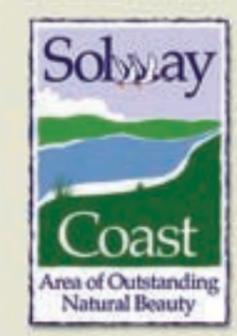
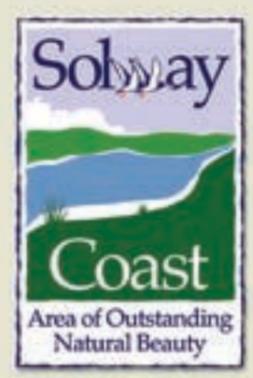




A Shared Responsibility
for a Very Special Place



The Solway Coast Area of Outstanding Natural Beauty
Management Plan
2015-2020



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Solway Coast AONB Partnership is a member of the National Association of Areas of Outstanding Natural Beauty (NAAONB). The Association is an independent organisation acting on behalf of AONBs and their partners to promote, conserve and enhance the natural beauty of the 46 areas designated as AONBs in England, Wales and Northern Ireland. The NAAONB is funded by Natural England, the Countryside Council for Wales and partner membership subscriptions.



Every effort has been made to ensure that the contents of this publication are correct at the time of printing

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Contents

Chairman's Foreword	3
Part 1 Background and Context	
• 1.1 Legislation and Need	4
• 1.2 What's New?	4
• 1.3 National and European Landscape Framework	6
• 1.4 Areas of Outstanding Natural Beauty	6
• 1.5 Management and Operating Framework	7
• 1.6 Solway Coast AONB (Special Qualities)	10
• 1.7 Landscape and Seascape Character and Setting	12
Part 2 Objective Setting	
Section 2.1 Conserving and enhancing natural beauty	
• 2.1.1 Landscape	18
• 2.1.2 Land Management	20
• 2.1.3 Intertidal saltmarshes and associated mudflats	23
• 2.1.4 Sand Dunes	24
• 2.1.5 Lowland Raised Mires - Mosses	26
• 2.1.6 Biodiversity	28
• 2.1.7 Water Environment	31
• 2.1.8 Historic Environment and Culture	33
• 2.1.9 Development and Planning	35
Section 2.2 Understanding and enjoyment	
• 2.2.1 Access and Recreation	37
• 2.2.2 Tourism	38
Section 2.3 Social and economic well-being	
• 2.3.1 Employment and Business	41
• 2.3.2 Services	44
• 2.3.3 Transport	45
Section 2.4 Engagement	
• 2.4.1 Awareness and Communication (Education)	46
• 2.4.2 Community Involvement	47
Section 2.5 Global Considerations	
• 2.5.1 Climate Change	48
Part 3 Implementation and Monitoring	
• 3.1 Objectives	
• 3.2 Actions	
• 3.3 Delivery	
• 3.4 Reporting	
Part 4 Appendices	
1. Glossary of Terms and Acronyms	68
2. Core Functions	72
3. External Review Process and Public Consultation	72
4. An Ecosystem Approach and Eco-services	74
5. IUCN Protected Areas and International Classification	75
6. Acknowledgements	75

Chairman's Foreword

It gives me both a sense of pride in continuity and a feeling of real progress to have been able to preside over the production of our third Management Plan for the Solway Coast AONB. The journey began in 2004 when we published our initial plan (under the Countryside and Rights of Way Act 2000) covering the first five years of our 30 year vision for the AONB. Now, ten years on and the publication of this our latest plan taking us to 2020 we have already achieved a legacy of change, prosperity and sustainability for future generations of which we can all be justifiably proud.

Our Vision, summarised in this plan and its predecessors as 'A Shared Responsibility for a Very Special Place' is the key to our success. By working closely with Partners from Communities to Statutory Agencies and Government, we have collectively secured quality project planning, significant funding and above all sustainable solutions to the many and varied challenges we jointly face. The delivery record of the Solway Coast AONB has been consistently outstanding over the past decade thanks to its clarity of purpose, its deliverable vision, its dedicated volunteer force, the professionalism of its small staff unit, the watchful steer from its Joint Advisory Committee, the officer support from its three partner Councils and of course the specialist agencies. The Solway Coast AONB has, in addition, been remarkably successful in levering in very substantial amounts of funding to deliver on its Management Plan promises with a very high match fund ratio against a background of public expenditure cuts.

Conservation and restoration are at the heart of this plan like its predecessors. We have, after all, only one statutory purpose – the conservation and enhancement of our landscape. However we have always had an eye on our responsibility to our communities and their socio-economic concerns. We now seek to open up this faraway land, steeped in history, haunting beauty and magic to deliver a 21st century tourism offer which will reflect an understanding and



William (Bill) Jefferson O.B.E

appreciation of today's concerns and solutions in a sustainable and relevant way. Our plan focuses initially on infrastructure to provide for visitors through access and information, and by engaging with the visitor economy of England's Solway Coast in general. Landscape pressures do exist – the march of renewable energy schemes continue to occupy our conservation remit as do other developments both large and small scale. As I write this foreword, government have announced further measures to trim the public purse over the same time period of this plan. Protected landscapes have taken their share of government cuts and further reductions in funding could not be absorbed by Partnerships that are already under funded. However, I remain confident that we will rise to the challenge and deliver yet again, because of our relevance, focus, commitment and track record

The Solway Coast AONB Partnership, and our growing band of volunteers will deliver this plan on behalf of the Nation and our three constituent Local Authorities. Its sustainable legacy, however, will outlive its five year life.

All good wishes to you all and sincerest thanks to all those who have contributed towards this venture.

William (Bill) Jefferson O.B.E.
Chairman

Part One

Background and Context

1.1 Legislation and Need

The Countryside and Rights of Way Act (2000) strengthened previous Countryside and National Parks Act (1949) making further provision for the protection and enhancement of AONBs. It requires Local Authorities to prepare, publish and review, every five years, a Management Plan for AONBs in their area. In the case of Solway Coast AONB the plan is undertaken and led by the Solway Coast AONB staff unit on behalf of Cumbria County Council, Allerdale Borough Council and Carlisle City Council and with support from Natural England and Defra. Essentially this Plan represents a comprehensive review of the 2010-2015 Management Plan. The Plan must be reviewed within five years of its original publication and at similar intervals thereafter. In addition the CRoW Act also places a duty on public bodies and others, to have regard to the special purposes of the AONB designation when carrying out their work.

The designation of an AONB:

- Gives formal statutory recognition to these nationally important landscapes;
- Requires special land use planning policies to apply; and
- Encourages an integrated approach to land management.

The AONB Management Plan is a statutory plan which sets out a 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.

The aims of the Management Plan, which reflect the AONB purposes, are to:

- Conserve and enhance Natural Beauty through securing the natural and cultural heritage of UK's Areas of Outstanding Natural Beauty, ensuring they can meet the challenges of the future
- Support the economic and social well-being of local communities in ways which contribute to the conservation and enhancement of natural beauty
- Promote public understanding and enjoyment of the nature and culture of AONBs and encourage people to take action for their conservation
- Value, sustain and promote the benefits that the UK's AONBs provide for society, including clean air and water, food, carbon storage and other services vital to the nation's health and well-being
- To meet the recreational needs of local residents and visitors alike – where these are compatible with the purpose of AONB designation

The revised Plan will need to recognise an updated agenda and a changed context, and revised policies including:

- The Natural Environment White Paper 2011
- Defra Biodiversity 2020 Delivery Plan
- New planning legislation and National Planning Policy Framework including Green Infrastructure



- Common Agricultural Policy (CAP) reform post-2013
- Revised National Character Area profiles
- Conservation of the historic environment
- Ecosystem goods and services and landscape-scale approach
- Government targets for renewable energy
- Climate change mitigation and adaptation
- Local Flood Risk Management
- Cumbria Minerals and Waste Local Plan
- Localism
- Natural England Protected Landscapes Designation guidelines
- New marine legislation, marine planning, Marine Conservation Zones and seascape character assessment
- Establishment of Marine Management Organisation (MMO)
- Nationally agreed set of AONB Objectives/ tripartite agreement between Defra, Natural England and the National Association of AONBs
- Slightly older but being implemented : NERC act – duty on local authorities with regards to biodiversity, Revised SMP, CRoW coastal access, European Landscape Conservation.
- The developing Local Plans for Allerdale Borough Council and Carlisle City Council.

The new plan will be subject to scrutiny through both a Strategic Environmental Assessment and, where it affects European Nature Conservation sites, by a Habitats Regulations Assessment.

1.2 What's new?

There have been a number of important changes since publication of the last Management Plan in 2010, which have a significant impact on the conservation and enhancement of natural beauty in the Solway Coast 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 Allerdale Borough Council and Carlisle City Council
- New Government guidance on renewable energy <https://www.gov.uk/government/publications/planningpractice-guidance-for-renewable-energy> replaced "Planning for renewable energy: a companion guide to PPS22" confirms that the need for renewable energy does not automatically override local environmental and heritage protections and the concerns of local communities



- The production of 'Making Space for Nature' (The Lawton Report 2010) which highlighted the importance of enhanced ecological networks across the landscape and taking an approach to management which was summed up by the phrase, 'bigger, better, and more joined-up'
- The publication of the 'State of Nature' report, which chronicles the dramatic decline in the UK's wildlife and which should be a wake-up call to all who have responsibility for policy affecting our natural environment
- 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. It promotes an integrated cross-sectorial approach not just integrated biodiversity at a landscape-scale
- 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'. NIAs, aimed at enhancing and reconnecting nature on a significant scale, were introduced in the Natural Environment White Paper (NEWP) and a competition launched to fund twelve initial areas in the period 2011 to 2015.
- 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.

- 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. A desire for a more outcome-focused approach to agri-environment schemes
- '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 global 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 enables creation of Marine Conservation Zones and the 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.
- The signing of the European Landscape Convention which aims to embed a holistic understanding of landscape and 'place' into plans and policies. Its 7 key principles can be seen here: http://www.naturalengland.org.uk/Images/ELCGUIDANCE-PART-2_tcm6-23585.pdf
- New parcels of Allerdale Borough Council land (mainly SSSIs) have been put into Higher Level Stewardship since the last Solway Coast AONB Management Plan 2010-2015
- The Solway Wetlands Landscape Partnership Scheme has been running through the last three years of the Solway Coast AONB Management Plan 2010-2015



- The Solway Basin National Character Area (NCA) has been published (2013) including an ecosystem service review and the identification of Statements of Environmental Opportunity



Ecosystem services

What has nature ever done for us? Apart from providing food, jobs, wildlife, clean air and water, carbon storage, flood relief, pollination, nutrient cycling, a tourism industry and a 'natural health service'?

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 4 categorises and describes the range of ecosystem services relevant to the AONB.

1.3 National and European Landscape Framework

The European Landscape Convention (ELC) came into effect in the United Kingdom in March 2007 and is adopted and promoted by the Council of Europe. The ELC definition



of landscape is all embracing: 'Landscape means an area, as perceived by people, whose character is the result of the action of natural and/or human factors.'

The ELC promotes landscape protection, management and planning, and European co-operation on landscape issues. The ELC is the first international convention to focus specifically on landscape.

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 Convention was reaffirmed as being part of the Defra delivery framework through the Natural Environment White Paper June 2011.

It highlights the importance of developing landscape policies dedicated to the protection, management and creation of landscapes and establishing procedures for the general public and other stakeholders to participate in policy creation and implementation.

The UK is recognised as already putting many of the principles of the ELC into practice. For example, the National Character Area map of England has been in use for nearly 10 years. Another example is the well-established practice of using Landscape Character Assessment to inform local policymaking.

Natural England is leading the implementation of the ELC in England and has worked with Defra and English Heritage to produce European Landscape Convention: A framework for implementation in England: (215kb), 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 all 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, including improved knowledge and care, as well as a sense of inspiration, well-being and connection between people and place.

The Solway Coast AONB, along with other AONBs with their high concentration of environmental assets, is well placed to deliver multiple government outcomes that relate to the natural environment, our national heritage and provision of ecosystem services. To deliver these outcomes government policy needs to make asset preservation economically robust to market forces and socially valued. The Solway Coast AONB can potentially fulfil, either directly, or through the National Association of AONBs who lobby and influence government policy to ensure that policy aspirations which relate to natural beauty are deliverable.

1.4 Areas of Outstanding Natural Beauty

What is an AONB?

Our National Parks and Areas of Outstanding Natural Beauty are some of the finest landscape assets in the British Isles. This status is underpinned by a legislative framework for their protection and enhancement into the future.

The National Parks and Access to the Countryside Act (1949) provided for the designation of National Parks and



Areas of Outstanding Natural Beauty (AONBs). Following this initial legislation over 60 years ago, AONBs have received varying management and a range of management solutions driven by Local Authorities. In 2000 the Countryside and Rights of Way Act (CRoW) created legislation for the better protection of AONBs. This new Act consolidates and strengthens the 1949 Act concerning AONBs, reaffirming the purpose of designation and confirming the powers of Local Authorities to take appropriate action to conserve and enhance the natural beauty of AONBs. The following are the objectives of the relevant sections of the Countryside and Rights of Way Act 2000 with regard to AONBs:

Section 82	reaffirms the purpose of AONBs
Section 84	confirms the powers of local authorities to take appropriate action to conserve and enhance the natural beauty of AONBs
Section 85	places a duty on all public bodies and statutory undertakers to 'have regard' to the 'purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty'
Section 89	creates a statutory responsibility for Local Authorities to prepare and publish and periodically review a plan which formulates their policy for the management of the area and for the carrying out of their functions in relation to it

The purpose of AONB designation is the conservation and enhancement of the natural beauty of the landscape. Government confirmed in July 2000 that, since the landscape qualities of National Parks and AONBs are equivalent, the protection being given to both types of area by the land use planning system should also be equivalent. The statement of purpose of AONB designation is:

'To Conserve and Enhance Natural Beauty'



The natural outcome for the statement of purpose is to pursue its aims through a management plan. Therefore the primary driver for this document is the statement of purpose.

Having due regard for the purpose of AONB designation is a provision of the CRoW Act (2000), Section 85 places a duty of regard on all bodies undertaking work within AONBs. Therefore this Management Plan is a useful tool for public bodies to support AONB purposes.

The AONB Unit has a dual role, one as a delivery team for various management plan actions, but also as a co-ordinator to ensure joined up asset management by various bodies influencing change in the AONB including Government Agencies, Local Authorities and NGOs to support the AONB and its purpose. Thus many Management Plan actions are not 'owned' by the AONB Unit, but their integration into the plan allows the sum of these actions, and how they deliver the outcomes the AONB Unit seeks, to be seen. The Plan will reflect the requirements of the National Planning Policy Framework (NPPF) with regards to proposals put forward, for example, the impacts of agricultural land management should ensure that the conservation and enhancement of heritage assets as well as their setting will be referred to.

Local Authorities have the primary responsibility for the conservation and enhancement of AONBs. The duty under section 89 of the CRoW Act, to produce a plan giving policies for the management of the area, also falls on the Local Authorities for the area covered by the designation. In the past Natural England, but now Defra, with the three constituent local authorities, Cumbria County Council (CCC), Allerdale Borough Council (ABC), and Carlisle City Council (CaCC), provide both the foundation and the core funding to maintain the AONB Partnership through the provision of a Staff Unit and a Joint Advisory Committee (JAC). The Staff Unit has produced this Management Plan revision on behalf of the three local Authorities.

1.5 Management and Operating Framework



As described, the Solway Coast AONB JAC came into being in 2002 and its structure and membership has proven successful over the past 12 years. A number of small changes have been made to both the membership of the JAC and its constitution (working arrangements) over the years to enhance its role as a governance structure and maintain it as 'fit for purpose'.

The JAC is made up of representatives of organisations with a particular interest in the area. They include Local Authorities, Parish Councils, Community Groups, Statutory Agencies and other public and voluntary sector organisations. The JAC was set up and constituted in 2002 and comprises 23 seats:

Statutory Bodies	(2)
Natural England	
Environment Agency	
Local Government Elected Members	(5)
Cumbria County Council	(2)
Allerdale Borough Council	(2)
Carlisle City Council	(1)
Parish Council Representation	(4)
Lead Groups	
West One	Oughterside & Allerby
West Two	Allonby
East One	Bowness on Solway
East Two	Burgh by Sands
Town Council Representation	(2)
Silloth	
Maryport	
Community	(4)
Port Carlisle Community Group	
Lakes Area of Ramblers	
Action with Communities in Cumbria (ACT)	
Bowness on Solway Community Group	
Local Land Ownership & Management Issues	(4)
Friends of the Lake District	
Senhouse Roman Museum	
Royal Society for the Protection of Birds	
Country Land & Business Association	
Tourism & Community Sector	(2)
Cumbria Tourism	
Solway Coast Volunteer Group	

Further to the JAC, the AONB is guided by a Technical Officer Steering Group made up of officers from the three Local Authorities and officers from Natural England, Environment Agency and Solway Firth Partnership. This group supports the work of the permanent staff unit.

The Staff Unit comprises the AONB Manager (FT), Assistant AONB Manager (PT), Community Volunteer Coordinator (FT) and Administrator (PT). Also there is the Solway Wetlands Landscape Partnership Scheme (SWLPS) staff accommodated in the AONB Office (until 2016) comprising; SWLPS Project Manager (FT), SWLPS Learning and Community Officer (FT), SWLPS Wetlands Officer (FT), SWLPS Administrator (PT). The AONB Partnership is core funded through Defra, Allerdale Borough Council, Cumbria County Council and Carlisle City Council. The AONB Partnership (JAC) is hosted by Allerdale Borough Council which acts as the 'Accountable Body' for the AONB Partnership. They provide financial management, employment facilities and accommodation on behalf of the AONB Partnership.

Who is this Plan for?

It is the Solway Coast AONB Partnership that will own, steer, and facilitate the implementation and review of this Management Plan. The wider partnership is inclusive of all stakeholders within the AONB and, as such, all have a say in its delivery. The plan will also inform, influence and

integrate all partner/stakeholder activities in the AONB area with the ultimate goal of fulfilling the 'Vision'. It is the Staff Unit and the Joint Advisory Committee that will monitor progress and make the decisions about reaching the ultimate vision for the AONB.

AONB Management Plans do not form part of the Statutory Development Plan, but may contribute to setting the framework for development by providing evidence and principles which should then be reflected in the Local Authorities' Development Plans.

Where does this Plan fit into the wider policy framework?

The context or relationship of this Plan to other strategies and plans is extremely important. The supporting documentation that underpins the Local Development Framework (LDF) provides the primary focus for the AONB Plan. This Plan will work as an informing document which will influence other plans but, and more importantly, it has taken full account of the many policies, objectives and aspirations of the wider framework.

The Plan must also fit into the National Association for Areas of Outstanding Natural Beauty (NAAONB) common objectives.

International, national, regional and local plans have all influenced the Plan in some way and this makes it both relevant and alive and as aspirational as others.

A comprehensive review of the relevant local, regional and national strategies and plans which influence this Plan can be found in 'The Solway Coast AONB SEA Environmental Report 2015'. The life of this Plan is five years and in that time change is inevitable whether on a small or large scale and the forces for change can be many and varied, from European and National legislation to changes in local partner priorities. Whatever the driver, the AONB Partnership must be flexible but must always concentrate on the successful delivery of the plan and, equally as important, to maintain the Partnership. The Plan both covers the direct delivery lead by the AONB Unit but also the work of the partners with the AONB Unit providing a co-ordinating role. All of the 46 AONBs are part of the AONB Family and all share the same objectives under the influence of NAAONB.

How will progress be measured?

The Solway Coast AONB Partnership has two priorities with regard to plan delivery progress and how it is measured. Actions driven by the plan must be monitored within the context of SMART (Specific, Measurable, Achievable, Realistic and Timely) outputs and the subsequent success of the actions must be measured against the condition of the AONB.

To fulfil this need, we will:

- Assess progress and achievements made against the Action Plan Targets for each year
- Confirm Action Plan activities and targets for the year ahead whilst incorporating unfinished actions from the previous year
- Identify new areas of action based upon partner activities or new forces for change
- Keep the Action Plan under review over the five year life of the Plan

To monitor condition we will identify a range of condition and direction of change indicators which can be used to establish a baseline and measure change:

- Countryside and land-cover indicators
- Cultural and vernacular indicators
- Ecological and environmental indicators (purpose of designation)
- Socio-economic and quality of life indicators

The Annual Review document published by the AONB Partnership in December each year will describe measure and report on all of the indicators above. The Annual Review is produced by the AONB Unit on behalf of the Partnership and is signed off by the Joint Advisory Committee each year.

Monitoring

A partnership of representatives from Natural England, Defra, the English National Park Authorities Association, the National Association for Areas of Outstanding Natural Beauty and English Heritage is developing a Protected Landscape Monitoring Framework. This will provide a consistent means of monitoring some of the environmental outcomes that occur in protected landscapes, and which the wide range of relevant authorities and local people will be helping to deliver via the Management Plan. As part of this process useful National data on those environmental outcomes and local information will become available and can be used as evidence as part of the Management Plan Reviews, e.g. State of the Environment Reports.

Delivery of Management Plan Actions

The measurement of success or otherwise regarding delivery of Management Plan objectives entails performance indicators once again. However, the measurement this time can be simple or complex. On the one hand delivery of a simple project such as the design and publication of a leaflet by the AONB Unit is in the hands of the Partnership. In this context both delivery and performance can be directly attributed to the AONB Partnership. Alternatively, a project supported by the AONB Unit such as a partnership approach to a common theme may be compromised in both delivery and performance by a member organisation. This situation cannot be directly attributable to the AONB Partnership.

To avoid any misunderstandings and to provide a SMART scoring system, the AONB Unit must identify the external threats to each of the actions and factor them in as part of the monitoring and reporting process. This approach is embedded in the Action Plan matrix in section three of this plan.

Core Funding

Core funding is provided by Defra and the three Local Authorities. It covers the cost of running the AONB Staff Unit and delivery of the core functions as stipulated by Defra (see Appendix 2). The funding and governance arrangements are outlined in the current Memorandum of Agreement (MoA), updated in 2006. This was replaced during 2011 by a new agreement outlining the new working arrangements between Natural England, Defra and the constituent Local Authorities.

Project Funding

Funding will be sought from a range of sources to fund

delivery of the actions identified in this Management Plan provided as projects. Defra has provided funding for a Sustainable Development Fund (SDF) for the AONB. The SDF has been a grant scheme managed by the AONB Unit. It supported innovative and sustainable projects that combined social, environmental and economic benefits to the AONB. The fund, at present, goes to the Solway Wetlands Landscape Partnership Project to provide a 'Community Fund' which gives funding towards sustainable community projects in the project area (some of which is just outside the AONB).



State of the AONB

In 2008, as part of the 2004-09 Management Plan Review, the AONB Partnership commissioned a State of the AONB Report. For the first time the AONB Unit had a 'baseline' data set from which it could measure change and monitor condition within a range of subject matter pertaining to the AONB. From the condition of SSSI, to the cost of housing, to visitor spend, to land-use. This report has now been succeeded by a new 'State of the AONB Report 2013' and there is now information on which to inform progress in the conservation and enhancement of the AONB. Almost all of the subject matter is contained within this Report, however only part of it is directly influenced by the AONB Partnership.

