order
B4RN	Broadband for the Rural North	Ma	(preceded by a number) million years ago
CAP	Common Agricultural Policy	NAAONB	National Association for Areas of Outstanding Natural Beauty
CCC	Cumbria County Council	NE	Natural England
CCF	Coastal Communities Fund	NEWP	Natural Environment White Paper
CFINNS	Cumbria Freshwater Invasive Non-Native Species initiative	NCA	National Character Area
CQuEL	Character and Quality of England's Landscapes	NIA	Nature Improvement Area
CRoW	Countryside and Rights of Way Act 2000	NPPF	National Planning Policy Framework
CRP	Furness Line Community Rail Partnership	NNR	National Nature Reserve
Defra	Department for Environment, Food and Rural Affairs	NT	National Trust
DPD	Development Plan Document	NWIFCA	North Western Inshore Fisheries and Conservation Authority
EA	Environment Agency	PAWS	Plantations on ancient woodland sites
EH	English Heritage	PISCES	Partnership of Irish Sea Coast & Estuary Strategies
ELC	European Landscape Convention	PRoW	Public Right of Way
EU	European Union	RDPE	Rural Development Programme for England
FC	Forestry Commission	RSPB	Royal Society for the Protection of Birds
GTBS	Green Tourism Business Scheme	SAC	Special Area of Conservation
HER	Historic Environment Record	SDF	Sustainable Development Fund
HLS	Higher Level Stewardship	SLDC	South Lakeland District Council
H2H	Headlands to Headspace	SMP2	Shoreline Management Plan 2
ICT	Information and communications technology	SPA	Special Protection Area
INNS	Invasive non-native species	SSSI	Site of Special Scientific Interest
LCC	Lancashire County Council	S41	Section 41 of the Natural Environment and Rural Communities Act 2006
LCiC	Lancaster City Council		



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