Issues and Forces for Change

The main forces for change that have operated in the past and are likely to continue to shape the landscape of the AONB are listed below and drive our theme objectives and policies.

- Natural Processes
- Climate Change (including changes in temperature, sea level, storminess and rain fall patterns)

Development pressures, particularly:

- Renewable energy
- Housing and industry
- Leisure and tourism
- Traffic and transportation (both journeys and infrastructure upgrades)
- National Grid Developments
- Nuclear Waste containment

Agricultural and land management, particularly changes affecting:

- Ongoing intensification of agricultural systems
- Tree and hedgerow management
- Water body extent and water quality
- Habitats and species
- Setting to historic sites
- Farm based renewable energy installations

1.6 The Solway Coast AONB (Special Qualities)



Figure 1.
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Designated in December 1964, the Solway Coast Area of Outstanding Natural Beauty (AONB) is one of 46 AONBs in England, Wales and Northern Ireland. It is the only AONB that is fully within Cumbria, it lies in a narrow linear strip along the Solway Firth coastline between Carlisle in the east and Maryport in the west and it covers an area of 115 sq. km. The AONB is the statutory responsibility of Allerdale Borough Council, Cumbria County Council and Carlisle City Council.

Statement of Significance



The Solway Coast AONB contains a unique mosaic of coastal and pastoral landscapes set among a wide and low lying coastal plain and lying under the ever-changing drama of the dominant sky. The landscape is further enriched by the twice daily influence of the tide that in turn reveals the rich birdlife which use the estuary all year round. There is an emotive role played by the expansive and dynamic landscape which with the uniqueness of the historical landscape together give natural beauty of national value and fulfils the role for society in terms of sense of place, provision of tranquillity and nationally important habitats.

The area is steeped in heritage from archaeological evidence of the Stone Age, through to Roman remains associated with Hadrian's Wall to the airfields of WWII. Today the area is home to 13,000 residents who both live and work within the landscape and help maintain its unique cultural identity.



The AONB lies on the southern edge of the Solway Firth, a large intertidal estuary, which also forms the border between England and Scotland. The area has remained relatively unchanged in character since its designation and follows 59 km of coastline from the River Esk near Rockcliffe to Maryport in West Cumbria.

The town of Silloth, with its surrounding industrial areas and golf course, sits at the heart of the AONB but is not designated and splits the AONB into two distinct areas.

The Solway Coast contains many locally nationally and internationally important features, some centring on landscape and others on wildlife and heritage. Many features are protected by designations and collectively they indicate the high value of the area's heritage and underpin the need to protect and enhance it for future generations.

The AONB contains areas of lowland raised mire which represent a significant proportion of the UK national resource.

Grazed saltmarshes are present in an unbroken ribbon throughout the inner estuary area and, as such, are internationally important. They provide feeding and roosting areas for ducks, geese, swans and waders that over-winter on the estuary in internationally important numbers. Part of the AONB's nationally rare natterjack toad population uses the saltmarshes.

An almost unbroken tract of sand dunes, much of it designated as SSSI, forms the coastal fringe of the western section of the AONB.

The Solway Coast has a nationally significant archaeological and historical resource, arguably the most important of which is the internationally designated Frontiers of the Roman Empire - Hadrian's Wall World Heritage Site. Other find-spots, features, buildings and clusters of sites are representative of Mesolithic and Neolithic settlement, the Bronze and Iron Ages, the Roman occupation and the Anglo-Scandinavian period followed by the Norman Conquest and its associated Monastic period, the Late Medieval, the Industrial Revolution and finally WWII and its airfields.

The AONB has many heritage assets including :

Scheduled Monuments:	28
Listed Buildings:	
Grade 1:	3
Grade 2:	7
Grade 3:	68
Conservation Areas:	7
Entries on the National Heritage at Risk Register 2014:	1
World Heritage Site:	1

Agriculture is the dominant type of land-use. Pasture for dairy, beef and lamb production, both as grazing and grass silage, is the primary crop. Arable agriculture is confined to maize, now a major crop, with some rape and vegetables. Characteristic small fields with 'kested' hedges sometimes associated with drainage ditches create a mosaic pattern in the landscape. Settlement character is extremely varied from linear villages with space between dwellings, as at Burgh by Sands, to closely assembled and attached cottages and farms like those in Bowness on Solway. Some villages reflect their establishment or growth periods where their architecture can be attributed to styles; fine examples are the Georgian façade at Port Carlisle and Victorian buildings in Allonby. These contrast starkly with Anthorn village and its Ministry of Defence utilitarian style architecture. Building fabrics are both local, such as beach cobbles and clay dabbin, and imported, and create a non-uniform character across the area.

In general, the most important landscape features of the area are as follows:

- Large flat expanses of coastal terrain
- The sky is a dominant feature
- Dynamic and large intertidal estuary
- Vast unbroken vistas across the estuary to Scotland
- Extensive areas of traditionally grazed saltmarsh
- Large but fragmented areas of lowland raised mire
- Long narrow linear tract of coastal sand dune and dune heath
- Large areas of exposed sand and mud with gravel storm ridges and sandy beaches
- Culture of dairy, beef and sheep farming small kested hedge bound fields with sunken lanes and narrow roads
- Very scarce woodland cover
- Rich archaeological and historical heritage
- High levels of biodiversity associated with a wide range of intertidal, coastal and inland habitats
- Internationally important area for birdlife in estuary habitats and lowland raised bogs



The AONB in its Local and Regional Setting

The North West of England Region consists of Cheshire, Lancashire, Merseyside, Greater Manchester and Cumbria and covers an area of 14,170 sq. km. The region contains three National Parks - parts of the Yorkshire Dales and the Peak District and the whole of the Lake District make up this resource. Four AONBs are also represented comprising Forest of Bowland, Arnside and Silverdale and Solway Coast and a small part of North Pennines AONB which runs into Cumbria. Solway Coast AONB is completely in Cumbria and is around 15km from the northern boundary of the

Figure 2. North West Regional Context Map



NATURAL ENGLAND

AONB:

- ARNSIDE AND SILVERDALE
- NORTH PENNINES
- SOLWAY COAST
- FOREST OF BOWLAND

National Parks:

- LAKE DISTRICT
- PEAK DISTRICT
- YORKSHIRE DALES

Community Forests:

- RED ROSE FOREST
- THE MERSEY FOREST

Government Office Boundaries

County Boundaries

National Trails:

- HADRIANS WALL PATH
- PENNINE BRIDLEWAY
- PENNINE WAY
- Heritage Coast: St Bees

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Lake District National Park. In total, protected landscapes cover 4,177 sq. km or 29% of the region.

The Solway Coast covers 115 sq. km of the Cumbrian landscape and over 5% of the northwest regional coastline. It lies within the boundaries of three Local Authorities namely Allerdale Borough Council (88% of area), Cumbria County Council (100% of area) and Carlisle City Council (12% of area). To the north, and sharing the intertidal expanses of the Solway, lies Scotland, with the international boundary existing as a set of map coordinates, reflecting the mid-point, rather than a physical feature in the landscape.

Hadrian's Wall World Heritage Site is contiguous with Solway Coast AONB as it straddles its east to west coast linear corridor. Hadrian's Wall Path National Trail stretches 15km into the eastern end of the AONB from Beaumont to Bowness on Solway where it begins/ends. England Coast Path (NE) stretches from Maryport to Allonby in the AONB (2014) and by 2017 should stretch to Gretna, around 100km in length. The international Special Area of Conservation (SAC) and Specially Protected Area (SPA) designations that cover the estuary system are continuous with the Scottish side of the Solway. Also SAC lowland raised bogs which extend landscape character beyond the AONB boundary.



1.7 Landscape and Seascape Character and Setting

The character of the Solway Coast AONB is the product of physical, ecological and human influences. The landscape has a strong unity of character which is greatly influenced by the proximity of the sea, and yet has considerable variation within it which creates local diversity and distinctiveness. The landscape as a whole is characterised by coastal and estuarine features such as beaches, sand dunes, saltmarshes and low cliffs; contrasting agricultural land and mosses; the diversity of the flora and fauna; and the typical settlements and buildings.

In 1995 the Countryside Commission published 'The Solway Coast Landscape' (CCP 478) on behalf of Solway Coast AONB. As this became dated, in 2009 the AONB commissioned an updated Landscape and Seascape Character Assessment (LSCA) for the AONB and its setting, updating and improving the earlier work. The European Landscape Convention (ELC) came into effect in



the UK in March 2007 and is adopted and promoted by the Council of Europe. The new AONB-wide LSCA recognises the importance of all landscapes and seascapes and includes appropriate guidelines for their protection, management and future planning. The study area includes the extent of the AONB, but also considers those areas of land and sea which constitute the 'setting' of the AONB.

Seascapes and Intertidal Landscapes.

The Solway Coast AONB seascapes comprise extensive areas of both the Inner and Outer Solway Firth. This dynamic and changing coastline includes flats, intertidal creeks, sands and saltmarshes, and is bounded in places by shingle bays, sand dune systems and low earth cliffs. The transition between land and sea is marked by beach and dune systems, generally along the west coast, and the mudflats and saltmarshes of the more sheltered northern areas of the Inner Firth.

The setting of the AONB

Open areas within the AONB and wider area afford panoramic views south to the Lake District fells, including Skiddaw, and of the hills of Dumfries and Galloway, seen across the Solway Firth, particularly Criffel.

Low lying inland landscapes

Inland mosses and raised mires contrast with improved pasture, enclosed by hedges and 'kests'. Open areas of the raised mires, gentle rises in the landscape of the coastal plains and the hilltops of the rolling and undulating lowland hills afford panoramic views. Settlements have developed along the coastline, including the seaside resorts of Silloth and Allonby. Seasonal tourism is important to the area and some of the coastal villages are popular destinations for holidays and retirement and people 'escaping' Carlisle. Birds and flora attract visitors to nature reserves such as Campfield Marsh RSPB Reserve and Bowness Common and Glasson Moss National Nature Reserves. The landscape of the Solway Coast has a rich historic and cultural heritage closely linked to its historical position as a 'frontier' landscape on the border between Scotland and England. Evidence of a long and historic land use is seen in the field patterns, such as ridge and furrow on the grazed marshes, and the medieval pattern of 'infield' and 'outfield' farming linked to the agricultural improvements brought by the Cistercian monks of Holme Cultram Abbey.

THE LANDSCAPE/SEASCAPE CLASSIFICATION & CHARACTER

Fit with the previous AONB classification

The landscape types which were presented in the Solway Coast Landscape (1995) and the Solway Coast AONB Management Plan 2010-2015 are listed below. Some of these types are very general and do not convey the differences and variations that can be found within the specific areas within the types of landscape under consideration. These have been reviewed as part of an updated Landscape Character Assessment (LUC 2010). The new classification uses more descriptive names and subdivides the character types into areas to bring out differences.

Previous and new Solway Coast AONB types

Existing Types	Updated Types
COASTAL MARGIN <ul style="list-style-type: none"> Open sea and river channels Foreshore Saltmarsh Sand dunes Cliff 	SEASCAPE/INTERTIDAL <ul style="list-style-type: none"> Type A: Inner Firth Intertidal Flats and Saltmarsh Type B: Outer Firth Beaches and Dunes
MOSSLAND <ul style="list-style-type: none"> Raised Peat Bog 	LOWLAND LANDSCAPES <ul style="list-style-type: none"> Type C: River Floodplain and Marshy Grassland Type D: Coastal Mosses Type E: Coastal Plain Type F: Drumlinised Lowland Farmland Type G: Undulating Coastal Farmland Type H: Coastal Town and Urban Fringe
AGRICULTURAL LAND <ul style="list-style-type: none"> Improved pasture and arable land Rough pasture 	

For comparison the landscape and seascape classification for the AONB and the landscapes which fringe the area is mapped on Figures 11-12 and listed below. The Landscape Character Types have been sub-divided into the component character area units of the Landscape.



Figure 3. Superseded Landscape Character Types (1995)

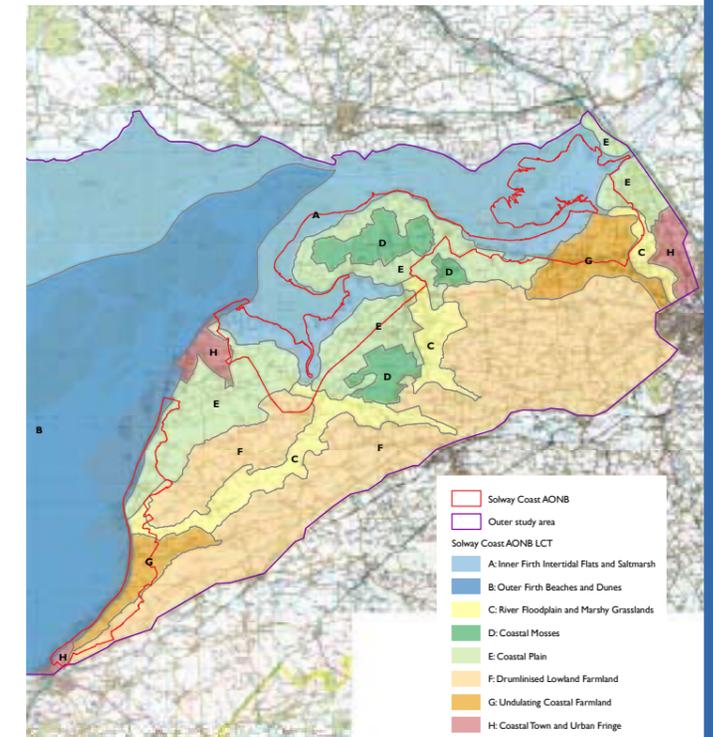
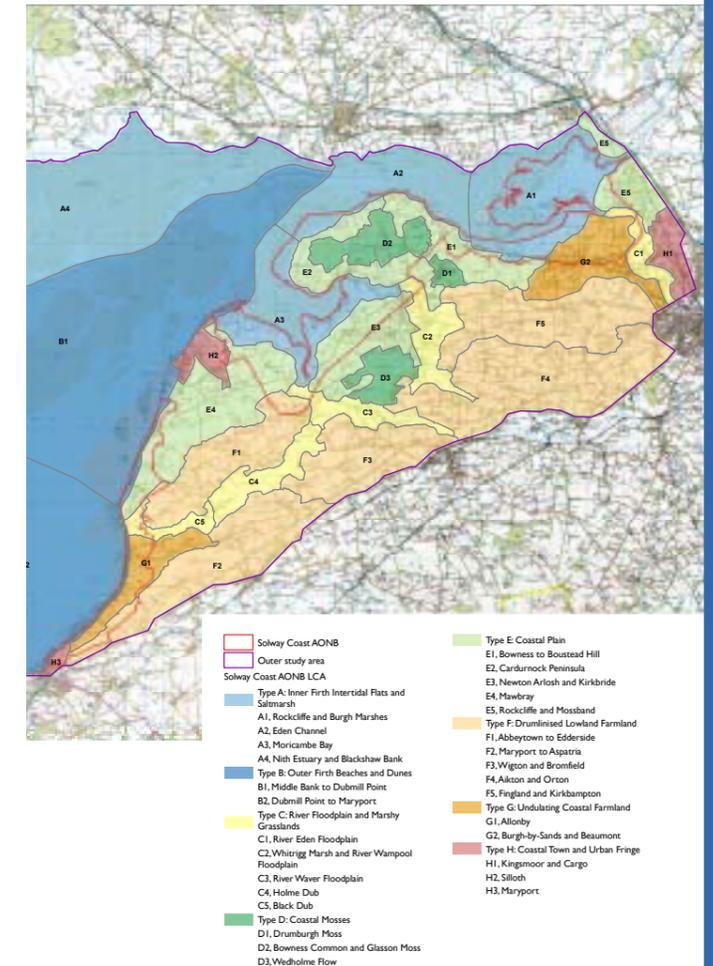


Figure 4. Updated Landscape Character Areas (2012)



SEASCAPE

- Landscape Type A: Inner Firth Intertidal Flats and Saltmarsh
- Landscape Character Area A1 Rockcliffe and Burgh Marshes
- Landscape Character Area A2 Eden Channel
- Landscape Character Area A3 Moricambe Bay
- Landscape Character Area A4 Nith Estuary and Blackshaw Bank
- Landscape Type B: Outer Firth Beaches and Dunes
- Landscape Character Area B1 Middle Bank to Dubmill Point
- Landscape Character Area B2 Dubmill point to Maryport (Allonby Bay)

LOWLAND LANDSCAPES

- Landscape Type C: River Floodplain and Marshy Grassland
- Landscape Character Area C1 River Eden Floodplain
- Landscape Character Area C2 Whitrigg Marsh & River Wampool Floodplain
- Landscape Character Area C3 River Waver Floodplain
- Landscape Character Area C4 Holme Dub
- Landscape Character Area C5 Black Dub

Landscape Type D: Coastal Mosses

- Landscape Character Area D1 Drumburgh Moss
- Landscape Character Area D2 Bowness Common and Glasson Moss
- Landscape Character Area D3 Wedholme Flow

Landscape Type E: Coastal Plain

- Landscape Character Area E1 Bowness to Boustead Hill
- Landscape Character Area E2 Cardurnock Peninsula
- Landscape Character Area E3 Newton Arlosh and Kirkbride
- Landscape Character Area E4 Mawbray
- Landscape Character Area E5 Rockcliffe and Mossband

Landscape Type F: Drumlinised Lowland Farmland

- Landscape Character Area F1 Abbeytown to Edderside
- Landscape Character Area F2 Maryport to Aspatria
- Landscape Character Area F3 Wigton and Bromfield
- Landscape Character Area F4 Aikton and Orton
- Landscape Character Area F5 Fingland and Kirkbampton

Landscape Type G: Undulating Coastal Farmland

- Landscape Character Area G1 Allonby
- Landscape Character Area G2 Burgh-by-Sands and Beaumont
- Landscape Type H: Coastal Town and Urban Fringe
- Landscape Character Area H1 Kingmoor and Cargo
- Landscape Character Area H2 Silloth
- Landscape Character Area H3 Maryport



Seascape/Intertidal Landscapes – Key features and attributes

Type A: Inner Firth Intertidal Flats and Saltmarsh

This area falls within the Intertidal Flats and Coastal Marsh sub-types in the Cumbria Landscape Character Assessment. This document was produced by Cumbria County Council in 2011 and is divided into two



parts; part 1 is the Cumbria Landscape Character guidance and part 2 the Cumbria Landscape Character Toolkit.

- Dynamic character influenced by the state of the tide and changing with the longer term cycle of erosion and deposition
- Large expanses of fine sands and mudflats dissected by dendritic creeks and channels

- Open, flat expanses of saltmarsh, transitional to the flat coastal plains, mosses and enclosed farmland of the inland areas
- Large scale of the landscape with expanses of tidal flats extending towards open sea and the skylines of Dumfries and Galloway
- Open skies and sense of space
- Saline tolerant species often grazed by sheep and cattle with sights and sounds of large number of birds
- The Estuary is designated as SSSI, SPA, SAC and Ramsar

Type B: Outer Firth Beaches and Dunes

Occurs throughout the open coastal area, the eastern section has more channels and has finer deposits due to the low energy tidal regime characteristic of the inner estuary. The seascape and intertidal estuary environment here within type B differs from the inner Firth environment of Type A, being closer to the influences of the open sea. The western section has open sea and is more characteristic of a traditional seaside landscape with high wave and tidal energy providing

movement of larger sediments such as gravels.

- Large scale dramatic landscape of undeveloped flats and open water, with open skylines and long views over the Solway firth to the Scottish coastline and Criffel mountain
- Visually and aurally dynamic seascape characterised by sights and sounds of the sea, lapping water and large numbers of birds that feed on the flats, notably waders
- Large and open expanses of intertidal sand flats opening out to the open sea and backed by shingle and pebble beaches and dune systems to the south and mudflats along more sheltered northern stretches of the coastal fringe
- ‘scaurs’ or pebble patches are distinctive along the beaches and support mussel beds and honeycomb worm reefs providing important feeding grounds for wading birds. The scaurs have a glacial origin and a stable rocky nature that contrasts with that of the wider sandy substrates of the intertidal areas allowing the development of different and distinctive intertidal communities
- Small linear towns and villages along the coast
- Visibility of Robin Rigg in the Solway Firth



Sand dunes

- Mobile dunes form at the landward interface of the vegetated shingle ridges by deposition of wind-blown sand
- Dune slacks contain some ephemeral freshwater ponds and pools
- Dune heath or heather dominated areas occur behind the mobile dunes where acid soil conditions prevail due to the underlying boulder clays and the leaching of sandy soils
- Dune grasslands grow on the alkaline shelly sands and soils and contain a rich variety of herb species and orchids
- The rare natterjack toad is resident throughout the dune system
- SSSI status for Silloth and Mawbray Dunes and the Grune

Type C: River Floodplain and Marshy Grassland

Areas of low lying, flat floodplain, marshy grassland and improved pasture follow the courses of the River Waver, Wampool and Eden and the glacial basin of Black Dub, Holme Dub and Crummock Beck



Some areas are backed by low cliffs, e.g. Crosscanonby area. These areas are reclaimed from other wetter habitats.

The key characteristics of the River Floodplain and Marshy Grassland type are:

- Low lying, flat areas of floodplain and wet pasture, with some areas of grazed marsh, which follow the course of rivers that flow into the firth.
- Enclosure is partial and irregular, with fencing and occasional, fragmented hedges, creating an open landscape with long views along flat river valleys.

- The lush rye-grass is grazed by sheep and cattle in some areas, whilst others are characterised by rough grazing, rushes and scrub.
- A dense network of streams, ditches and creeks dissect the areas, usually intensively managed and with eroded river banks in places.
- Development is confined to the outer fringes of the area as the land rises above sea-level, where dispersed farmsteads are scattered, along the margins of the former wetlands.
- An open, flat landscape, contrasting with the undulating and rolling topography of the farmed lowland hills and drumlins surrounding it.
- Fen peat soils are characteristic in the dubs and upper reaches of the broad and gentle river valleys.

Type D: Coastal Mosses

The Mosses or raised mires centre on the Cardurnock peninsula where Bowness Common and Glasson Moss cover an area of 1080ha. In the west of the AONB, Salta Moss covers around 46ha. Two other large areas of raised mire lie just outside of the AONB at Wedholme Flow and Drumburgh Moss.



Raised mire

- Low lying raised mires, raised by peat formation above the surrounding land, comprising flat or slightly undulating hummock-hollow mosaics, including water pools, marsh, moss, reeds and fringing wet woodland, usually birch, heather and purple moor grass grow in the drier areas
- Sharply contrasting with adjacent improved grasslands
- Dynamic landscape changing colour with the seasons, time of day and weather
- Sense of remoteness and tranquillity, absence of settlement and intrusion
- Landscape supports rare assemblages of deep peat with sphagnum mosses and many acid loving plants
- Important habitat for specialised wading bird species
- Long views to the Lake District, across low-lying mosslands
- Increasingly promoted as an attraction for visitors to the area
- Designated as SSSI and SAC

Type E: Coastal Plain

The coastal plain areas are included mainly as sub-type 2c Coastal Plain in the Cumbria Landscape Character Assessment.



Low lying farmland occurring along the coastal fringes of the LCA study area, along the West coast and through the northern areas bounding the Inner Firth.

- Large, flat, open landscape, with a strong relationship to the coastal margins and the rural farmland of the plains
- Wind sculpted trees lining roadsides, including avenues of beech

- Coastal pasture predominates, enclosed by ditches and hedgerows planted on raised banks (kests), with a distinctive pattern of small inner fields and larger outer fields and long narrow strip fields
- Historic villages, such as Newton Arlosh, Kirkbride and Mawbray are clustered within coastal pasture and closely related to the field patterns, with traditional buildings of cobble, sandstone and 'clay dabbin'
- Sandstone gate stoops
- Open views to Lakeland Fells and over to the Scottish Hills
- Sunken roads often winding across more linear roads

Type F: Drumlinised Lowland Farm

The Drumlinised Lowland Farmland is the most extensive character type in the study area. Large areas lie predominantly beyond the AONB boundary to the south and southeast and play an important role as the setting of character areas within the AONB.



- A deeply rural, agricultural landscape, with green pastoral fields divided by hedgerows draped over the rolling drumlin landforms.
- Predominantly agricultural land, intensively managed for grazing and silage production with some arable crops.
- Large regular, geometric fields of parliamentary enclosures are interspersed with older field enclosure patterns of medium sized irregular fields and long narrow strip fields.
- Distinctive wide and sunken lanes, that are former drove roads, rise up and down across the farmland, with clear edge profiles of ditches and raised banks topped with hedges, locally known as 'kests'. Ferns and wild flowers grow in the hedgerow bottoms and ditches.
- Varied mixtures of architectural styles and building materials, with thatched roofs, 'crook' barns, and long houses built of 'clay dabbin' are found in the historic settlements. Farms often have large sheds, outbuildings and slurry tanks.
- Tranquil and peaceful areas of farmland, less exposed and influenced by the coastal setting and more enclosed than the adjacent coastal plains, with views to Lakeland Hills.

Type G: Undulating Coastal

This landscape occurs immediately inland from the coast from the Inner Firth area to the Outer Firth area.



- Deeply rural, agricultural landscape, with green pastoral fields divided by hedgerows, hedgebanks and drainage ditches.
- Predominantly agricultural land, managed largely for grazing and silage production with some arable crops and occasional copses and woodland plantations.
- Medium sized enclosures are interspersed with areas of older field enclosure patterns of medium to small sized irregular fields, contained by the undulating landform and

winding becks that run through the area.

- Distinctive wide and sunken lanes, that are former drove roads, run through some parts of the farmland, with clear edge profiles of ditches and raised banks topped with hedges, locally known as 'kests'. Ferns and wild flowers grow in the hedgerow bottoms and ditches.
- There is a coastal outlook from some of the northern and western sections, with views out across the Solway seascape, although views are often contained by the varied undulating landform and the network of hedges planted on banks.
- Varied mixtures of architectural styles and building materials, with thatched roofs, 'crook' barns, and long houses built of 'clay dabbin' found in the historic settlements. Farms often have large sheds and outbuildings.
- A variation in tree cover across the different character areas according to coastal exposure, with the hedgerow trees and small copses being important features in areas with sparse tree cover.
- Views inland over series of rolling ridges to the Cumbria high fells, which rise up in the far distance to the south and southwest.
- Tranquil and peaceful areas of farmland, less exposed and open than the adjacent coastal plains.

Type H: Coastal Town and Fringe

Lying outside of the AONB boundary, but in close proximity to it, are the larger settlements of Maryport, Silloth and an area of urban fringe west of Carlisle between Kingmoor Nature Reserve and Rockcliffe



- Low-lying areas, generally flat and open in character.
- Linear settlements with old centres and a wider range of development types surrounding them, or areas of urban fringe with loosely dispersed developments of different types.
- Settlement cores and facades are characterised by distinctive architecture styles and building materials, including the Georgian and Victorian facades fronting onto the sea in the seaside resorts of Maryport and Silloth.
- Hard, man-made forms shape the shoreline and the coastal edge of the settlements of Maryport and Silloth.
- Urban fringe areas comprise a disparate collection of development with very mixed land uses including airfields, allotments, caravan parks, and railway sidings on the fringes of Carlisle.
- Rich historical interest, including industrial heritage and archaeological sites associated with the Roman frontier.
- Vast seaward views out across the Solway Firth, large skies with changing colours and moods depending on weather and seasonal changes.
- Small areas of agriculture interspersed with development at the edges of the settlements and areas of open mown grass within the settlements themselves.
- Views to the offshore wind farm at Robin Rigg, visible across the open horizon.

SETTLEMENTS

Settlements within the AONB are strongly associated with the coastline and rivers. Where settlements do not conform to this pattern they are usually associated with major roads, disused canals and railways, farmsteads or Hadrian's Wall.

Settlements

- Most of the larger settlements have a strong linear form either influenced by the coastline or an adjacent highway
- The settlements in the eastern section have clear seaward frontages with some development behind
- The establishment of villages is extremely varied from those with 12th Century origins to those developed through new ports and latterly by WWII airfields

Buildings

- There is a complex mixture of vernacular styles from fortified stone buildings to 'cruck-roof' based structures
- Fortified farm houses or 'Bastles' are common in the Borders area and the AONB has one at Drumburgh
- Fortified churches can be seen at Burgh by Sands and Newton Arlosh
- Longhouses, clay dabbins and cruck roofed dwellings are scattered around settlements and farmsteads across the landscape
- The only large country estate at Castletown near Rockcliffe has an associated 'Hall' type dwelling
- Building materials are extremely diverse from shoreline cobbles to dressed stone, brick and clay. Many buildings, especially multi-phase farm settlements have a range of fabrics
- Roofs are usually covered in slate or sandstone pan-tiles. Some reed thatch still survives
- Architectural influences are typical of the northwest coastal area where single storey longhouses hug the topography and the settlements tend to be two storeys with the upper floor as part of the roof apex and probably added at a later date
- The village of Port Carlisle has Georgian terraces, and is the product of early 19th century investment into the port associated with the Carlisle canal; it is a peculiar and quirky feature in the area
- Allonby has some notable Victorian buildings and was developed during that period as a spa-style resort
- Recent building styles have taken away much of the character of the villages with modern bungalows providing infill and boundary expansion

Roads, Footpaths and Waths

- Drove roads or sunken lanes with high hedge kests are common
- Extant, derelict and in-filled ponds occur along highways; most are within settlement boundaries
- Estuary crossing points known locally as 'Waths' are unmarked and shift with the movement of estuary sediments
- Hadrian's Wall Path National Trail, Hadrian's Cycle Route, the Cumbria Coastal Way and the England Coast Trail all share the highways and byways of the AONB
- A large Public Rights of Way network criss-crosses the landscape many parts of which follow sunken lanes and field boundaries
- Open access areas include a selection of sand dunes,

salt-marshes and raised mires along with the England Coast Trail 'spreading room'

- Natural England Coastal Path along the coast from Allonby to Whitehaven (Maryport as end of the AONB stretch)

Tranquillity

- The AONB generally is mapped as a 'most tranquil' area with the level of tranquillity decreasing slightly in the southern area of the AONB along the coast from Silloth to Maryport. The impact of the roads on tranquillity is clearly seen

Significant features

- Hadrian's Wall, contemporary defences of the Cumbrian coast, remains and earthworks (Mileforts and Vallum)
- Elizabethan Sea Dyke at Skinburness
- Salt extraction sites on saltmarshes and behind open beaches
- Carlisle canal
- Railway buildings, bridges and cuttings
- Ministry of Defence wireless array (15 masts) near Anthorn
- Robin Rigg Turbines in the Outer Firth

Historic Landscape Characterisation

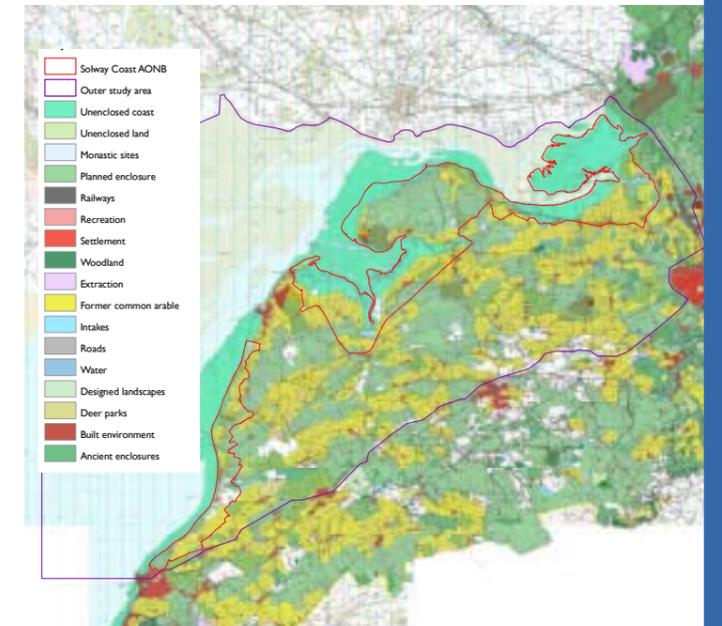


Figure 5.

Historic Landscape Characterisation has taken place for Cumbria at a County wide scale. A range of historic landscape types have been defined and historic landscape character areas have been developed. The AONB forms part of the Solway Plain character area. This extends from the coast from near Carlisle to Crosscanonby and inland towards the A596. It also forms part of the Ellen and Marron Valley Character area south of Crosscanonby. More information can be found in the Guide to Cumbria Historic Landscape Characterisation Database for Cumbria's Planning Authorities.

The following section (Section 2) deals with real and anticipated forces for change that impinge upon the landscape of the AONB, some forces are perceived as having a negative effect and others positive. Whichever way they fall they need objectives, strategies and plans for action.

Part Two

Part 1 described the context of this Management Plan in terms of its landscape, designation, management and where the Plan sits within the local, national and international framework.

Part 2 provides a more detailed description of each landscape type and the forces for change acting upon it. Wider considerations come later where the setting of the AONB, coastal issues, climate change and other areas are considered. Finally, Part 2 explores the relationship between the AONB designation and the rural economy, tourism, education and access.

Ecologically and culturally, the whole Solway, English and Scottish, is a single entity and traditionally there has been much connection across the Solway, not just around the head of the Solway. This has been lost by the dependency on the road network in recent decades and also politics. However, there is a need for a common Solway identity to put nature conservation, water management, historic landscape and cultural identity into common context.



The Solway Coast Area of Outstanding Natural Beauty Landscape and Seascape Character Assessment was published in 2010 and describes, in detail, the principal landscape elements that exist across the AONB and which, either singly or in combination contribute the unique character and quality of the AONB and its setting (within 8 distinct landscape character types, see Part 1 section 6). The study area includes the extent of the AONB, but also considers those areas of similar or matching landscape and seascape character around it, so that it can be seen where landscape/seascape character areas extend over the boundary, as well as those areas of land and sea which constitute the 'setting' of the AONB. Thus, developments such as renewables and visible developments can be considered.

Natural England has recently reviewed its Natural Character Area profiles (NCAs). The AONB forms part of the Solway Basin NCA although the NCA area extends beyond the AONB boundary. There is a great relevance of the NCA "Statements of Environmental Opportunity" to this Management Plan. ³ (link:)

The character of the Solway Coast landscape is intricately linked to its coastal setting, its historical cultivation and landuse and as a 'frontier' between Scotland and England. The deeply rural setting of the AONB, which due to its isolation has remained relatively unchanged and undisturbed in character, contributes to the strong sense of remoteness which is fundamental to the character of the area.

Specific issues that affect the significance of the AONB are: natural processes; climate change; development pressures; leisure and tourism; traffic and transportation; agricultural change; land management; nature conservation; habitats and species; and the fabric and setting of historic sites.



2.1.1 Landscape

"The Solway Coast AONB contains a unique mosaic of coastal and pastoral landscapes set within a low and expansive coastal plain and lying under the ever-changing drama of the dominant sky. The landscape is further enriched by the twice daily influence of the tide that in turn reveals the rich birdlife which uses the estuary all year round" ¹

The simple and subtly changing landforms within the AONB reflect the effects of glacial and post-glacial erosion and deposition on the shaping of the landscape. The resulting natural landscape and its ability to retain water has, in turn, influenced the pattern of settlement, constraining the activities of the early settlers and the ways in which they utilised the natural resources of the area. ²

The landscape has been greatly modified by the actions of human communities, most significantly by land drainage from the Neolithic period to the modern industrial era and plays a significant role in the formation of its local identity. It has been created from a mix of cultural, social, economic, historical, geological, and ecological features. Today it is extremely fragmented but retains its identity as a large scale wetland.

The majority of the AONB, around 55%, is farmland, including arable. Raised mires cover a further 10% and the remaining 35% are areas such as saltmarshes, sand dunes, rivers, settlements and highways.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Change in Climate is driving changes in agriculture, affecting the water balance of the mosses, influencing shoreline and coastal erosion, and saltmarsh features</p> <p>Wetter warmer winters are bringing increased storminess and rainfall creating erosion, water-logging (standing water in fields), though a portion of this is oversize farm machinery causing soil compaction creating poor drainage</p>	<p>The Solway Wetlands Landscape Partnership was created to restore lowland raised mires making them more robust to change. After the project, the legacy of the remaining partnership will continue to restore the Solway's wetlands</p> <p>Agri-environment (AE) schemes have been secured on Local Authority owned land that are designated SSSI's dunes, raised mires and Nature Reserves are all in the scheme. Work with partners to forward plan and prepare adaption strategies in order to accommodate future change</p>
<p>Inappropriate developments impacting on the landscape and its management, close to and within the AONB boundary, affecting the scenic beauty and the skylines and views into and out of</p>	<p>The Solway Coast AONB Landscape and Seascape Character Assessment 2010 creates a basis upon which to comment upon planning applications helping us make informed decisions and responses regarding</p>

¹ AONB (2009) Solway coast Area of Outstanding Natural Beauty Management Plan 2010-2015
² The Solway coast Area of Outstanding Natural Beauty Landscape and Seascape Character Assessment 2010
³ http://www.naturalengland.org.uk/publications/nca/solway_basin.aspx

the AONB including wind turbine proliferation, tidal barrage research



development. It also has an important role to play in guiding the management of changes and trends, and in so doing, protecting, managing and planning the quality of the landscape and seascape character.

The Cumbria Landscape Character Guidance and Toolkit also provides a way to inform planning decisions on all major developments

Tranquillity is under threat due to increasing pressure from noise and light pollution

Small but significant increases in traffic has affected the tranquillity of the AONB (noise and light) primarily caused by the widening of the A74 M from Floriston to Gretna and the Carlisle Northern Relief Road. More frequent use of gyrocopters and other motorised recreation add to loss of tranquillity

Quiet Roads initiatives, calming measures and development planning for noise and light pollution



Loss of traditional land management skills such as North Cumberland Style hedgelaying, which is being replaced by mechanised flail cutting, is altering the landscape, denuding the area of hedgerow trees and creating a manicured field boundary pattern.

Standard trees in hedgerows are disappearing and are not being replaced creating lower horizons across the AONB. Each farm has a different way of flailing hedges and as such there is a lack of continuity of styles creating discord across the agricultural landscape

North Cumberland Style Hedgelaying training courses to restore Cumberland Style kested hedges are run on an annual basis lead by the AONB Partnership keeping skills alive. Agri-environmental schemes are a mechanism to support future management guarantees



Loss of traditional sandstone gatestoops (gatestoops) due to neglect/mega farm mechanisation

Gatestoop replacement projects will enable promotion of traditional boundary furniture

Increased road signage and road markings and road urbanisation

Loss of traditional cast iron highway signs which are being replaced by modern aluminium signs. Posts are being shared by a proliferation of smaller plates for cycle routes, walking routes, etc. Concrete kerbs and other highway hardware is particularly eye catching in a rural setting.

Quiet Roads initiatives, calming measures and development planning for noise and light issues

Through AONB seeking opportunities to share signage where possible, reducing clutter.

Encouraging PC and the Highways Authority to collaborate to replace and restore cast iron highway signs

The accumulation of windfarms, wind clusters and single turbines are creating a 'windscape'. This is increasing around the Solway Firth in general with Scottish developments being outside the scope of the English planning process. The higher than average wind resource is being exploited by developers across the area. Tidal barrage research continues in the estuary with a view to developing major schemes.

Reducing the carbon footprint by achieving reductions in greenhouse gas emissions will help to reduce the degree and impact of climate change. This can be achieved through increasing energy efficiency, e.g. using appropriate forms of renewable energy, reducing car use and using public transport, purchasing locally sourced food and services.

To provide impetus to locking environmental carbon through sequestration within the biota, habitats and landforms of the Solway Coast.

Promote renewable energy sources that are complementary to AONB character

Overhead power and telecommunication wires and poles are intrusive in the flat open landscape including the overhead high voltage wirescape around the Eden estuary.

Continue to underground overhead wires with Electricity North West and identify new areas for the next 15 years

Use of the Cumulative Impact of Vertical Infrastructure information (Cumbria County Council in partnership with Allerdale Borough Council, Carlisle City Council, et al)

Landscape Objective 1:

To ensure that the distinctive character and qualities of the Solway Coast AONB landscape and seascape are understood, conserved, enhanced and restored.

2.1.2 Land Management

The Farmed Landscape

The economics of farm incomes on the Solway Coast reveals a marginal and 'hand to mouth' type of turnover, low incomes and consequently less capital for reinvestment is a real problem. A large majority of farms are livestock based with dairy, beef and lamb being the dominant product and the small amount of arable being cereals for winter stock feed as well as increasing prevalence of maize. The whole of the Solway Plain is heavily cropped for grass-silage. The intensification of stock numbers and modern methods has resulted in the production of more silage and slurry, which requires adequate storage, slurry being a valuable fertilizer when applied at the correct time. Nitrate vulnerable zones limit slurry spreading in winter so driving a need for long periods of slurry storage. This need has been met by the installation of larger slurry tanks and silage clamps and some farms have created cooperatives and are jointly running bio-digesters to provide fertiliser and energy. Farming occupies around 55% of the AONB's area and there are 85 farm holdings. In 2006, the area was 65% with 134 holdings. In 2010, there were 209 people employed in farming within the AONB, of these, 119 were full-time farmers.

Agriculture is the dominant land use of the Solway landscape. Pastoral systems are most common but there is a small amount of arable land resulting in the retention of a mixed farming landscape. The vast majority of agricultural area (73.8%) is grass (temporary and permanent) and is used for grazing. A further 5.8% is classed as rough grazing. 13.6% is used for crops, mainly spring and winter barley, maize and wheat. Woodland comprises only 2.4% of the agricultural land, 1.9% of the AONB. Away from the open coast a landscape pattern characterised by the presence of relatively small square or narrow fields, with generally maintained boundary hedges sometimes with associated ditches, reflect the evolution of the landscape over time.

Farming has been a major influence on the development of the Solway Coast landscape, with the raised mires, saltmarshes and sand dunes being subject to different management regimes which in turn have shaped their varied characters. All of the land has been modified in some way, in general to supply the need for agriculture whether for livestock or arable use.

The majority of farms within the AONB are dairy and lowland livestock grazing and this has remained the same for many years (at least since 1990 from when data is available). The figures do, however, show a continuing decline in the number of holdings involved in dairy farming.



Between 2000 and 2009 there was a consolidation of dairy production into fewer, larger but more intensive holdings and was probably initiated by the devastating effect of Foot and Mouth Disease in 2001 which resulted in many farm businesses making a switch from dairy to meat production.

Between 2000 and 2009 Defra data indicates a broadly stable agricultural land use with the exception of 'other crop types' which increased and this is likely to be attributable to the increased use of maize which is also an efficient way to get rid of large volumes of slurry in the spring.

Over recent decades a change in sheep management has occurred on the Solway with increased numbers in winter as a consequence of 'off-wintering' of sheep from nearby upland areas. Changes in agricultural policy have caused some changes in stock management; for example loss of some subsidies, and an increased need for movement testing of cattle, have led to a decrease in cattle numbers in some areas. This has an effect on the summer grazing of some marshes which in-turn affects their vegetation structure.

Future cessation of Environment Agency maintenance of land drainage pumps on naturally water-logged land may result in the establishment of an Internal Drainage Board (IDB) to oversee water level management in the near future but will be dependent upon landowner cooperation. Even with the establishment of an IDB farming economics may result in decreased levels of water level management in some areas with the consequent wetting up of areas of marginal farmland. However, a wider water management partnership providing an opportunity for new visions, managed change and new partnerships should bring lasting improvements.

Woodland cover on the coastal plain is minimal with trees being largely restricted to occasional hedgerow standards, fringes of raised mires and river valleys. Low woodland cover increases the expansive and open feel to the landscape in the flatter parts of the Solway Plain.

Summer grazing on the marshes by livestock, provides inland grasslands to be managed for silage production. The marshes thus provide an important agricultural asset supporting dairy and meat production as well as the intertidal and floodplain grazing marsh being the most extensive priority habitat for wildlife in the coastal parts of the Solway basin.

Many species of birds are associated with the agricultural landscape during the breeding season, including lapwing, skylark, grey partridge, corn bunting (now locally extinct) and yellow wagtail but all have declined in number across the area in tandem with agricultural intensification in the latter decades of the 20th Century. However, non-breeding wintering migratory species such as pink-footed goose, barnacle goose and whooper swan which use pastures, stubbles and saltmarshes in the winter have increased their numbers significantly in recent years.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Uncertainty of incomes in farming caused by volatility in markets, the reform of the Common Agricultural Policy (CAP) and the impacts of potential diseases</p> <p>Farmers are growing sceptical that certain subsidies will be withdrawn</p>	<p>Influencing agri-environment scheme targeting and uptake.</p> <p>Implementing agri-environment schemes and farm diversification schemes that support management that complements the AONB landscape and character</p> <p>Use of Environmental regulation, and Environmental Impact Assessment (EIA) to prevent damaging change</p>
<p>Insecurity of farm incomes driving farm diversification for economic sustainability.</p> <p>Farm diversification is evident in a variety of forms such as tea rooms, accommodation, etc. While some diversification can reinforce the landscape character other types of investment can have damaging impacts, such as wind turbines</p> <p>Driven by the need for low carbon energy sources and associated Government policy the proliferation of farm based wind turbine applications to off-set electricity costs and to provide income from selling the excess electricity</p>	<p>Implementing agri-environment schemes and farm diversification schemes that support management that complements AONB character.</p> <p>Influence Rural Development Programme investment strategies for the AONB its boundaries and setting</p> <p>Influence development planning with Local Authorities</p> <p>Raise the priority attached to landscape impact and landscape damage where large wind installations are concerned</p>
<p>Changes in farming patterns, linked to sustainability of certain crops could lead to landscape character change with biodiversity affected.</p> <p>An example of this could be due to further intensification of livestock management affecting the way agricultural land is managed. One example of this is the creation of grey partridge habitat along field edges, however, if this is combined with mature hedgerow trees avian predators are likely to impact on the population</p> <p>Splitting of farmsteads from farmland, or consolidation of dairy farms may be unsympathetic to the landscape</p>	<p>Use of Environmental regulation, and Environmental Impact Assessment to prevent damaging change</p> <p>Support populations of farmland birds on land under arable management using AE to support</p> 
<p>Larger farms, isolated farm houses and larger herds with their needs for winter layerage, slurry tanking and silage clamping for winter fodder.</p> <p>Intensification results in decreasing numbers of in field stock with an increasing level of stock permanently kept indoors and more mechanically managed grassland.</p>	<p>Influence Local Enterprise Partnership (LEP) or Rural Development Programme (RDPE) priorities to provide rural business development</p> <p>Promote cooperation between landowners where this can aid sustainability (for example in maintaining biomass digesters)</p>
<p>Loss of traditional field boundary skills, hedgelaying, and removal of hedges can lead to landscape character change, with larger fields and fences as boundaries. Flail cutting taking out trees denude the field patterns of mature trees</p> <p>Hedges are declining and are being replaced by post and wire fences. Cumberland style hedgelaying is only used sporadically around the AONB. The use of mechanical flails is increasingly creating a highly groomed look to field boundaries with different landholdings often cutting in different styles</p> <p>The loss of traditional sandstone gatestoops continues to increase as they are damaged by heavier and wider farm implements and tractors.</p>	<p>Influencing agri-environment scheme targeting and uptake</p> <p>Implementing agri-environment schemes and farm diversification schemes that support management that complements AONB character</p> <p>Use of Environmental regulation, and environmental impact assessment to prevent damaging change</p> <p>Promotion of Land Management skills training</p> <p>Support populations of farmland birds on land under arable management through appropriate hedgerow management and uncultivated margins providing nesting locations</p>

<p>Loss of wildlife diversity and wildlife corridors and habitats due to any of the above and uptake of AE Schemes to counter it is important.</p> <p>AE Schemes can combat these changes but need to be tailored to reflect all key features identified within Farm Environmental Plans including the overarching aim of supporting landscape quality within the AONB.</p>	<p>Implementing agri-environment schemes and farm diversification schemes that support management that complements AONB character</p> <p>Influence targeting and uptake of AE schemes</p> <p>Use of Environmental regulation, and Environmental Impact Assessment to prevent damaging change</p> <p>Support populations of farmland birds on land under arable management through appropriate hedgerow management and uncultivated margins providing nesting locations</p>
<p>Increased prevalence of tree pests and crop pests, from global trade, climate change and import of diseased material</p> <p>Locally invasive species are an increasing issue with Himalayan balsam a particular issue along river courses. (This is also an issue in other areas in later sections)</p> <p>The situation is getting worse with the spread of known species increasing as is the list of new invasive species. The resistance of invasive species to clearance measures cannot be underestimated. Combining the high cost of eradication alongside the fecundity of these species makes intervention a priority.</p>	<p>Use of Environmental regulation, and Environmental Impact Assessment to prevent damaging change</p> <p>Monitor to provide an early warning and allow remediation before impacts are realised</p> 
<p>Policy shifts affecting the management of agricultural drainage infrastructure including agency withdrawal from watercourse maintenance, wetting up of agricultural land for AE schemes and lack of an Internal Drainage Board. The activity of wetland restoration is driven by changes in water-level management policy and economics</p> <p>Withdrawal of the EA funding to provide a pumped land drainage scheme on the southern edge of the AONB is providing a debate on what the value of this land is for society. Landscape in general is likely to be subject to change when the issue is combined with climate change and predicted increased rainfall.</p>	<p>Use Agri-environment schemes and farm diversification schemes to manage change</p> <p>Promote awareness of AONB and biodiversity duties to a new IDB should it be established.</p> 
<p>Where agriculture is present on peaty soils, intensive management can often result in the reduction of stored soil carbon through peat wastage and soil erosion, particularly where land is ploughed for grassland reseeding or arable cropping.</p>	<p>Promotion of sustainable and carbon sensitive farming regimes that are economically viable.</p>

Farming Objectives

- Objective 2:** To ensure that sustainable farming practices become the primary means by which the distinctive farmland landscapes and qualities of much of the AONB are maintained
- Objective 3:** To ensure that the skills required to care for the traditional landscape and its special qualities are appreciated and increased, with opportunities to acquire and develop such skills made available to all
- Objective 4:** To ensure rural land management, which conserves and enhances natural resources, including biodiversity, landscape character and the historic environment, and which aids public enjoyment of the AONB is supported and promoted

2.1.3 Intertidal Saltmarshes and associated Mudflats



The salt marsh and intertidal systems are of national and international importance and provide an area of high tranquillity that have a remote and isolated feel and are away from the major transport

routes. These marshes are a component of three of the five Natura 2000 sites in the AONB. Known as the 'Upper Solway Flats and Marshes' they are designated as Special Conservation Areas (SAC) (as the Solway Firth SAC), Special Protection Area (SPA), RAMSAR site and also as a Site of Special Scientific Interest (SSSI).

The salt marshes of the Solway estuary provide an unbroken ribbon around the inner estuary, some form narrow fringe areas and others are extensive, such as those at Rockcliffe and Newton. The areas are generally grazed with cattle during the summer months and sheep brought down from the surrounding uplands during the winter, both wander freely on the unenclosed marshes but are moved according to the tides. On smaller marshes grazing is managed by 'marsh committees' separate from

land ownership and are based on the Medieval stint system that is based on 'headage' (stock numbers) rather than land area with the stinted rights on different marshes historically linked to individual Parishes.

Summer grazing on the marshes by livestock is an important agricultural asset supporting dairy and meat production

The marshes are priority habitats and support nationally and regionally important populations of many species. The few un-grazed marshes tend to be more diverse in coastal plants while natterjack toads are associated with the more tightly grazed marshes. In the inner Solway marshes there are areas of erosion and deposition, but as a whole there has been an increase in salt marsh extent, this is most prevalent in the inner most part of the Solway to the east of Bowness-on-Solway, where Rockcliffe marsh has both expanded and risen in response to sediment deposition.

On the salt marshes of the inner Solway the grazing regime is important for maintaining the grass sward height for wintering wildfowl (swans, geese and ducks) and breeding waders (lapwing, redshank and oystercatcher). As well as their importance for biodiversity the marshes perform an important role in providing coastal protection, carbon sequestration and storage (through retaining organic matter and carboniferous material), food provision, sense of place and tranquillity.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Changes in agricultural policy have caused some changes in stock management, for example loss of some subsidies, and increased need for movement testing of cattle, have led to a decrease in cattle numbers summer grazing on the marshes subsequently affecting their vegetation structure</p>	<p>Retaining grazing systems that provide the conditions for key species and allow the natural development of the marshes, and managing recreational use, will be important in maintaining the value of the marshes into the future.</p> <p>Implementing agri-environment schemes that help with the perpetuation of traditional land management systems.</p> <p>Influence targeting and uptake of AE schemes</p>
<p>A number of species characteristic of the coastal zone have seen declines in recent years, in particular breeding waders on the saltmarshes, and wintering waders on the intertidal flats. However, species such as barnacle goose and whooper swan have increased.</p>  	<p>Use of Environmental regulation, and Environmental Impact Assessment to prevent damaging change</p> <p>Gaining a better understanding of causes of change will allow for adaptive future management.</p> <p>Policy drivers such as Biodiversity 2020, Water Framework Directive and Natura 2000 targets are likely to see the continuation of a programme of restoration of semi-natural habitats, particularly wetland and coastal habitats, of which there is an exceptional coverage in the AONB</p> <p>Conserve the Inner Firth Intertidal Flats for nature conservation for SPA/SAC status and possibly restore areas of reclaimed farm land to marshes where possible</p>
<p>Along the saltmarsh coast there may be an increased dynamism of coastal processes, with sea level rise and exacerbated storminess causing floods</p>  	<p>Policy drivers such as Biodiversity 2020, Water Framework Directive and Natura 2000 targets are likely to see the continuation of a programme of restoration of semi-natural habitats, particularly wetland and coastal habitats, of which there is an exceptional coverage in the AONB</p> <p>Conserve the Inner Firth Intertidal Flats for nature conservation for SPA/SAC status and possibly restore drained farmed areas to marshes where possible</p> <p>Seeking management which supports saltmarsh function as a regulator of coastal process</p>

<p>Saltmarsh sediments and soils (3% of the area) may be lost to coastal erosion, including from sea level rise. At present there is a net accretion of salt marsh soils in the area fed by material delivered to the Solway estuary both by rivers (alluvium) and coastal processes.</p>	<p>Policy drivers such as Biodiversity 2020, Water Framework Directive and Natura 2000 targets are likely to see the continuation of a programme of restoration of semi-natural habitats, particularly wetland and coastal habitats, of which there is an exceptional coverage in the AONB</p>
<p>Developments such as tidal barrages in the Solway Estuary would create visible effects and alterations to the hydrology of the estuarine intertidal flats and marshes</p>	<p>Monitoring changes in sea level and coastal erosion to determine any trends or patterns; and to manage the process of realignment and allow natural processes to act as stated in the shoreline Management Plan 2, if appropriate</p> <p>Use of Environmental regulation, and Environmental Impact Assessment to prevent damaging change</p>
<p>Influences such as the Marine and Coastal Access Act, may require modifications for a long distance coastal access route and may affect key species. Influences of the Shoreline Management Plan 2 will influence management recommendations affecting the intertidal landscape</p>	<p>Respond to the requirements of legislation such as the Countryside and Rights of Way Act and Marine and Coastal Access Act to promote development of the coastal access route whilst ensuring its development and implementation is in line with the landscape management of the marshes for all its key features.</p>

Saltmarsh Objective

Objective 5: To ensure the effective conservation and management of the saltmarsh habitat for its unique character, specialist species and role regulating coastal process.

2.1.4 Sand Dunes

Fringing the outer Solway Firth an extensive coastal dune and heath system is situated along the southern section of the AONB including stretches designated as Silloth Dunes and Mawbray Banks SSSI and the Grune Dunes which are part of the USF&M SSSI and Solway Firth SAC. To the south the dunes also extend beyond the SSSIs to Allonby Bay.

The Silloth Dunes and Mawbray Bank SSSI extend for about 8km from Silloth in the north, to Dubmill Point in the south, excluding the narrow area around Beckoot. It covers 0.79% of the AONB. 41.4% of the SSSI is in unfavourable/recovering condition.

The areas of acidic dune grassland and heath are of particular note, as they comprise the second best example of this rare and restricted habitat in Cumbria. There is a rich diversity of dune and maritime heath plant and animal communities and the protected natterjack toad and great crested newt have breeding sites within the dunes. The SSSIs and non-designated dunes form one dune series which is one of only three sand dune systems in north and west Cumbria.



The dune system as well as the salt marshes of the inner Solway act as a natural sea defence in that they absorb and dissipate tidal energy thus protecting inland areas. This dynamic system also helps to trap sediments so increasing the level and extent of sand dune and salt marshes providing enhanced natural protection as they increase in height or expand seawards.

Coastal squeeze is significant with the B3500 highway creating an unnatural barrier to dune extension further inland. As a consequence, where erosion dominates, a number of

'pinch points' occur along the length of the dunes where hard engineering has been deployed to protect the highway infrastructure from loss due to wind and tidal erosion.

People enjoy dunes for summer recreation and this has an undoubted effect on the fragile dune system. As dunes are primarily created from vegetated unconsolidated sands they can be damaged very easily by human interventions such as cars, motorcycles and even footfall from walkers. This in turn can compromise the resistance of the dunes to tidal energy which can eventually lead to flood breaches and the subsequent damage to infrastructure inland.

In recent years the dune system of the outer Solway Coast has seen a decline in direct damage caused by unmanaged access, such as by vehicles, allowing stabilisation of sand dunes. However, recent declines in coastal grazing have also seen changes in vegetation to those associated with grazed systems, so more rank grasses, gorse, invasive species such as ragwort and other shrubs have invaded the heath and dune grassland areas.

Open access land along the Solway coast, includes a large proportion of the sand dune coast. Hadrian's Wall Cycleway and Cumbria Coastal Way are long distance routes which also cross the area. This has also been one of the first areas in the UK to receive formal Coastal Access provision of England Coastal Path within a section from Allonby to Maryport

Access to the dunes and foreshore for recreation/fisheries/travellers can create issues if not done sympathetically for both other users and nature conservation

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Coastal processes have caused modification of coastline with some areas subject to erosion and others deposition. Erosion along the coast from Dubmill to Beckfoot has reached a point where hard defence of the coastal road has been undertaken. To the south there are a number of points where erosion is approaching the coast road. Further north coastal defences have been strengthened at Skinburness. Grune Point, the northernmost point on the outer Solway, continues to realign in response to modification of sediment supply with erosion of the western shore and deposition on the east.</p>	<p>Encourage integrated designation management to help ensure the objectives of differing designations do not conflict with objectives for the Outer Firth Beaches and Dunes.</p> <p>Seascape/Intertidal Landscape Character Type B: Outer Firth Beaches and Dunes (LCSA 2010)</p> <p>Appropriate management would be linked to seeking long term sustainability including opportunities to adapt in accordance with SMP policy</p>
<p>Increases in coastal dynamism due to the impacts of climate change including, variously increased erosion and deposition along tidal water courses, frequency and intensity of storm flooding events, will have far reaching impacts including risk to coastal historic assets (salt pans, Roman Cemetery) and community demands for coastal defences around settlements and infrastructure.</p> <p>Loss of coastal car parks due to increased storms and erosion</p>	<p>Encourage integrated designation management to help ensure the objectives of differing designations do not conflict with objectives for the Outer Firth Beaches and Dunes. Seascape/Intertidal Landscape Character Type B: Outer Firth Beaches and Dunes (LCSA 2010)</p> <p>Work with PCs and landowners to close informal car parks but maintain main car parks</p>
<p>Access to the dunes and foreshore for recreation/fisheries/travellers can create issues if not done sympathetically for both other users and nature conservation.</p>	<p>Working with PCs, landowners and key user groups to ways of managing access that supports legitimate and traditional land use without causing conflict with the character and nature conservation value of the dune system.</p> <p>Discourage groups of travellers from settling along the dune areas.</p>
<p>Increases in recreational access by foot, through Open Access and the Coastal Path, and cyclists along the Hadrian's cycleway and other access types (e.g. fishery, travellers) may increase dune erosion and may have an impact on tranquillity, sensitive species and archaeology</p>	<p>Ensure the sections of the Hadrian's Cycleway on the dune areas are sensitive to the archaeology</p> <p>Work with PCs and landowners to close informal car parks but maintain main car parks</p> <p>Respond to the requirements of legislation such as the Countryside and Rights of Way Act and the Marine and Coastal Act to promote the positive development of a long distance coastal access route whilst ensuring its development and implementation is in line with the landscape management of the dunes for all its key features.</p> <p>Monitor access to mussel fisheries through the dunes so that no further erosion occurs</p> <p>Discourage groups of travellers from settling along the dune areas.</p>
<p>The SSSI status needs to move towards favourable condition</p>	<p>Higher Level Stewardship of Allerdale owned land on the dunes (2012-2022) will be used to support the management of the dune grasslands and until appropriate and sustainable management techniques are found to restore appropriate levels of grazing, mechanical grass cutting will be undertaken. This will continue to conserve the dunes and heathlands for nature conservation (reflecting their improving SSSI status)</p>
<p>Some overhead electricity lines and poles still affect views to the dunes SSSI and from the dunes inland to the fells</p>	<p>Continue to work in partnership with Electricity North West in undergrounding more 11kv overhead lines to improve visual amenity.</p>

Objective 6: To ensure that organisations responsible for the conservation and enhancement of the natural beauty of the dunes deliver appropriate actions and that the dunes are enjoyed sensitively by all users

2.1.5 Lowland Raised Mires - Mosses

Within the coastal plain a series of lowland raised bogs are present. Parts of the series are collectively designated as the South Solway Mosses Special Area of Conservation (SAC) with parts of the SAC also designated as National Nature Reserve (NNR). The SAC designation recognises the fact that the raised mires comprise the most intact and extensive series of sites in England, with their unique communities of peat-forming mosses, dwarf shrubs, cotton grasses, sundews, dragonflies and large heath butterflies.

The mosses were once even more extensive across the Solway Plain, before being fragmented through drainage and improved for agriculture (low grade pasture). These large areas of rain-fed peatland form shallow raised domes of peat at a maximum depth on the Solway Plain of around 6.5m. The four largest mosses are found on and around the Cardrunk Peninsula: Wedholme Flow, Bowness Common, Glasson and Drumburgh Mosses (of which Bowness Common and Glasson Moss are in the AONB). The sites and their margins include a range of wetland types including raised bog, mire, heathland, open water, reeds, fen and some fringing wet woodland. The latter typically includes birch, alder and goat willow. Wetland and wet woodland habitats are of high biodiversity value and are rich in birdlife.

The mosses provide a tranquil environment and are generally not very visible from the surrounding areas of coastal pasture due to their low elevation and screening by fringes of woodland. Large parts of the mosses are managed by Cumbria Wildlife Trust (CWT), Natural England (NE) and the RSPB, though others are still under private ownership. Several of the mosses have been subject to, and continue to be subject to, 're-wetting', to restore their hydrology and condition as wetland habitats for nature conservation, as have some surrounding pastures through reversion. Some of the species present are lapwing, curlew, reed bunting, and willow tit and the area is popular with bird watchers. The mosses are also enjoyed by visitors for their attractive semi-natural landscapes. The Solway Wetlands Landscape Partnership Scheme (SWLPS) seeks to provide much of the improved access as well as facilities for visitors and some wetting up (reversion) projects.

Unmodified raised mires are rainwater fed and consequently at the head of hydrological systems, acting as reservoirs and releasing their latent water slowly into the surrounding system. The mosses are able to hold water for longer, which requires good soil and vegetation management. Within the Solway Plain this is not the case where past hydrological interventions have been made to de-water peat land for reclamation as low-grade pasture. These 'interventions' continue to compromise natural hydrology and have a devastating effect on the flora and fauna of the bogs and their edge habitats and landscapes. Peat habitats are

required to function well with a minimum of drainage and complete vegetation cover.

Little of the surviving lowland raised mire (SSSI) is in favourable condition because of past degradation. Historically conservation landowners have provided much valuable restoration work with much of this 'good practice' being passed onto surrounding landowners. As a result the larger mires are now being restored in a collective way through the SWLPS so that on Bowness Common 87.5% of the SSSI is in favourable or recovering condition; and on Glasson Moss 63.8% is in favourable or recovering condition. However, the other lowland raised mire in the AONB Salta Moss, remains largely in unfavourable declining condition due to inappropriate ditch management draining the site, pheasant rearing, inappropriate scrub control and water pollution (discharges).

Visually the most extensive changes in recent years have been seen on some of the lowland raised mires where restoration has taken place with resultant decreases of secondary woodland cover and a directly related increase in wetland species.

On the mire edges unimproved semi-natural grasslands have declined through the latter half of the 20th Century as agricultural management has intensified and sites have been subject to reseeded with the related increases in nutrient levels compromising the wetland habitats which once flourished adjacent to the mires.

Conversely habitat restoration work has allowed some habitat specialist species to be restored such as the marsh fritillary butterfly which had declined to local extinction in the late 1990's. So far this restoration has happened outside the AONB but there is potential to restore further populations in the AONB.

Peatlands are carbon rich and contribute greatly to the national carbon balance. When raised mires are in favourable condition carbon uptake through the burial of peat forming vegetation is considerable. However, when in unfavourable condition, through modified drainage, peat stripping or habitat succession as a consequence of damage their ability to both sequester and store natural carbon is compromised. This situation leads to a double negative whereby stored carbon is lost to the atmosphere and the mechanism for primary storage is also lost.

The importance of these sites cannot be over emphasised both on nature conservation grounds and as natural carbon storage vaults. Current long range climate projections for the future 10 years and more, point toward wetter milder winters and drier warmer summers. This scenario could prove to be a climatic 'perfect storm' for these sites accelerating decline of damaged sites and as such the time is right to return them to their natural state through restoration.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Continued decline of sites not subject to restoration with consequent loss of condition, species, carbon and resilience</p> 	<p>To protect and restore lowland raised bogs for their biological and historical value through sustainable management</p> <p>The restoration and management of peat bogs has potential to reduce the loss of nationally important carbon storage capacity and reduce emissions from degraded peat soils.</p> <p>Increasing awareness of the biological, historical and carbon value of the bogs amongst the local community.</p>

	<p>Management to reduce carbon loss includes reversion of high risk arable land to pasture and management which promotes the return of organic material to the soil</p> <p>On some sites species reintroductions may be appropriate for specialist species to facilitate recolonisation, e.g. the Marsh Fritillary butterfly and increase public engagement with the sites</p> <p>Seek management of lowland wetlands and pasture that delivers benefits both biodiversity and sustainable farm business, in particular measures that support key species such as breeding waders, and reduces nutrient loading of watercourses.</p>
<p>Pressures for renewable energy development including onshore and offshore wind farms and other large scale development which may change the views from the mosses, particularly extension of developed skylines along open and undeveloped land or sea horizons</p>	<p>Work with local Planning Authorities to control inappropriate developments</p>
<p>Increased flows in water courses and increased winter rainfall, contrasting with increased summer drying potentially result in damage to the raised mire systems, such as cracking, erosion and moorland type fires</p> 	<p>Protecting and restoring lowland raised bogs by restoring appropriate hydrology for their biological value, their historical values as an archive of past environmental conditions and their value as a climate regulator by both securing the storage of carbon in peat and preventing its release as carbon dioxide and by enabling the sequestration of carbon dioxide from the atmosphere (SWLPS)</p> <p>Restoration of peatlands will provide many environmental and ecological benefits as well as contributing significantly to reduction in local flood risk in downstream areas</p>
<p>Possible increases in the salinity or incidence of sea water incursion to the edges and deep basal layers of the mosses due to sea level rise</p>	<p>Restoration of site hydrology, which generally involves the removal of recently established woodland and scrub and work to block drains on the moss surface, would be expected to result in a freshwater buffer to any saline incursion.</p>
<p>Drainage of areas of wetland moss, intensification of agriculture across areas which are already drained, demand for different crops, or changes in grazing regimes in response to increasing demands for food or energy crops</p> 	<p>Protecting and restoring lowland raised bogs for their biological value, their historical values as an archive of past environmental conditions and their value as a climate regulator by both securing the storage of carbon in peat and preventing its release as carbon dioxide and by enabling the sequestration of carbon dioxide from the atmosphere (SWLPS)</p> <p>Seeking sustainable management regimes that ensure areas of agriculturally managed peat are managed in the most appropriate manner</p>
<p>Increasing visitor pressure affecting tranquillity and biodiversity, for example at Glasson Moss and Drumburgh Moss</p>	<p>In tandem with generally increasing awareness of the mosses and the valuable role they perform securing appropriate access provision to allow engagement with sites that is sympathetic to their character.</p>
<p>Changes in water quality influencing landscape character, for example through presence of higher levels of nutrients which could alter vegetation, or reed growth which may affect the extent of open water. Inappropriate scrub control and water pollution (discharges).</p>	<p>Restoration of site hydrology which generally involves the removal of recently established woodland and scrub and work to block drains on the moss surface.</p> <p>Use legislation to protect and improve the condition and through improved awareness make the mosses more widely valued for their biological and historical values</p>

Objective 7: To ensure continued creation, restoration and enhancement of new and restored raised mire habitat

2.1.6 Biodiversity and Geodiversity

The Solway Coast AONB landscape is unique for several reasons. Following the last ice age (Devensian) the area was cloaked in glacial deposits such as gravels, sands and similar deposits described collectively as 'Drift'. These deposits have been scoured and modified by subsequent meltwater events, changes in sea level and coastal processes. These processes [plus post-glacial peat formation] have created the basis for the generation of habitats and the species which inhabit them. The hand of man has since modified the natural landscape through drainage, woodland clearance and agriculture leaving us with a patchwork of modified habitats. What is left is important to conserve and restore as it supports a range of distinctive features, habitats and their dependent flora and fauna.



The layer of designations designed to protect the areas habitats and wildlife is testament to their importance locally, nationally and internationally.

The area is exceptional for its biodiversity associated with a range of lowland habitats. These are important both in their own right, as key assets of local sense of place and in many cases as the support for other services.

The Solway Firth is designated as a Special Area of Conservation (SAC) for its salt marshes, sand dunes, and intertidal habitats and Special Protection Area (SPA) and Ramsar site for its populations of breeding birds and wintering waders and wildfowl, including barnacle geese and whooper swans, whose daily movements between roosts and feeding areas are also an iconic feature of the landscape.

Inland from the coast many of the series of lowland raised bogs make up the South Solway Mosses SAC which includes the most intact and extensive series of raised bogs in England, with their unique communities of peat-forming mosses, dwarf shrubs, cotton grasses and large heath butterflies. In the East is the River Eden and Tributaries SAC which extends far beyond the AONB with its populations of salmon, otters, lamprey and beds of water crowfoot.

Priority habitats within the AONB include coastal and floodplain grazing marsh, salt marsh, lowland raised bog and sand dunes as well as a number of other habitats. (Priority habitats within the AONB include 3014 ha of coastal and floodplain grazing marsh, 2694 ha of saltmarsh, 1136 ha of lowland raised bog and 260ha of sand dunes as well as 1871ha of undetermined habitats from a total of 9077ha). The area also supports nationally and regionally important populations of many species, such as natterjack toad, breeding and wintering waders, wintering wildfowl and coastal plants. However, others, such as farmland birds, are associated with the wider landscape.

Geodiversity

The post-glacial geology of the area is important with coastal features and terrestrial peats providing significant information about past climatic fluctuations and the palaeo-environmental record. There are two SSSIs within the AONB – Upper Solway Flats and Marshes and the River Eden and Tributaries – which are designated partly for their geological importance.

There are also four Regionally Important Geological/ Geomorphological Sites (RIGS) in the AONB: Beckfoot-submerged forest; Rockcliffe – sandstone outcrop; Swarthy Hill – drumlin and raised beach profile; Dubmill Point and Allonby – raised beach profiles.

⁴ AONB (Nature on the Map, <http://www.natureonthemap.org.uk/map.aspx?m=sssi>)

The Outer Solway Firth is dominated by sandy beaches and sand dunes, including both mobile and fixed dune types hosting a range of plant and animal communities. As well as their biodiversity these dunes provide the first line of coastal defence away from the coastal settlements and are an important recreational asset used for walking and golf.

The reefs and scour banks of the outer Solway are important in their own right but additionally provide a food resource for wintering waders, and they support a commercial mussel fishery in years of high yield.

Little of the surviving lowland raised mire is in favourable condition because of past degradation, however, a number of the larger mires are now being restored.

The farmland landscape of the AONB is also important for a suite of species in decline adapted to the agriculturally managed landscape such as grey partridge, tree sparrow and barn owl.

Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) include lists of habitats and species which are of principal importance for the conservation of biodiversity in England commonly referred to as 'Priority Habitats/Species'. The following habitats and species are considered to be characteristic of the Solway Coast AONB.

Habitats

The following S41 'Priority Habitats' are present within the AONB ⁴

- Coastal and Floodplain Grazing Marsh
- Coastal Sand Dunes (including both Dune Grassland and Dune Heath)
- Lowland Raised Bog (and Lowland Heathland)
- Coastal Vegetated Shingle
- Coastal Grassland (in sand dunes and maritime cliffs and slopes)
- Maritime Cliffs and Slope
- Reedbed
- Lowland Fen
- Saltmarsh
- Mudflats
- Saline Lagoons
- Honeycomb worm reefs (*Sabellaria alveolata*)
- Traditional Orchards
- Wet Woodland
- Purple Moor grass and Rush Pasture

The location and extent of Priority habitats within the AONB is available on the Natural England website but there is currently no information available on the condition of those habitats outside the designated SSSI series or whether they are recovering or declining or remaining stable.



Species

Within the AONB there are a number of S41 Priority species present. Of these there are eight species for which there is a Cumbria recovery plan (see Cumbria Biodiversity Action Plan):

- Song Thrush,
- Barn Owl,
- Long-eared Bat
- Natterer's Bat,
- Pipistrelle Bat,
- Marsh Fritillary,
- Natterjack Toad and
- Great-Crested Newt (also known as Warty Newt)

There are also six EU Habitats Directive 'Annex II' Species ⁵ – Common Porpoise, Common Seal, Grey Seal, Otter, Marsh Fritillary,



Great-Crested Newt; recorded in the AONB and a number of EU protected species ⁶ – Brown long-eared Bat, Common Porpoise, Natterers Bat, Pipistrelle Bat, Otter, Bottle-nosed Dolphin, Natterjack Toad and Great-Crested Newt. Fish species include Atlantic Salmon and Sea Lamprey.

There are also those plants and animals that are classified as invasive, non-native species. These fall into the opposite category whereby measures are being taken to try to eradicate them from the AONB. Himalayan Balsam along water-courses, and Japanese Rose within the sand dunes are two such plants. Wildlife disease has been detected within the AONB one of which, chytrid fungus, impacts on a priority species, the Natterjack toad.

In recent years there has been a shift from site based policy to secure biodiversity to one that prioritises a landscape-scale approach and which raises awareness of the important role biodiversity plays for society this is set out in the Natural Environment White Paper published in June 2011. Outcomes will be delivered through actions in four areas:

- a more integrated large-scale approach to conservation on land and at sea;
- putting people at the heart of biodiversity policy;
- reducing environmental pressures;
- improvement of knowledge.

In the short term the policy ambition focuses on 2020, which coincides with the end of this management plan. National outcomes are set out in "Biodiversity 2020: A strategy for England's wildlife and ecosystem services" and it is anticipated that protected landscapes will make a significant contribution to achieving its aims.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Policy shifts away from site-based approaches to landscape scale delivery of biodiversity that link core sites through a permeable wider landscape</p> <p>Current Biodiversity 2020 targets of 9% priority habitat under favourable/recovering condition with 50% favourable by 2020, and 90% priority habitat under favourable/recovering condition by 2020, and 17% of England under sustainable management is a huge driver for positive change as are WFD targets and the implementation of the Marine Coastal Act with the potential designation of Allonby Bay and the potential extension of the Solway Firth SPA may also be a driver for positive change</p>	<p>Through the SWLPS and beyond work with AONB partners to align ambitions and maximise opportunities arising from the suite of reserves that are such an important component of the AONB landscape.</p> <p>Influence targeting and uptake of AE schemes so that the wider landscape is well managed for biodiversity, with a particular emphasis on areas that link core sites.</p> <p>Implementation/enforcement of policy and legislation, e.g. WFD, Designated Sites protection, Biodiversity 2020 prioritisation to secure key outcomes</p> <p>Extension of the Solway Firth SPA and designation of Allonby Bay as a Marine Conservation Zone will further increase and protect biodiversity</p>
<p>Characteristic habitats and some species are in decline or may be lost because of a range of factors including, changes in farming practices, climate change influences, poor management techniques, development pressures from new planning regulations on green and brownfield sites</p>	<p>Implementing agri-environment schemes that support sympathetic management across the habitats that underpin AONB character.</p> <p>Influence targeting and uptake of AE schemes</p> <p>Implementation/enforcement of policy and legislation, e.g. WFD, Designated Sites protection, Biodiversity 2020 prioritisation</p>

⁵ "Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) whose conservation requires the designation of special areas of conservation."

⁶ The Conservation Regulations (1994) are the UK law that enacts the EU Habitats and Species Directive Annex 4 and 5, which are respectively lists of "Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) in need of strict protection. They are protected from killing, disturbance or the destruction of them or their habitat." and "Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) whose taking in the wild and exploitation may be subject to management measures. Member states must ensure that taking wild specimens and their exploitation is compatible with the species being maintained in favourable conservation status."



AONB driven views on planning and development control
 Ensuring appropriate SMP implementation
 Increasing awareness of sensitivities especially among recreational users
 Develop programmes targeting Invasive Non-Native Species (INNS)
 Securing actions such as retaining grazing systems that provide the conditions for key species and allow the natural development of the marshes and managing recreational use, will also be important in maintaining the value of the marshes into the future.
 Key actions to restore raised mire sites will include the restoration of site hydrology which generally involves the removal of recently established woodland and scrub and work to block drains on the moss surface. On some sites species reintroductions may be appropriate for specialist species to facilitate recolonisation. Generally increasing awareness of the valuable role these mosses perform through appropriate access provision would also be desirable.
 It will be important to continue to allow dynamic coastal processes, secure appropriate grazing regimes and manage recreational access to the dunes if they are to continue to fulfil this varied role as biodiversity asset, recreational asset and flood defence.

There has been a drift to site based approaches which are not effective in the long term to meet species needs. So there is the need for better site linkage and more permeable fabric of the landscape

Develop landscape scale initiatives, e.g. Nature Improvement Areas and Landscape Partnership activity, such as the Solway Wetlands Landscape Partnership Scheme, to create a wider scale of biodiversity improvement.

This will move focus away from site based solutions toward site linkages and wildlife corridors.

There is still a limited knowledge about the overall biodiversity resource of the AONB because of the scale of the task and lack of recorders

Improve biological recording and use of record centre (Tullie House) for all species including non-native species

Non-native species are appearing in the AONB and not being targeted or eradicated

Improve awareness by identification training and leafletting.
 Raising awareness on marine non-native species across the whole Solway is being undertaken by the Solway Firth Partnership supported by the AONB Partnership in England

Sabellaria reefs are at risk from disturbance and trampling by mussel and crab fishers though for many years there hasn't been any commercial mussel stock available due to size restrictions. The reefs however are adapted to natural cyclical change in the dynamic coastal system.

Raising awareness of this sensitivity may be appropriate through the Marine Protected Areas (MPAs). The Allonby Bay Marine Conservation Zone (MCZ) would be appropriate for this approach and is currently undergoing consultation as a Tranche 2 site

Objective 8: To ensure the conservation, enhancement, expansion and enhanced connectivity of habitats, creating resilient ecological networks across the Solway Coast AONB and beyond with a focus on 2020 priorities

Objective 9: To protect the establishment and spread of invasive non-native species (INNS) and plant diseases, and where appropriate eradicate populations

Objective 10: To ensure conservation and understanding of geodiversity and its importance in the landscape and biodiversity of the AONB

Objective 11: To ensure the conservation and protection of Marine Protected Areas and coastal dunes and marshes

2.1.7 Water Environment

The Solway Coast AONB landscape is essentially a heavily modified and fragmented lowland wetland. Over the past 1000 years, since the establishment of a Cistercian Abbey and its ancillary trades and land uses, the area has been drained to provide agricultural land. Until recently the network of drainage channels, rivers and ditches have been maintained by the Environment Agency through the understanding of the complex hydrology created through piecemeal drainage schemes. However, since the publication of the Catchment Flood Management Plan (CFMP) in 2005, the EA has reduced the extent of its maintenance activities in rural areas.

Within the Waver and Wampool river catchments and adjoining smaller waterways both surface water and ground water aquifers are used by agriculture and amenity users. Around 504ha of farmland in the Waver-Wampool catchment is pump drained at present by the Environment Agency, some of which is in the AONB, but the formation of a new Internal Drainage Board (IDB) by 2016 is proposed. There are currently 4 pumping stations the EA wants to actively withdraw from any involvement with along with the cessation of ditch clearing and dredging for solely agricultural benefit. Future work of this nature undertaken by the EA will be more tightly prioritised to protect property and other infrastructure from flooding both tidal and riverine.

Climate change is likely to be a major driver of change in the Solway Coast AONB, its low lying character and network of coastal and wetland sites are likely to be especially vulnerable to change.(See NE CC Risk Model: <http://naturalengland.org.uk/ourwork/climateandenergy/climatechange/vulnerability/nationalvulnerabilityassessments.aspx>)

Environmental policy drivers such as Biodiversity 2020, the Water Framework Directive and Natura 2000 targets are likely to see the continuation of a programme of restoration



of semi-natural habitats, particularly wetland and coastal habitats, of which there is a large coverage in the AONB.

The combinations of low lying geography, high average rainfall, areas of free draining soils and under surface drift deposits, some of which are also free draining (sands and gravels), should provide high water tables in many areas.

National measures implemented to improve water quality in recent years have included the upgrading of waste water treatment facilities discharging into both the coastal waters and the river systems that feed the Solway. The ecological status of river waters and estuaries is generally moderate or poor.

The AONB includes three designated bathing water beaches (Silloth West Beach, Allonby Bay and Crosscanonby). In recent years two of these have passed water quality standards however the third has experienced some failures which are attributable to nutrient loads following storm events. From 2015 bathing waters standards will be increased in line with European policy which may affect categorisation of AONB beaches.

Marine litter is a problem with the Solway's position at the head of the Irish Sea meaning that litter can be carried up the Cumbrian coast as well as down the Eden and other rivers.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Climate change projections suggest that the AONB is likely to see increases in both summer and winter temperatures, an increase in winter rainfall but a decrease in summer rainfall, and an increase in the number and intensity of storm events. Rainfall is likely to be focused into fewer events of higher intensity. Recent years have seen increased instances of flooding in the river systems.</p> <p>WFD policy is a driver for change</p> 	<p>Global changes influencing local climates cannot be directly influenced by local measures. However, opportunities exist for local mitigation or adaptation to impacts. Opportunities arise through changes in land management such as 'wetting-up' and other schemes such as reversion, restoration and re-wilding.</p> <p>Mechanisms include AE schemes, WFD priorities and new policy/programmes eg Carbon credits. These will help by managing flows and supporting water quality targets.</p> <p>Securing sympathetic management of the diverse array of high quality wetlands both inside and outside designated sites including rivers, valley mires, lowland raised bogs, coastal and floodplain grazing marsh, reedbeds and fens to reinforce the AONB character; and support the provision of ecosystem service benefits</p>
<p>Inland wetlands are likely to experience lower summer water levels and consequent decreases in water quality, increases in CO2 emissions from dried out peat, increased risk of flooding events in low lying areas and a risk of saline intrusion into coastal fresh water wetlands</p>	<p>Global changes influencing local climates cannot be directly influenced by local measures. However, opportunities arise through changes in land management such as 'wetting-up' and other schemes such as reversion, restoration and re-wilding.</p>

	<p>Locally measures such as the restoration of lowland raised bogs can reduce water loss at periods of high rainfall, with consequent benefits for surrounding agricultural land.</p> <p>Restoring and enhancing the suite of wetland SSSIs, and SACs, and their component habitats present in the AONB.</p>
<p>Flood management policy prioritising resources to residential property and key infrastructure is likely to draw government funding away from agricultural areas, which may have particular implications in what is a predominantly rural, low lying and flat landscape with large areas of farmland close to sea level.</p>	<p>Setting up of IDB/Water Level management Board by Farmers and landowners would oversee and support management – but costs would still have to be met so there is still likely to be a significant agricultural impact.</p> <p>Funding could be found through a local tax (enhanced community charge contributions) attributed to households within IDB catchments.</p>
<p>Because of water quality failures the catchments of the Rivers Waver and Wampool are Priority Catchments for Catchment Sensitive Farming funding initiatives. Soil erosion and diffuse pollution are identified as issues within these catchments. Soil erosion can carry pollutants such as inorganic fertilizers and slurry as well as sediment into watercourses</p> 	<p>Developing new wetlands that trap sediments, manage agricultural flood risk and help support wetland species through CSF funding, Nitrate sensitive zone regulations and Code of Good Agricultural Practise linked to the Single Farm Payment</p> <p>Pressure on land to receive agricultural waste such as slurry when ground conditions are not suitable can be reduced through measures such as the timing of operations and securing improvements in farm infrastructure. Supporting and guiding programmes such as CSF can help address these issues.</p> <p>While generally beneficial in-field measures would be likely to result in short-term decreases in some services such as food provision, however, impacts in the longer term would likely be neutral or positive.</p> <p>Covering slurry areas to reduce high nutrient runoff entering water courses, covering yards (to prevent rain water increasing the volume of material to be stored), increasing slurry storage capacity, and better management of point source points of pollution such as around gateways. Regular soil sampling to promote a better understanding of soil nutrient status and potential is also recommended.</p> <p>Ensuring that ditches and other watercourses have buffers of vegetation, including trees where appropriate, and riparian habitats along their margins to support riparian species and enable species movement, trap sediment and run-off in areas of high erosion risk, and ensure that stock access does not result in sediment entering watercourses</p>
<p>Ensuring marine bathing water is monitored and marine litter is controlled</p> 	<p>The EU Water Framework Directive is a driver to protect water bodies including bathing waters from pollution and seeks to secure good ecological condition as a driver for change/solutions.</p> <p>Seek opportunities to reduce impacts on bathing waters by reducing diffuse pollution entering watercourses and monitor marine litter</p>

Objective 12: To ensure freshwater watercourses are appropriately managed and their quality enhanced,

Objective 13: To secure sustainable land management that regulates flooding

Objective 14: To make a significant contribution to the delivery of the Water Framework Directive by improving water quality and water body status in and around the AONB and Coast

2.1.8 Historic Environment (and Culture)

A Historic Environment Assessment does not exist for any part of the AONB leaving only the Ancient Monuments Register (AMR) to provide a list of significant archaeological and historic sites. However, from a landscape point of view it is the pattern of land use, the periods and the changes created by the hand of man. This is underpinned by culture, language, dialect and tradition.

Shaped by more than 5000 years of human activity, the Solway Coast AONB contains a wealth of archaeological sites and historic buildings set within a distinctive historic landscape. The conservation of these is essential to the well-being of the local settlement character and the sense of history of the area.

There are many historic assets and influences in this landscape, most notable being the features associated with the Frontiers of the Roman Empire World Heritage Site including Hadrian's Wall itself as well as a series of forts, mile fortlets and earthworks associated with the monument. More recently, during the Medieval Period, the landscape was heavily influenced by monastic activity and its position within the 'debatable lands' - an administrative no-man's land - that once separated England from Scotland and was dominated by the 'Border Reivers'. This has left a legacy of abbey ruins, fortified farmsteads and a nucleated rural settlement pattern as well as the field patterns and areas of ridge and furrow that are a key feature of the Mediaeval rural landscape. The most recent features of the historical landscape are again those of conflict and are associated with the Second World War comprising a suite of airfields now largely adapted to light industrial uses.

A mixture of materials have traditionally been used as building material including red sandstone; limestone; cobbles; local clay; and Welsh and Cumbrian slate, reflecting the varied history of the area, local skills and particular trade links. Of particular local note are the cruck roofed and clay-walled buildings, known as 'clay dabbins' which are to be found on the Solway Plain.



Non-scheduled features, including ponds, traditional field boundaries (kested hedges), salt pans, 'clay dabbins' and traditional farm buildings are all important and distinctive features of the historic landscape but which can be threatened by neglect, under-management or lack of consistent recording. A sense of how the land was sequentially adapted for agriculture over time is evident in the patterns of drainage ditches, hedgerows and stone-faced hedgebanks (kests).

Oral and cultural traditions also provide a sense of history. In addition to place names, many of which are Viking and French in origin, the persistence of traditional fisheries maintains a direct cultural link to the area's past. Of particular note is the tradition of 'haaf netting' for salmon in the river mouths of the Solway Firth. This technique has a Viking origin and retains Viking technology, language and equipment.

There is also a shared nomenclature between many areas on the north and south sides of the Solway reflecting a common heritage despite movement of the national boundary over time, e.g. the name 'Kirk' being in many village and town names.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>There are seven Conservation Areas (built environment) and one listed building within the AONB. There are a number of sites that are designated as 'Heritage at Risk'.</p> 	<p>Conserve and enhance the important sites and features linked to cultural heritage and their surrounding cultural landscape with particular reference to Hadrian's Wall and Hadrian's Wall Buffer World Heritage Sites and the historic Holme Cultram Abbey, founded in 1150, which is just outside the AONB boundary. Much of the framework of the present landscape was formed in the medieval period and the archaeology of the Abbey and its related sites are most important in understanding the past lives of the Cistercian monks.</p>
<p>In rural areas most farm buildings were considered intact in 2003 (CQC) though some had been converted. Since that time Agri-environment funding has seen many remaining under active management and some restored. None the less there remains a continued loss of some building types, in particular clay dabbin buildings which require specialist building techniques. These have declined greatly in recent years as other building</p>	<p>Promoting awareness of the surviving historic landscape including both the built features and their associated landscapes, improving access to sites and linking up cultural heritage sites to natural heritage sites and the rights of way network including long distance paths and cycle ways.</p>

<p>materials have become readily available through transport improvements. Knowledge of how to maintain clay walled buildings has declined, a good example is the importance of using lime-wash mortar rather than concrete, as the latter corrodes the clay.</p> <p>Lack of quality access to sites of historical interest and their interpretation and potential damage due to new developments which might affect important cultural sites</p>	<p>Seeking opportunities to maintain local vernacular styles in new developments and seeking to ensure that the layout of new developments reflects local settlement structure.</p> <p>Promote increased awareness of the Roman and Cistercian Solway through improved interpretation and archaeology research</p> <p>To work with site owners to provide agreed access and infrastructure (signage, car parks etc.) to reveal their existence to the public.</p>
<p>Along the outer Solway coast some sites are being lost to coastal erosion, for example the Roman cavalry cemetery at Beckfoot</p>	<p>Conserve and maintain the 17thc Saltpans and Roman remains in the AONB in collaboration with Ecosal UK and English Heritage. Where sites cannot be protected from coastal erosion then prioritise their recording and archiving as a last resort if physical conservation measures cannot be achieved.</p>
<p>Generic land management practises and the loss of local skills are a threat to the long-term maintenance of the historic assets of the area, for example clay dabbin building skills are almost lost while much field boundary maintenance no longer follows traditional management practise.</p> 	<p>Protecting and restoring traditional buildings, and developing the skills to restore them using traditional techniques, using appropriate materials and techniques including cobbles, clay dabbin and local sandstone.</p> <p>Protecting and restoring boundary features such as hedges, mature trees, ditches, sandstone gate stoops and riparian corridors. Carrying out works such as earth-bank 'kest' restoration, and gapping up and protecting hedges, including management in the Cumberland Hedgelaying Style.</p>
<p>Poorly documented sites are under threat from loss through inappropriate management, for example some roman sites are managed as part of arable systems and other sites such as some mile forts, which should be present, are undocumented.</p>	<p>Conserving archaeological features through securing sympathetic land management practices – for example, through reversion of arable land to grassland where ploughing threatens the integrity of below-ground archaeology.</p> <p>Identifying the locations of sites that should be present but are undocumented.</p>
<p>Maintaining a strong sense of history throughout the landscape will require raising awareness both of key assets and their value and securing increased capacity to deliver appropriate management into the future.</p> 	<p>Improving interpretation of historic sites through both onsite information and new technologies such as web based resources and mobile technologies.</p> <p>Provide improved access, interpretation and educational facilities to increase visitor experience of, understanding of, and enjoyment of the AONBs natural and historic heritage, and engage the local community in its future management</p> <p>Continue to promote Haaf Netting as a traditional means of fishing in the Solway</p> <p>Promotion of events celebrating traditional land management skills e.g. North Cumberland Style Hedge laying training</p>

Objective 15: To ensure the effective conservation and management of the Solway Coast AONB historic environment, including historic buildings, archaeological sites, heritage landscapes and heritage fisheries

Objective 16: To ensure and increase professional and public knowledge and understanding of the AONB's historic environment

2.1.9 Development and Planning

Villages and individual buildings and farmsteads and their settings form a vital element of the character of the Solway Coast AONB, particularly because of the traditional materials used in the vernacular buildings on the Solway. The planning and design of development, both within the AONB and around it, is of major importance in maintaining the landscape and scenic beauty of the area. Decision making is the responsibility of the local planning authorities within the context of the National Planning Policy Framework, Local Plans, and Neighbourhood Plans.



Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>There is a need for affordable housing within the AONB and it will be very important to ensure that in meeting these needs, detrimental impacts upon the character of individual settlements and the overall landscape character of the AONB of any new housing development are minimised.</p>	<p>Affordable housing programmes developed by the Local Authorities and social housing providers.</p> <p>All new development needs to consider local settlement character including housing layout, scale, design, vernacular tradition and fabrics</p>
<p>Development of infill plots for residential housing can lead to loss of important semi-natural habitat and have an urbanising effect on villages, removing the local character in its setting.</p>	<p>Position Statements and design guidance provided by the Local Authorities in conjunction with the AONB, Parish Councils and the wishes of local communities through Village and Parish Plans.</p> <p>All new development needs to consider local settlement character including housing layout, scale, design, vernacular tradition and materials</p>
<p>Conversion of buildings continues within the AONB and inappropriate repair or insensitive conversion can result in features associated with the building's original use being lost. Addition of features and styles which detract from their setting, all contribute to a gradual erosion of settlement character</p>	<p>Through National Planning Policies, Local Plans and neighbourhood planning control will be regulated to the setting of the AONB</p> <p>All new development needs to consider local settlement character including housing layout, scale, design, vernacular tradition and materials</p>
<p>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. This also may lead to adverse impacts on wildlife such as bats. 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 needs to be avoided.</p>	<p>Position Statements and design guidance provided by the Local Authorities in conjunction with the AONB, Parish Councils and local communities will be adopted to mitigate the perceived gradual erosion of the rural 'feel' of the area.</p> <p>Minimising light and noise pollution from development and recreation.</p> <p>Engagement with the Highways Departments, Local Authorities and Parish Councils on road infrastructure improvement and signage within the AONB</p>
<p>Pressure for commercial scale wind energy development, both terrestrial and offshore, remains strong in the area surrounding the AONB, also farm-scale commercial wind energy developments are part of the cumulative effect. Development in the setting of the AONB can be just as damaging to the character of the area as development within the boundary. Turbines can be visually intrusive, particularly if seen against the skyline, and have the potential to significantly affect views out from the AONB.</p>	<p>Through National Planning Policies, Local Plans and neighbourhood planning control will be regulated to the setting of the AONB</p> <p>Position Statements and design guidance provided by the Local Authorities in conjunction with the AONB, Parish Councils and local communities</p> <p>Continued assessment of planning applications within the AONB, and other large scale developments outside the boundary but which may affect the setting of the AONB and impacts on the landscape character of the AONB, whilst not discouraging small scale renewable energy schemes in appropriate locations</p>

<p>The potential for the development of bioenergy (biofuels derived from agriculture e.g.; miscanthus, and other biomass sources such as short-rotation coppice) within the AONB is limited but could lead to large-scale agricultural operations taking over some permanent pastureland. This would have major landscape and agricultural impacts unless sensitively managed.</p>	<p>Through National Planning Policies, Local Plans and neighbourhood planning control will be regulated to the setting of the AONB.</p> <p>Continued assessment of planning applications within the AONB, and other large scale developments outside the boundary but which may affect the setting of the AONB and impacts on the landscape character of the AONB, whilst not discouraging small scale renewable energy schemes in appropriate locations</p>
<p>Proposals for a Solway Barrage or other tidal energy generator would have significant impact on the AONB in terms of both landscape and the natural environment.</p> 	<p>Through National Planning Policies, Local Plans and neighbourhood planning control will be regulated to the setting of the AONB</p> <p>Position Statements and design guidance provided by the Local Authorities in conjunction with the AONB, Parish Councils and local communities</p> <p>Continued assessment of planning applications within the AONB, and other large scale developments outside the boundary but which may affect the setting of the AONB and impacts on the landscape character of the AONB, whilst not discouraging small scale renewable energy schemes in appropriate locations</p> <p>Continue to engage with the Solway Energy Gateway Scheme to monitor and help guide proposals for a Solway Barrage</p>
<p>As part of the North West Coast Connections Project 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.</p> <p>There is currently a need to upgrade and develop the existing electricity transmission network to provide these connections. The route of this network may pass through, or pass by the boundary of the AONB in certain locations but there remain significant concerns regarding potential impact on the setting of the AONB and views out from the area.</p> 	<p>Continue to advise and work with National Grid to create the ultimate solution to the new high voltage power line linking Harker (Carlisle) to West Cumbria</p> <p>Position Statements and design guidance provided by the Local Authorities in conjunction with the AONB, Parish Councils and local communities</p> <p>Minimising light and noise pollution from development and recreation</p> <p>Engagement with the Highways Departments, Local Authorities and Parish Councils on road infrastructure improvement and signage within the AONB</p> <p>Continued assessment of planning applications within the AONB, and other large scale developments outside the boundary but which may affect the setting of the AONB and impacts on the landscape character of the AONB, whilst not discouraging small scale renewable energy schemes in appropriate locations</p> <p>Continue work with E-NW on Undergrounding for Visual Amenity project whilst assessing the impact of designated sites</p>
<p>The development of high-speed broadband connections and undergrounding for Visual Amenity could potentially disturb designated areas</p>	<p>Through National Planning Policies, Local Plans, neighbourhood planning control will be regulated to the setting of the AONB</p> <p>Minimising light and noise pollution from development and recreation</p>

Objective 17: To ensure the special qualities of the AONB and its setting are fully respected in all Local Plan (National Plans) documents and decision-making processes have regard to the Statutory Management Plan.

Objective 18: To ensure that development in the AONB and its setting, is of a nature, scale, location and design so that it meets community need without compromising the special qualities of the Solway Coast AONB

2: UNDERSTANDING AND ENJOYMENT

2.2.1 Access & Recreation

The Solway Coast AONB is ideal for outdoor recreation and enjoyment, particularly walking, cycling, wildlife-watching and horse riding. It features a range of different landscape types, each offering their own opportunities for exploring and enjoying, such as the sand dunes and coast, the lowland raised mires, salt marshes and the important World Heritage Site of Hadrian's Wall and associated Mileforts and traditional villages.

There is an extensive network of over 86,418 m of public rights of way (PRoW) within the AONB including footpaths, bridleways, National Trails (14,193m), Countryside Stewardship Linear Access (7224m), and Open Access which amounts to 19% of the area of the AONB, with spreading room associated with the England Coast Path increasing the available area.

The National Cycle Network Route 72 passes through the AONB (the Hadrian's Wall Cycleway) and part of this (and the Cumbria Cycle Way) between Silloth and Maryport has been specifically re-routed off-road due to the danger of the traffic on the B5300.

Four long distance footpaths pass through the AONB: the Cumbria Coastal Way, the Hadrian's Wall Path National Trail the England Coast Path and the Allerdale Ramble. There

are also 11.4km of Easy Access walks.

Natural England has completed improved public access along a section of the England Coast Path between Allonby and Whitehaven. The next planning phase is now underway to link the rest of the AONB coast from Allonby to Floriston, and beyond the AONB to Gretna on the Scottish border. There have also been area-wide access improvements (via the new 'coastal margin') that sit alongside the approved England Coast Path route such as secured access to beaches and dunes, etc.

A range of information using multiple media such as books, leaflets, films, web, etc. on walking, wildlife watching, cycling in the AONB is available to help people discover different parts of the AONB, including many of the lesser-known areas.

Retaining this high quality access network and ensuring it is maintained and promoted will ensure that residents and visitors can continue to access and enjoy the area to its full potential.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Access, via Rights of Way, should be maintained and available for use by people with a wide range of mobilities. There may be much less input from Cumbria County Council on upkeep of PRoW and reduced funding in countryside management can impact on accessibility standards.</p>	<p>The management and improvement of the rights of way network by local authorities and others with the assistance of volunteer activity, with coordination of activity encouraged by the AONB partnership</p> <p>Looped walks also support wider access to the AONB than just linear routes for the benefit of visitors and residents and joining up diverse environmental assets</p>
<p>There is often some conflict between recreational users and private landowners where dogs may interfere with grazing sheep and cattle, or on sensitive sites which may harm wildlife and high biodiversity value</p> <p>Generally there is an increase in recreational access to the coast in various forms e.g. on foot, with dogs, and through flying gyrocopters, this can cause disturbance for both wildlife and other user groups. Need to ensure increases in recreational access are managed so they do not compromise key assets.</p>	<p>Secure provision for appropriate access and promote best practise.</p> <p>Access to particular areas, such as agricultural grazing land and sensitive wildlife sites should be restricted at certain times to avoid disturbance to wildlife or breeding animals.</p>
<p>The coastal area of the AONB can be very dangerous with the strong currents and fast moving tides of the Solway. Increased coastal access under the Marine and Coastal Act is likely to lead to additional visitor numbers using this area</p> <p>The salt marsh creeks and erosion here can also be very dangerous to visitors not familiar with these areas</p>	<p>Continued work with NE and Local Authorities to develop and deliver well informed coastal access</p> <p>Information regarding the safe access on the coast needs to be widely available and promoted. The development of the coastal access trail will bring significant social and economic benefits to the coastal communities and visitors to west Cumbria and provide a quality recreational resource.</p>

The impact of increased walkers and cyclists along the Hadrian's Wall route adds extra impact on the rural roads with the dangers associated with motor traffic.	Signage and speed limits need to be placed on the rural and coastal road to improve safety in partnership with the Highways Authority.
Access onto the peatlands can be difficult and dangerous to visitors who do not know the areas and the nature of the peatlands	Encouraging access to and improving the quality of and enjoyment of the recreational experience for all should be a priority, including improved, but site appropriate and asset sensitive, access to the peatlands through the legacy of the Solway Wetlands Landscape Partnership Safe access can be achieved through the deployment of high quality boardwalks and these will continue to be implemented on the peatlands of the AONB.
The AONB attracts relatively low numbers of under-represented, hard to reach groups. In particular people from inner-city areas, ethnic minority groups, and young and less mobile people are infrequent users of the rural environment.	Encourage the promotion of all forms of access via leaflets, interpretation signs, mobile device 'apps', and any other media to increase the awareness of the vast opportunities of safe 'Access for All' in the AONB
The low level of public transport provision inhibits visiting much of the AONB for recreation for those without access to a car.	Promotion of access via public transport where possible and encourage the provision of more regular rural services
Over-use of some of the more popular countryside and recreational sites, combined with reduced funding for site management, leads to degradation and erosion of key areas, including important sites for biodiversity.	Encourage the promotion of all forms of access via leaflets, interpretation signs, mobile device 'apps', and any other media to increase the awareness of the vast opportunities of safe 'Access for All' in the AONB

Objective 19: To ensure that a wide range of opportunities exist for all to gain physical access with sound infrastructure, and information about the AONB to understand its special qualities

Objective 20: To maintain, improve and promote access and quiet recreational opportunities in a sustainable way for a diverse group of people

Objective 21: To encourage and promote understanding, well informed access and enjoyment of the coast and AONB

2.2.2 Tourism



Tourism is a key component of the local economy and a shared approach to the development and management of sustainable tourism in the AONB is needed, which takes into account the needs of the environment, local residents, businesses and visitors. Historically tourism within the AONB has been concentrated along the coast and, particularly, around Silloth and Allonby for traditional 'seaside' holidays.

Becoming more popular are the quiet recreational activities such as, walking, cycling, bird watching, wildlife, fishing and windsurfing. Heritage tourism and cultural tourism are also important, with more visits to the Hadrian's World Heritage Site, Hadrian's Wall and the related cycle route and National Trail

The tourism offer within the AONB is based on the area's special qualities and this relies on good quality information being available and how people can experience them and support their conservation.

There are nine caravan/holiday parks within the AONB predominantly located along the south coast, and two hotels. Further accommodation is available in the form of Bed and Breakfast, guest-houses, self catering accommodation and camp sites.

There are a further six caravan/ holiday parks and three hotels in and around Silloth, which although not within the AONB boundary, provide bases for tourists visiting the AONB. There is one Tourist Information Centre (TIC) within the Solway Coast Discovery Centre at Silloth, managed by Allerdale Borough Council with further centres at Maryport and Carlisle.

Allerdale Borough Council in its Tourism Strategy ⁷ identifies tourism as a vital sector in the local economy and a large employer in the borough. Tourism is seen as an important component of Allerdale's economy. The report also confirms that Allerdale attracts a predominantly day visitor market, as well as shorter days and lower spend, the AONB also attracts a high proportion of day visitors

Tourism activity in Cumbria (and the AONB) and the consequent tourism revenue is subject to seasonal variations, July to September being the busiest part of the year. Revenue created by tourism activity is a key measure of a destination's performance. In 2012, visitors to Cumbria generated 50.6 million tourist days (Cumbria STEAM Report⁸).

⁷ A Strategy for Tourism 2005-2015, Allerdale Borough Council, August 2005.

⁸ Cumbria STEAM (Scarborough tourism Economic Activity Monitor) Report (2012), Research Dept., Cumbria Tourism <http://www.cumbriatourism.org/research/surveys-data.aspx>

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Survey data regarding visitor make-up for the AONB is not currently available but it is thought that day visitors come chiefly from Carlisle, North Cumbria, Southern Scotland and from the northern Lake District; staying visitors are dominated by traditional seaside holidays based at the coastal chalet and caravan parks.</p> 	<p>Development of a single destination management plan for the AONB by Destination Management Organisations</p> <p>Working with businesses to improve their environmental and 'Green' credentials will be important as can be visitor payback schemes to fund environmental projects</p> <p>Promoting locally produced food and other products will help to reinforce the local distinctiveness and add value to the local economy (saltmarsh fed beef, shrimps, fish).</p> <p>Work with the LEP, Cumbria Tourism and other partners to implement a sustainable visitor strategy for the AONB.</p>
<p>Although visitor numbers recorded by both Allerdale Borough Council and Carlisle City Council (and across Cumbria) have shown a recent downward trend the number of visitors to the AONB specifically is rising mainly as a result of the designation of Hadrian's Wall as a World Heritage Site and the development of the Hadrian's Wall Cycleway and Trail.</p>	<p>Close working relationships need to be developed and maintained between tourism businesses, the AONB partnership and tourism support organisations (Cumbria ACT, Cumbria Tourism, Allerdale Borough Council (ABC).</p> <p>Work with the Local Enterprise Partnership (LEP), Cumbria Tourism and other partners to implement a sustainable visitor strategy for the AONB.</p>
<p>There is limited but essential collaborative working with Cumbria Tourism for the Solway Coast in general but also for the AONB.</p> 	<p>Development of a single destination management plan for the AONB by Destination Management Organisations</p> <p>Close working relationships need to be developed and maintained between tourism businesses, the AONB partnership and tourism support organisations (Cumbria ACT, Cumbria Tourism, ABC).</p> <p>Promoting locally produced food and other products will help to reinforce the local distinctiveness and add value to the local economy (saltmarsh fed beef, shrimps, fish).</p> <p>Work with the LEP, Cumbria Tourism and other partners to implement a sustainable visitor strategy for the AONB.</p>
<p>There is a heavy reliance among visitors on the use of private cars.</p> <p>Facilities and infrastructure are required such as adequate car parking, cycle hire, tramper hire, litter bins and accessing the AONB via public transport needs to be explored</p> 	<p>Marketing and promotion of the area and its special qualities and accessibility, both locally and more widely is important and close working is needed with organisations responsible for carrying out pre-arrival marketing.</p> <p>Work with the LEP, Cumbria Tourism and other partners to implement a sustainable visitor strategy for the AONB.</p> <p>Promote the Solway Wetlands Landscape Partnership Scheme and its legacy, as a destination for important peatlands and wildlife</p> <p>Develop circular day routes to increase visit lengths linking to visitor infrastructure such as cafes.</p>
<p>Within Cumbria there is insufficient, specific, visitor-focused information, in a variety of formats, about the AONB, its sense of place and distinctive features</p>	<p>Development of a single destination management plan for the AONB by Destination Management Organisations</p> <p>Close working relationships need to be developed and</p>



Increased recreational pressure, infrastructure not in keeping with landscape context and (visual, noise, litter) pollution risk



There is a lack of up-to-date and accurate research data to improve understanding of visitor profiles, patterns and tourism trends in the AONB in order to inform future plans/actions



maintained between tourism businesses, the AONB partnership and tourism support organisations (Cumbria ACT, Cumbria Tourism, ABC).

An important element of promoting the AONB as a nature and wildlife destination will be to help businesses understand and promote the nature of the area (and to understand what businesses need from the wildlife asset as a two way process).

Through the NAAONB learn about and build on best practise promotion of AONB's

Develop cross interest group 'sense of place' type information packages (physical or electronic) that link nature, history, culture and landscape into one.

Working with businesses to improve their environmental and 'Green' credentials will be important as can be visitor payback schemes to fund environmental projects

Marketing and promotion of the area and its special qualities and accessibility, both locally and more widely is important and close working is needed with organisations responsible for carrying out pre-arrival marketing.

Locally produced food and other products will help to reinforce the local distinctiveness and add value to the local economy (saltmarsh fed beef, shrimps, fish).

Work with the LEP, Cumbria Tourism and other partners to implement a sustainable visitor strategy for the AONB.

Promote the Solway Wetlands Landscape Partnership Scheme as a destination for important peatlands and wildlife

Make use of M6/mainline rail to Carlisle as a source of visitors to the Eastern part of the AONB to tap in to potential economic market and audiences

Develop the offer to visitors transiting the area on long distance trails eg. Hadrian's Wall, England Coast Path

Development of a single destination management plan for the AONB by Destination Management Organisations

Marketing and promotion of the area and its special qualities and accessibility, both locally and more widely is important and close working is needed with organisations responsible for carrying out pre-arrival marketing.

Work with the LEP, Cumbria Tourism and other partners to implement a sustainable visitor strategy for the AONB.

The production of an AONB visitor survey as part of a wider project

Objective 22: To ensure the developing tourism industry and associated economy is environmentally sustainable, is based on, and actively supports, the special qualities of the Solway Coast AONB and brings benefits to the community and has a consistent recognisable brand

Objective 23: To ensure an increase in heritage management, tourism, hospitality and outdoor education to help secure the future of the area

Objective 24: To monitor and manage recreational pressure to avoid harmful impacts on the special qualities of the AONB



2.3: SOCIAL AND ECONOMIC WELL-BEING

2.3.1 EMPLOYMENT AND BUSINESS

In the AONB, farming and tourism are both key generators of income for the local economy and key employers. The total number of people employed in farming has fallen significantly since the 1990s.

Tourism is important to the local economy. AONB specific data is not available but some figures give a picture of the importance of tourism to employment within the local area. Direct employment in tourism includes accommodation, food and drink, recreation, shopping and transport but indirect employment is also important. The accommodation sector is the primary direct tourism employer in Cumbria but the food and drink sector is also important in supporting tourism employment.

Ward profiles based on the 2011 Census indicate that a significant number of people within the AONB work from home ranging from around 7.2% of the working population in Burgh to 10.7% in Holme. This compares with 4.5% for Cumbria as a whole.

The level of unemployment in the AONB has remained fairly stable over recent years.

There are around 200 businesses operating in the AONB. Just over half (53%) of these are related to agriculture, forestry and fishing. Construction accounts for 11% and tourism a further 10% of the number of businesses. With the exception of agriculture, forestry and fishing (47% of the AONB working population) and construction (10% of the AONB working population) there are no published numbers of people employed in the AONB by industry. 81% of households are owned and 8.5% are rented. within the AONB, with rented accommodation being proportionately higher in the south. Owner occupation is higher in the AONB than in Cumbria (71%) but rented is much lower (27%).

House prices range considerably across the AONB, but in 2013-14 house prices have fallen.

Figures show that the majority of the resident population in the AONB cannot afford to buy a house. Caravan sites in the AONB can also effectively be second homes and have a positive economic importance in the area.



Issues and Forces for Change

The Government's Rural Economy Growth Review in 2011 confirmed the large contribution made by rural areas to the national economy. In the subsequent Rural Statement 2012, the need for rural businesses to make a sustainable contribution to national economic growth was highlighted.



Possible Mechanisms to Manage Impacts

Working in partnership with land owners, land managers and local businesses is needed to support and encourage sustainable growth in the rural economy during the life of this Management Plan.

Promote locally produced food and other products to help reinforce local distinctiveness and add value to the local economy, developing a local products initiative (see tourism) to support local product development. Also support local complete supply chains from production to market; and generate value added products that sustain a sense of place

Through the NAAONBs influence the next phases of the EU and UK government investment (including RDPE, LEP, Natural Environment White Paper Initiatives) to ensure that investment is targeted at supporting land managers in the AONB.

<p>Modern telecommunications, including access to high-speed broadband and good mobile phone coverage are vitally important to a successful rural economy and the development of local businesses.</p>	<p>Modern telecommunications, including access to high-speed broadband, are vitally important to a successful rural economy throughout the AONB and the delivery should be supported</p>
<p>Limited availability in rural areas like the AONB of other services such as locally-based job centres and training schemes, business advice, affordable start-up premises and affordable regular public transport can restrict employment opportunities, restrict economic growth and lead to progressive loss of young people from the area.</p> 	<p>Work with and support local businesses and facilitate projects that support sustainable growth</p> <p>Work with local tourism businesses to develop sustainable tourism within the AONB, and outside the AONB (see tourism). Tourism is an important element of the economy of the AONB. It is inevitable that there will be a continuing need for new sustainable tourist-related developments within the AONB</p> <p>Work with Coastal Communities Schemes (and FLAG) where possible to promote coastal business and sustainable tourism</p> <p>The importance of providing affordable housing throughout the AONB is recognised as vital to ensure that balanced communities can survive and prosper and particularly that those who care for the landscape of the AONB have an opportunity to live within it.</p>
<p>The future of public funding for farming and other environmental payments is uncertain and expected to follow a downward trend. This may lead to pressure on the profitability of farms in the AONB, and lead to farm diversification (see agriculture) or abandonment and potential development of derelict barns. The AONB retains traditional agricultural buildings that have not, as yet, been converted for other uses.</p> <p>This development could lead to urbanisation of the rural countryside landscape, but could also provide a mechanism to retain and reinforce landscape character by preserving buildings in vernacular styles that would otherwise become redundant and be replaced by generic buildings. Holiday accommodation, campsites and other facilities (e.g. equestrian uses) may also be a spin off from diversification.</p>	<p>Conversions need to be carefully appraised so that the buildings' distinctive character and setting are retained and adverse impacts on important nature conservation interests, such as bats, are avoided.</p> <p>Equine-related activities provide valuable farm diversification opportunities.</p> <p>Position Statements and design guidance produced by the AONB, agencies and local authorities can help in providing suitable housing developments.</p> <p>The Localism Act and provision for Neighbourhood Planning provides an opportunity for local people to actively engage in the development of their community.</p> <p>National Planning Policies, Local Plans/Core Strategies including the Community Infrastructure Levy (CIL), neighbourhood planning and Local Transport Plans all are important for employment and development.</p>
<p>Diminishing traditional local skills among contractors and land managers for hedgelaying and dry stone-faced kest banks may affect opportunities for small business development but also affect the quality of the landscape</p> 	<p>Work with AONB partners to encourage and target, the uptake of Conservation Schemes within the AONB especially Countryside Stewardship through the Solway Wetlands Landscape Partnership Scheme with an emphasis on land management options that reinforce landscape character and support key attributes. Support traditional skills development using training and Cumberland style hedgelaying.</p> <p>Farm diversification may provide opportunities for local business to set up.</p> <p>Increasing the number of training events for volunteers, landowners and contractors in traditional local skills will benefit the landscape and the rural economy.</p> <p>Through the NAAONBs influence the next phases of the EU and UK government investment (including RDPE, LEP, Natural Environment White Paper Initiatives) to ensure that it is targeted at supporting land managers in the AONB.</p> <p>Promote value and role of traditional local skills.</p>

<p>Increasing fuel costs and changing markets will add pressure on business (especially small businesses) and farming costs.</p> 	<p>Work with local tourism businesses to develop sustainable tourism within the AONB (see tourism) Tourism is an important element of the economy of the AONB. It is inevitable that there will be a continuing need for new sustainable tourist-related developments within the AONB</p> <p>Work with Coastal Communities Schemes (and FLAG) where possible to promote coastal business and sustainable tourism</p> <p>Through the NAAONBs influence the next phases of the EU and UK government investment (including RDPE, LEP, Natural Environment White Paper Initiatives) to ensure that investment is targeted at supporting land managers in the AONB.</p>
<p>Noise and activity arising from developments in the countryside, together with lighting, can have an adverse impact on tranquil and dark sky areas.</p> 	<p>Position Statements and design guidance produced by the AONB, agencies and local authorities can help in providing suitable housing developments.</p> <p>Promoting best practise in design through use of the AONB Management Plan</p> <p>The Localism Act and provision for Neighbourhood Planning provides an opportunity for local people to actively engage in the development of their community.</p> <p>National Planning Policies, Local Plans/Core Strategies including the Community Infrastructure Levy (CIL), neighbourhood planning and Local Transport Plans all are important for employment and development.</p>
<p>The AONB and its surroundings may well attract proposals for developments of significant scale, such as wind turbines. These could have significant adverse effects on the AONB landscape</p> 	<p>There is a need to manage development pressures and land use changes, both within and contiguous with the boundaries of the AONB, with sensitivity in order to maintain a balance in promoting economic and social viability whilst retaining traditional AONB character.</p> <p>Position Statements and design guidance produced by the AONB, agencies and local authorities can help in providing suitable housing developments.</p> <p>The Localism Act and provision for Neighbourhood Planning provides an opportunity for local people to actively engage in the development of their community.</p> <p>National Planning Policies, Local plans/Core Strategies including the Community Infrastructure Levy (CIL), neighbourhood planning and Local Transport Plans all are important for employment and development.</p>

Objective 25: To ensure that access to securing of funding such as AE, will support sustainable farming practices and support implementation of identified measures that support the conservation of natural beauty

Objective 26: To ensure opportunities are there to access training and employment and build skills base in sectors related to the purpose of designation such as land management and sustainable tourism

Objective 27: To ensure planning for housing development is both appropriate to the needs of communities and has regard to the AONB character

Objective 28: Across the sectors to develop an economy based on the valuing of, and support of, the key attributes of the AONB with a consistent brand that makes the link to the AONB landscape

Objective 29: To ensure maximisation of opportunities for the AONB's designation, special qualities and management to drive and support rural economic growth

2.3.2 Services

Within the AONB, the provision of local services is very variable and often services lie outside the AONB and can only be accessed via public transport or car transport.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Local services, including GP surgeries, schools, libraries, banks and building societies, post offices, petrol stations, shops, and pubs, all contribute to the quality of life and community cohesion. However, these vital services may be threatened with closure or reduced service due to local government fiscal austerity measures.</p> <p>To maintain the vibrancy of local communities within the AONB, one of the special qualities, retention of these services is vital</p> 	<p>Continue the promotion of local services, businesses and products in all AONB communications</p> <p>Gain better understanding of what AONB designation could do for local communities and businesses</p> <p>Support local services, businesses and product which contribute to AONB objectives through funding from the SWLPS or its legacy and other sources.</p> <p>Work with Local Authorities and other partners to retain and promote local services</p> <p>The Localism Act and provision for Neighbourhood Planning provides an opportunity for local people to actively engage in the development of their community and its services.</p> <p>The AONB partnership can provide an opportunity for developing skills and training around business services linked to its special qualities, such as tourism, traditional skills, environmental management skills</p>
<p>The continued cost of local housing in the area compared with average earnings means that the provision of affordable housing for local needs remains a significant issue within the AONB (see employment and business).</p>	<p>Finding appropriate locations for affordable housing which will not have detrimental impacts on the landscape should be a priority</p> <p>Preparation by Allerdale Borough Council, and Carlisle City Council of dedicated Local Plans which incorporate the AONB and Development Management guidance and design guidance in cooperation with the AONB partnership, Parish Councils and local communities</p>
<p>Many villages appear to have less than thriving facilities and services, which may lead to social isolation</p>	<p>Continue the promotion of local services, businesses and products in all AONB communications</p> <p>Support local services, businesses and product which contribute to AONB objectives.</p> <p>The Localism Act and provision for Neighbourhood Planning provides an opportunity for local people to actively engage in the development of their community</p>
<p>Training and skills to service the growth of rural micro-businesses is essential to sustain business growth</p>	<p>Support local services, businesses and product which contribute to AONB objectives.</p> <p>The AONB partnership can provide an opportunity for developing skill and training around business services linked to its special quality, such as tourism, traditional skills and environmental skills.</p> <p>Use NAAONB network to identify information share case studies to learn from other AONBs.</p>
<p>There is still a need for improved links to high-speed broadband to support small businesses and services in the AONB.</p>	<p>Further links to high-speed broadband and the relevant infrastructure are needed for the further development of rural businesses</p>

Objective 30: To ensure the current level of local services and access to those services by all is maintained and enhanced where possible to support sustainable communities

Objective 31: To encourage infrastructure improvements to achieve superfast broadband and mobile phone coverage for the whole of the AONB without a significant adverse impact

2.3.3 Transport

The majority of visitors arrive in the AONB by private car, however, the use of sustainable transport options such as public transport, cycling and walking are encouraged so that people can enjoy the special qualities of the AONB.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Links to, through and around the AONB by public transport is poor with buses running only infrequently and only on certain routes. This is more problematic on weekends where services are further restricted. Cutbacks in County Council spending may lead to further reduced routes.</p> <p>Traffic speed can be an issue on smaller roads</p>	<p>The AONB partnership promotes walking and cycling through in-house guides and publications.</p> <p>Initiatives under Local Transport Plans and Sustrans, may continue to stimulate better use of public transport and cycling events.</p> <p>Integration of public transport network with other transport businesses to create hubs is a priority.</p> <p>Put in place traffic calming measures especially where cyclist, walkers and vehicles use the same roads or cross them</p>
<p>People without a car in the AONB rely on the frequency and quality of public and/or community transport and on local shops and facilities which are vulnerable to closure</p>	<p>Develop/promote walking/cycling loops that integrate with public transport</p> <p>Work with local councils to promote opportunities in the AONB at key public transport 'get on points'.</p> <p>Linking events and activities to available public transport wherever possible, e.g. volunteers events and workdays.</p> <p>To explore the possibility of creating community based solutions focusing on mobile services.</p>
<p>The main coast road, the B5300, has suffered a large amount of erosion due to storm damage and requires constant upgrading.</p> 	<p>Cumbria County Council has continuing costs on highway infrastructure repairs. Sections of highway also perform a sea defence role. Repairs to this infrastructure is usually carried out with little understanding of the wider coastal processes affecting these sections of the coastline and do not serve the sustainable approaches to managing flood and coastal erosion risks identified in Shoreline Management Plans.</p> <p>Support the development of a more strategic approach to coastal defence work promoted by Cumbria County Council as Highway Authority and Lead Local Flood Authority (Flood and Water Management Act 2010)</p>
<p>There are a large number of lorries and 'Heavy Goods Vehicles' now using the minor roads in the AONB which increase noise and pollution but also make it dangerous for walkers and cyclists to co-use. The increased HGVs on minor roads can also be an issue to the local communities and to the degradation of the road.</p> <p>This can also impact on the landscape.</p>	<p>The Hadrian's Cycleway section which opened in November 2013 provides a safe route for cyclists, avoiding the busy stretch of the B5300 coast road between Allonby and Maryport.</p> <p>Electric cycles from the 'Wave' at Maryport may be available for day hire, promoting cycling for all abilities and a good link to Allonby to provide more visitors to the local services. Build on this model.</p> <p>Lorry routing schemes could be introduced through the highways authorities working with the AONB partnership. Practical lorry routing can be beneficial and CCC publishes a HGV route map which supports this. However, HGV access onto minor roads is often required for access to properties and sites and is therefore inevitable.</p>
<p>Excessive transport signage has a negative impact on the special qualities of the AONB</p>	<p>New low cost speed restrictions have been put in place on the B5300 to slow down speeding vehicles and increase awareness of cyclists. This could be done throughout the minor roads of the AONB.</p> <p>To remove cluttering of transport signage from the AONB the highways authorities could undertake clutter audits, to remove unnecessary signage and that any signage should be in keeping with the special qualities of the AONB.</p>

Objective 32: To ensure the special qualities of the AONB are respected in the planning, design, provision and management of all types of transport and associated infrastructure

Objective 33: To ensure opportunities are taken to promote walking, cycling and public transport and enhance schemes where possible to provide an alternative to private car use.

2.4 ENGAGEMENT

Information regarding the special qualities and the importance of the designation of the AONB is essential in order to ensure that the area is effectively managed, conserved and enhanced for the future. By improving awareness and understanding of these qualities (ecosystem services and other processes) to local people and visitors will help their understanding of the importance of effective management of the area and lead to greater appreciation and enjoyment of these special qualities in order to conserve it.

2.4.1 AWARENESS AND COMMUNICATION (Education)

Education is central to the promotion of the AONB to drive

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>There is lack of evidence to document the condition and value of attributes and direction of change of local wildlife sites, condition of hedgerows, speed of erosion of the shoreline and its dynamics, condition monitoring of heritage sites and assets of the AONB and a lack of continuity of recording cultural heritage within the AONB (CCC cutbacks), amongst others. Datasets that are cut to AONB boundaries is still limited to sources from NE and EA.</p> 	<p>Research, monitoring and analysis to address data gaps and ensure there is a good understanding of the status of the AONB's special qualities</p> <p>The range of interpretation and electronic media will continue to enhance communications effectiveness and provide many opportunities to present information and help to reach new audiences. The use of Facebook, Twitter and the AONB and SWLPS websites, or partner's websites will enable greater communication of the special qualities (ecosystem services) and events within the AONB.</p> <p>Improve Geographic Information System capability in the AONB team and develop data sharing protocols with key partners.</p> <p>Use of Biodiversity Action Reporting System (BARS2) will improve wildlife data</p>
<p>Local communities and visitors need high quality information and a range of interpretation about the special qualities of the AONB and the opportunities for enjoyment including walking, cycling, wildlife watching, fishing, to enable them to make the most of the area and to help support its conservation. This would also include the appreciation of why the AONB is special compared to non-AONB landscapes</p>	<p>More highway signage to help visitors realise the importance of England's Solway Coast and the AONB should be extended beyond the boundary to the M6 motorway.</p> <p>Continued production of interpretative leaflets, booklets, newsletters will further promote the AONB and activities through the media</p> <p>Produce a new website with daily information on weather, tides and events throughout the area.</p> <p>Continue to run the Community Volunteer Group and other volunteering opportunities with partners to promote quiet recreation and involvement with the management of the AONB</p>
<p>Lack of knowledge of less accessible or well-known places, such as the peatlands, hinders the appreciation of these important habitats for biodiversity</p> 	<p>Further development of the SWP, or partners interpretation and access at Campfield Marsh (RSPB Reserve, Drumburgh Moss (CWT), Glasson Moss (NE) and Wedholme Flow (NE) will enable people to explore and better understand these fragile habitats.</p> <p>Supporting programmes that deliver social, cultural and economic benefits from sustainable management of wetland resources and promote informed interaction with the wetland landscape such as educational and volunteer programmes that raise awareness of the unique wetlands in the AONB and promote skills associated with traditional management such as wetland grazing.</p> <p>Raise awareness of ecosystem service roles of healthy habitats</p>
<p>Education is essential to promote the AONB as a national asset, a special area of economic diversity and a great place to live or visit.</p>	<p>Creation of a communications and education officer will provide the necessary engagement to fulfil the needs of the promotion of the area</p>

Objective 34: To ensure fostering a community interest and culture linked to the AONB's strong sense of place.

a consequent respect which will ensure its future protection. The AONB Partnership has a key role in raising awareness regarding the special qualities of the AONB. Different groups such as children, residents, visitors, etc. each need a bespoke approach to awareness of the AONB, and locals who know the area and people new to the area may have different perceptions of the AONB's attributes which will need differing forms of awareness-raising.

Information provided to help raise awareness can include education through an AONB Officer, Volunteer Coordinator, other forms of social media from the AONB website, Facebook, Twitter, interpretation panels, leaflets and the Solway Coast AONB tourism signage with its unique brand image.

2.4.2 Community Involvement

Community involvement is vital to promoting understanding and awareness of the AONB and its special qualities. Through involvement and participation of local communities the 'ownership' of the AONB is sustained and preserved for years to come.

Maintaining links between people and the management of their local environment raises awareness of management need and gives them ownership of the wider landscape

and its stewardship.

Communities within the AONB rely on sustainable sources of food, water, air quality, and a healthy living style. Through a healthy lifestyle the economic benefits of the AONB can be promoted through good management of the natural environment.

Sustainable lifestyles within communities help mitigate against climate change.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>There is a lack of understanding as to what the meaning is of the designation of the AONB and what this means in terms of sense of place</p> 	<p>Only through involvement of communities in AONB projects and outcomes can this be improved.</p> <p>Through involvement of the Solway Coast Community Volunteers, schools, colleges and other organisations, the importance of conservation and enhancement of the AONB is maintained for future generations.</p> <p>Opportunities for people to get involved and actively participate in the conservation of the area should be supported and widely promoted</p> <p>Seeking opportunities to extend stewardship of natural environment to new areas</p> <p>Gain better understanding of what volunteers would want to do if enabled to do so</p>
<p>Rural communities that are quite isolated do not share the same knowledge of the AONB and outputs generated.</p> 	<p>Through seeking opportunities to work alongside communities, helping them to identify local issues and develop solutions, whilst conserving and enhancing the special qualities of the local natural and built environment.</p> <p>The Education and Community Engagement Officer involved in the SWLPS will continue to engage with local communities to provide information, seek active engagement and promotion of the AONB, events and activities. This is also provided by the Volunteer Coordinator</p> <p>Volunteer activities, promotion of walking, cycling, wildlife watching and other healthy activities will continue to be promoted through our websites, leaflets, newsletters and other electronic media. This will engage with Government policies for health and well-being and opportunities to form partnerships with the health sector in promoting access and enjoyment of the AONB.</p>
<p>Lack of recycling schemes and promotion of sustainable measures to reduce carbon emissions and water and energy efficiency all affect the 'green credentials' of the AONB.</p>	<p>Continue to work with partners towards a low carbon landscape for the AONB, following on from the SWLPS projects of wetting-up and repairing the peatlands.</p> <p>Promotion of public transport, cycling and walking instead of car use, and small scale renewable energy schemes appropriate for the AONB could all help to produce a contribution to energy reduction targets</p>

Objective 35: To enable communities to get involved in the custodianship of the AONB through engaging with the management and support of key assets.

Objective 36: To support local communities in moving towards sustainable low carbon living

Objective 37: To ensure less waste is produced through waste minimisation and recycling of waste materials generated by communities



2.5 GLOBAL CONSIDERATIONS

2.5.1 CLIMATE CHANGE

Global warming is “unequivocal”. This is the finding of the most recent report of the Intergovernmental Panel on Climate Change (‘IPCC Fourth Assessment Report: Climate Change’, 2007). The report also states that “most of the observed increase in globally averaged temperature since the mid-20th Century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations”.

Being coastal, low lying and at the head of the Irish Sea the AONB will be particularly vulnerable to impacts felt through changes in the marine environment including

raised sea levels, increases frequency and intensity of storm events, and impacts on coastal dynamism that arise as a consequence.

Through the policies in this Management Plan, the partnerships can develop a comprehensive approach to mitigate and adapt to climate change within and to a degree, around the AONB. This is particularly the case with management of coastal habitats, the provision of water supplies and control of flooding, soil management, species and habitat adaptation, habitat restoration, natural carbon sequestration, sustainable tourism provision and small scale renewable energy generation.

Issues and Forces for Change	Possible Mechanisms to Manage Impacts
<p>Changes in weather patterns since 2007 leading to milder wetter winters and warmer drier summers.</p> <p>The AONB is likely to experience more extreme weather events as a consequence peatlands may dry out in the summers, releasing carbon dioxide and erosion of the peat and the plant life on it.</p>	<p>Maintain favourable conditions of habitats and heritage sites and expand networks of natural habitats to deliver Nature Improvement Areas (NIAs). These have principles of good quality connected habitat in line with Government policy as set out in the Natural Environment White Paper</p> <p>Continue working with partners and volunteers to deliver on-going habitat restoration, enhancement and stability</p>
<p>Rate of coastal change is likely to increase as a consequence of climate change.</p> <p>Sea level rise compounded by increased strength and frequency of storm surges could lead to an increased risk of coastal erosion and flooding with infiltration of freshwater habitats by salt water.</p> <p>More erosion of the salt marshes and dunes could occur and may result in loss of inter-tidal habitats and important bird breeding sites.</p> <p>The winter of 2013-14 has caused extensive erosion leading to further coastal squeeze on infrastructure</p>	<p>Work with partners to address coastal erosion measures as part of the delivery of the SMP.</p> <p>Working with partners to secure coastal management regimes that mitigate impacts, e.g. through AE schemes, to allow saltmarsh accretion and land level rise to offset sea level rise.</p> <p>Manage access to the coastal zone so that fragile ‘barrier’ habitats are not damaged compromising their coastal protection function.</p> <p>Work to reduce need for unsustainable infrastructure in the coastal zone.</p> <p>Raise awareness of the inevitability of coastal change</p>

<p>Damage to historic buildings and archaeological sites through winter water-logging of land could occur</p>	<p>Maintain favourable conditions of habitats and heritage sites and expand networks of natural habitats to deliver NIAs. Also include documentation of sites where loss is inevitable</p>
<p>New non-native invasive species and pests and diseases could be introduced due to changing weather patterns and some species may disappear</p> <p>Change driving the range and increases of various species of invasives and plant diseases affecting marine, aquatic and terrestrial environments</p>	<p>Improve awareness of invasive species and support ‘early warning’ networks. Increase vigilance to prevent establishment of invasives wherever possible</p> <p>Maintain favourable conditions of habitats and heritage sites and expand networks of natural habitats to deliver NIAs (see Biodiversity section)</p> <p>Continue working with partners and volunteers to deliver on-going habitat enhancement and stability</p>
<p>Loss of characteristic habitats, fauna and flora with replacement by new colonists.</p> <p>Change having an effect on breeding habitats, soil conditions and food availability</p>	<p>Secure favourable conditions of habitats and habitat networks to make ecological systems as robust as possible to climate change impacts and find access to delivery funding for this</p> <p>Use policy drivers such as Natural Environment White Paper and WFD to foster improved ecological networks and more sustainable land use.</p> <p>Continue working with partners and volunteers to deliver on-going habitat enhancement and stability</p> <p>Make sure habitats are able to receive new colonising species where appropriate.</p>
 <p>Changes in agricultural land-use</p> <p>Changes in weather patterns may lead to changes in agriculture leading to more arable land use which will affect the landscape character.</p> <p>Winter waterlogging creating changes in landuse (arable shift) and drier pasture in summer reducing winter fodder (grass silage)</p>	<p>Maintain favourable conditions of agriculture related habitats and heritage sites and expand networks of natural habitats to deliver NIAs</p> <p>Continue working with landowners, partners and volunteers to deliver on-going habitat enhancement and stability</p>
<p>Renewable energy developments</p> <p>Wind and tidal renewable infrastructure increasing exponentially based on increased wind and tidal resources</p> <p>Potential development for a tidal barrage or inappropriately sized wind turbines due to the increased tidal and wind resource in the Solway area.</p>	<p>Reducing the carbon footprint by achieving reductions in greenhouse gas emissions will help to reduce the degree and impact of climate change. This can be achieved through increasing energy efficiency, e.g. using appropriate forms of renewable energy, reducing car use and using public transport, purchasing locally sourced food and services.</p> <p>Promote renewable energy sources that are complementary to AONB character.</p> <p>Continue to work with Planning Authorities on matters relating to domestic energy generation, wind turbine development and a possible Solway Barrage</p>

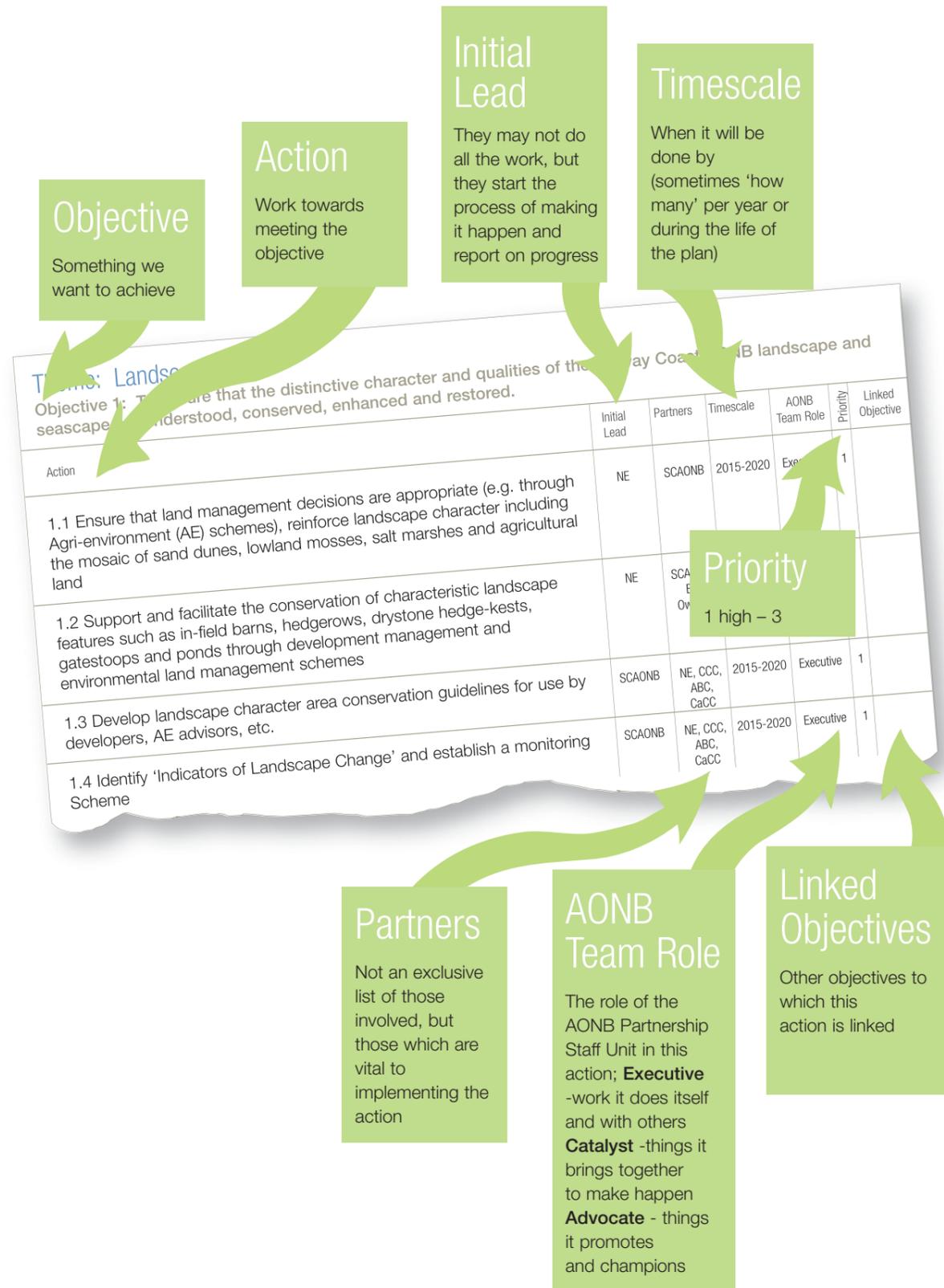
Objective 38: To ensure carbon emissions within the AONB are reduced by reducing energy consumption, applying energy conserving measures, encouraging more sustainable patterns of development, and utilising renewable energy generation technologies that are of an appropriate type and scale for their siting

Objective 39: To ensure land is managed sustainably in accordance with best practice to minimise erosion and water pollution and maximise resilience to drought stress

Objective 40: To work with the SMP2 policy in managing coastal change and securing adaptive management of coastal habitats and to consider impacts on heritage assets

Using the Action Plan

How to interpret the Action tables



Theme: Landscape

Objective 1: To ensure that the distinctive character and qualities of the Solway Coast AONB landscape and seascape are understood, conserved, enhanced and restored.

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
1.1 Ensure that land management decisions are appropriate (e.g. through Agri-environment (AE) schemes), reinforce landscape character including the mosaic of sand dunes, lowland mosses, salt marshes and agricultural land	NE	SCAONB	2015-2020	Executive	1	
1.2 Support and facilitate the conservation of characteristic landscape features such as in-field barns, hedgerows, drystone hedge-kests, gatestoops and ponds through development management and environmental land management schemes	NE	SCAONB, EH, Owners	2015-2020	Advocate	1	
1.3 Develop landscape character area conservation guidelines for use by developers, AE advisors, etc.	SCAONB	NE, CCC, ABC, CaCC	2015-2020	Executive	1	
1.4 Identify 'Indicators of Landscape Change' and establish a monitoring Scheme	SCAONB	NE, CCC, ABC, CaCC	2015-2020	Executive	1	
1.5 Support the conservation of drystone hedge kests, North Cumberland Style Hedgelaying through training schemes and sandstone gate stoops by replacement projects	SCAONB	NE, CWT Owners	2015-2020	Executive	1	
1.6 Monitor and act on tree and plant diseases, notably Chalara and Phytopthera, and other non-native invasive species which may have a significant impact on the landscape with Cumbria INNS strategy	NE	FCom, SCAONB	2015-2020	Advocate	1	4.2 9.4
1.7 Continue to wet up areas of farmland and lowland raised mires through water management schemes	NE	SCAONB, EA, CWT, RSPB, Owners	2015-2020	Advocate	1	
1.8 Develop guidance on management of rural roads, highway improvement schemes, signage and street/outdoor furniture appropriate to the AONB landscape	SCAONB	ABC, CaCC, CCC	2015-2020	Executive	1	
1.9 Reducing the carbon footprint by achieving reductions in greenhouse gas emissions will help to reduce the degree and impact of climate change. This can be achieved through increasing energy efficiency, e.g., using appropriate forms of renewable energy, peatland restoration, reducing car use and using public transport, purchasing locally sourced food and services.	CCC, ABC, CaCC	SCAONB, NE	2015-2020	Advocate	1	
1. 10 Promote renewable energy sources that are complementary to AONB character	CCC, CaCC, ABC, FLD	SCAONB, NE	2015-2020	Advocate	2	
1.11 With AONB partnerships encourage and target the uptake of Agri-environment schemes within the AONB, with an emphasis on land management options that reinforce landscape character and support key attributes	NE	SCAONB, RSPB, CWT, Owners	2015-2020	Catalyst	2	
1.12 Continue to underground overhead wires with Electricity North West and identify new areas for the next 15 years	ENW	SCAONB, Owners	2015-2020	Catalyst	2	
1.13 Ensure that proposals for National Grid's new power infrastructure seek to minimise impacts on the setting and views from the AONB through continued engagement of the Stakeholder Reference Group	CCC, ABC, CaCC,	SCAONB, FLD, NE	2015-2020	Advocate	1	
1.14 Ensure that wind energy applications that affect the AONB or its setting are required to demonstrate that the Landscape and Visual Impact Assessments have used the best available data and information and taken full account of the provisions of the National Planning Policy Framework regarding AONBs. Seek to ensure that visualisation work that supports such applications is submitted in accordance with the requirements of relevant good practice	CCC, CaCC, ABC, NE	SCAONB	2015-2020	Catalyst	1	

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
1.15 Adopt the Cumulative Landscape & Visual Impact of Vertical Infrastructure – Assessment & Guidelines	SCAONB	CCC,ABC,	2015-2020	Executive	2	
1.16 Use the Solway Coast AONB Landscape and Seascape Character Assessment 2010, to comment on planning decisions to make informed decisions and responses regarding development.	SCAONB	CCC, CaCC, ABC, NE	2015-2020	Executive	1	
1.17 Promote the importance of good soil management for carbon storage and water quality, ensuring that this resource protection is given priority within environmental land management schemes	NE	SCAONB, CWT, EA	2015-2020	Advocate	1	
1.18 Review and update the AONB Landscape and Seascape Character Assessment	SCAONB	NE, CCC,ABC, CaCC	2019-2020	Executive	2	
1.19 Develop and deliver a programme of landscape monitoring linked to management plan indicators	SCAONB	NE	2015-2020	Executive	2	

Theme: Farming and Other Land Management

Objective 2: To ensure that sustainable farming practices become the primary means by which the distinctive farmland landscapes and qualities of much of the AONB are maintained

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
2.1 Ensure that agriculture continues to contribute positively to conservation of the AONB's special qualities by providing bespoke advice and hands on support to farmers and land managers to promote and encourage uptake of environment and land management grant schemes	NE	SCAONB, NFU, EA	2015-2020	Advocate	1	
2.2 Continue to wet up areas of farmland and lowland raised mires through water management and to deliver sympathetic management of key assets	NE	EA, RSPB, CWT, SCAONB, Owners	2015-2020	Advocate	1	
2.3 Promote the importance of good soil management for carbon storage and water quality, ensuring that this resource protection is given priority within environmental land management schemes	NE	EA, SCAONB, CWT, RSPB, Owners	2015-2020	Advocate	2	
2.4 Support farm diversification schemes where appropriate through AE schemes, RDP, LEP and development planning	NE	RDP, LEP, ABC, CCC, CaCC, SCAONB	2015-2020	Advocate	2	

Objective 3: To ensure that the skills required to care for the landscape and its special qualities are appreciated and increased, with opportunities to acquire and develop such skills made available to all

3.1 Support the conservation of drystone hedge kests and North Cumberland Style Hedgelaying through training schemes, and sandstone gate stoops by replacement projects- which raise local awareness.	SCAONB	NE, Owners	2015-2020	Executive	1	1.5
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Objective 4: To ensure rural land management, which conserves and enhances natural resources, including biodiversity, landscape character and the historic environment, which aids public enjoyment of the AONB

4.1 Support the conservation of characteristic landscape features such as in-field barns, hedgerows, drystone hedge- kests, gatestoops and ponds through development management and environmental land management schemes	SCAONB	NE, CCC, CaCC, ABC, EH	2015-2020	Executive	1	1.2
4.2 Monitor and act on tree and plant diseases, notably Chalara and Phytopthera, and other non- native invasive species which may have a significant impact on the landscape in conjunction with Cumbria INNS strategy	NE	FCom, SCAONB	2015-2020	Advocate	1	1.6 10.4
4.3 Use Agri-environment schemes to support farming systems that maintain and enhance populations of priority farmland birds on arable land	NE	Owners, RSPB, CWT, SCAONB	2015-2020	Advocate	2	

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
4.4 Support NAAONB and other bodies' lobbying for CAP reform which benefits farming and wildlife	SCAONB	RSPB, CWT, EA	2015-2020	Executive	2	

Saltmarsh

Objective 5: To ensure the effective conservation and management of the saltmarsh habitat for its unique character, specialist species and role regulating coastal processes

5.1 Ensure that saltmarsh management continues to contribute positively to conservation of the AONB's special qualities by providing bespoke advice and hands on support to farmers and land managers to promote and encourage uptake of environment and land management grant schemes	NE	SCAONB, RSPB	2015-2020	Executive	1	
5.2 Retain grazing systems that provide conditions for key species and allow natural development of the marshes	NE	Owners, RSPB	2015-2020	Advocate	2	
5.3 Ensure sustainable management of natural resources whilst raising awareness of disturbance to breeding birds	NE	Owners, SSWA, SCAONB	2015-2020	Catalyst	2	
5.4 Conserve the Inner Firth Intertidal Flats for nature conservation for SPA/SAC status and restore areas of reclaimed farm land to marshes where possible	NE	Owners, SCAONB	2015-2020	Catalyst	2	
5.5 Monitor changes in sea –level and coastal erosion to determine any trends or patterns and if possible to manage the process	NE	CCC, ABC, EA, Owners, SCAONB	2015-2020	Executive	2	

Sand Dunes

Objective 6: To ensure that organisations responsible for the conservation and enhancement of the natural beauty of the dunes deliver appropriate actions and that the dunes are enjoyed sensitively by all users

6.1 Encourage integrated designation management to help ensure the objectives of differing designations do not conflict with objectives for the Upper Solway Flats and Marshes SSSI, Solway Firth SAC/SSSI and Silloth Dunes and Mawbray Bank SSSI	NE	SCAONB, ABC, CCC	2015-2020	Advocate	1	
6.2 Work with Parish Councils and landowners to close informal car parks on the dunes but maintain main car parks	SCAONB	PCs, ABC, Owners, CCC	2015-2020	Catalyst	2	
6.3 Continue to work with Allerdale Borough Council and other landowners to manage the dunes for key species (Natterjack Toad) and allow natural development through AE schemes	NE	SCAONB, ABC, ARC, PCs, Owners	2015-2020	Catalyst	1	
6.4 Promote the positive development of England Coast Path whilst ensuring any changes or development is in line with the landscape management of the AONB and dune management	NE	SCAONB, CCC, CaCC, ABC, Owners	2015-2020	Catalyst	2	
6.5 Monitor access to the dunes by mussel fisheries and discourage travellers from settling along dune areas to prevent further erosion	SCAONB	ABC, MMO, NE, IFCA	2015-2020	Executive	2	
6.6 Implement relevant fishery orders to effectively manage shellfishing activity from the sand dunes and ensure potential impacts on the AONB are minimised.	NWIFCA	NE, SCAONB, ABC, Owners	2015-2020	Catalyst	3	
6.7 Promote use of Hadrian's Cycleway whilst ensuring any changes or development is in line with the landscape management of the AONB and dune management	Sustrans	SCAONB, NE, HWT, ABC	2015-2020	Advocate	2	
6.8 Deliver appropriate land management related adaptation and mitigation actions identified in the Shoreline Management Plan2	NE	ABC, CCC, SCAONB	2015-2020	Catalyst	2	
6.9 Provide a workforce using the Solway Coast Community Volunteers and other groups to help with basic management of the dunes, invasive weed removal, gorse and scrub removal.	SCAONB	Volunteers, Community Groups, Schools, MCS	2015-2020	Executive	1	

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
6.10 Provide clear and adequate information and signage for users of the dunes to respect the delicate nature of the dune system and its wildlife, and behave accordingly.	SCAONB	NE, ABC, CCC,	2015-2020	Executive	2	
6.11 Continue to work in partnership with Electricity North West in undergrounding more 11kv overhead lines to improve visual amenity	SCAONB	E-NW, Owners,	2015-2020	Executive	2	
6.12 Work with landowners maintain favourable condition of the Grune dune system, and where feasible seek to restore grazing management on the Silloth-Allonby dune system	NE	SCAONB, Owners	2015-2020	Catalyst	2	
Lowland Raised Mires-Mosses						
Objective 7: To ensure continued creation, restoration and enhancement of new and restored raised mire habitat						
7.1 Support research into peatland hydrology, vegetation cover, grazing, biodiversity, carbon storage and the historic environment. Use research findings to guide peatland management	UNI	SCAONB, NE, EH, EA	2015-2020	Executive	1	
7.2 Continue the restoration and re-wetting of the peatlands and associated farmland, to reduce carbon loss and rebuild organic content of soils	NE	SCAONB, RSPB, CWT, Owners, EA	2015-2020	Executive	1	
7.3 Continue to manage the lowland wetlands and pasture that delivers benefits from biodiversity and sustainable farm business, in particular measures that support key species such as breeding waders	NE	SCAONB, Owners, RSPB, CWT	2015-2020	Catalyst	1	
7.4 Work with Planning Authorities to control inappropriate developments such as wind turbines that affect the skylines along the open views from the peatlands	SCAONB	CCC, ABC, CaCC, NE	2015-2020	Executive	1	
7.5 Continue to restore lowland raised bogs by restoring appropriate hydrology for their biological value, historic value and as a climate regulator by both securing the storage of carbon in peat and by enabling sequestration of carbon dioxide from the atmosphere	NE	SCAONB, RSPB, CWT, EH, EA	2015-2020	Executive	1	
7.6 Continue the restoration of site hydrology involving removal of recently established woodland and scrub and continue to block drains on the moss surface	NE	RSPB, CWT, SCAONB, EA	2015-2020	Catalyst	2	
7.7 Increase visitor awareness of the role the mosses play through continued appropriate access development (boardwalk), interpretation, Campfield Barn Visitor Centre provision, viewing platforms, school visits, visitor activities and other social media information	SCAONB	RSPB, NE, CWT, Volunteers	2015-2020	Catalyst	2	
7.8 Continue to use AE schemes to incentivise appropriate management, and partnership working	NE	SCAONB, ABC, RSPB, CWT, CCC, CaCC	2015-2020	Advocate	2	



Theme: Biodiversity and Geodiversity

Objective 8: To ensure the conservation, enhancement, expansion and enhanced connectivity of habitats, creating resilient ecological networks across the Solway coast AONB and beyond with a focus on 2020 priorities

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
8.1 Ensure that 95% of the AONB's SSSIs are in favourable or recovering condition by 2020 and take appropriate action to bring those SSSIs that are currently in recovering condition into favourable condition, so that at least 50% of SSSIs are in favourable condition by 2020	NE	SCAONB Owners, CWT, RSPB	2015-2020	Catalyst	1	
8.2 Carry out condition monitoring of the AONB's Local Wildlife Sites and aim to deliver positive management on all sites by 2020 by providing bespoke advice and support, negotiating management agreements and securing environmental land management or other grants	NE	CWT, RSPB, SCAONB, ABC, CCC, CaCC	2015-2020	Catalyst	1	
8.3 Carry out research into habitat connectivity that is applicable to the intimate scale of the AONB landscape	NE	SCAONB, CWT, RSPB, EA	2015-2020	Advocate	2	
8.4 Develop a more conservation friendly management of vegetation to enhance the wildlife and landscape value of verges and highway margins and link to B-lines proposals and government pollinator strategy	CCC	SCAONB, CWT	2015-2020	Advocate	3	
8.5 Retain, improve and expand areas of priority habitats, including lowland raised bog, coastal sand dune, saltmarsh and other areas within and around the AONB	NE	Owners, ABC, CWT, RSPB, SCAONB	2015-2020	Catalyst	1	
8.6 Demonstrate improvements in the AONB Partnership's ecosystem approach to landscape management through use of criteria based check lists	SCAONB	NE, CWT, RSPB	2015-2020	Executive	1	
8.7 Develop an AONB Biodiversity 2020 Local Delivery Plan	SCAONB	NE	2017-2020	Executive	2	
8.8 Ensure that any plans, projects and actions take into account the conservation objectives of, and where possible seek to enhance, European designated sites within and adjacent to the area	SCAONB	NE	2015-2020	Executive	1	
8.9 Carry out regular condition monitoring of the AONB's SSSIs	NE	SCAONB, Owners	2015-2020	Executive	1	
8.10 Retain, improve and expand priority freshwater wetland habitats including wet grassland, wet woodland (lagg), peatlands and reedbed within and around the AONB, in particular the programme of lowland peatland and wetland restoration	NE	SCAONB, EA, RSPB, CWT, Owners	2015-2020	Catalyst	1	
8.11 Conserve and enhance priority coastal habitats including saltmarsh, coastal and floodplain grazing marsh, maritime cliffs and slopes, vegetated shingle, coastal sand dunes and mudflats	NE	SCAONB, EA, CWT, RSPB, Owners	2015-2020	Executive	1	
8.12 Promote connectivity by providing linkages, corridors and stepping stones in the landscape	SCAONB	NE, CWT, RSPB, Owners, LAs	2015-2020	Catalyst	1	
8.13 Support research into peatland hydrology, vegetation cover, grazing, biodiversity, carbon storage and the historic environment. Use research findings to guide peatland management	UNI	SCAONB, CWT, NE, RSPB, EH	2015-2020	Executive	1	
8.14 Develop new opportunities to enhance, restore and connect priority habitats	NE	SCAONB, RSPB, CWT, Owners	2015-2020	Executive	2	
8.15 Support the continued work of biological records centres	LAs/NE	SCAONB	2015-2020	Advocate	1	
8.16 Implement conservation grazing on appropriate sites to manage areas of saltmarsh, sand dunes and other areas of herb-rich pasture by supporting appropriate conservation grazing initiatives	NE	SCAONB, Owners, RSPB, CWT	2015-2020	Catalyst	1	
8.17 Maintain favourable conditions of habitats and heritage sites and habitat networks to make ecological systems as robust as possible to climate change, using policy drivers such as the Natural Environment White Paper.	NE	EH, SCAONB, RSPB, CWT, Owners, LAs	2015-2020	Catalyst	1	

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
8.18 Develop and deliver an enhanced programme of monitoring where the need is identified	SCAONB	Record Centres	2015-2020	Catalyst	2	
8.19 Develop and deliver an Initiative to provide connectivity of pollination	Buglife/BC	SCAONB, CWT, RSPB, NE	2015-2020	Catalyst	3	
8.20 Develop and support conservation and research initiatives with a focus on NERC section 41 priority species	SCAONB	NE, CWT, RSPB, RT	2015-2020	Catalyst	1	
8.21 Develop and deliver new funded programme of wetland management at target sites to conserve the Marsh Fritillary butterfly and associated species	NE	SCAONB, RSPB, CWT, RSPB, Owners	2015-2020	Catalyst	2	
8.22 Continue species introductions for specialist species to facilitate recolonization of the Marsh Fritillary Butterfly	BC	NE, CWT, Owners	2015-2020	Advocate	2	
8.23 Develop a list of species characteristic to the AONB to include internationally, nationally and locally important species and relevant management actions to benefit them, taking note of sensitive areas e.g. high tide roosts and Natterjack ponds	SCAONB	NE, Record Centres	2015-2020	Catalyst	2	
8.24 Support and implement appropriate Species Recovery Programmes, following good practice guidance for species release and (re)introduction	NE	SCAONB, CWT, RT, RSPB, ARC, EA	2015-2020	Advocate	3	
8.25 Secure sustainable fisheries and shell fisheries management for the benefit of coastal species and habitats	NWIFCA	NE, SCAONB, CWT, SFP	2015-2020	Advocate	3	
Objective 9 : To protect the establishment and spread of invasive non-native species (INNS) and plant diseases, and where appropriate eradicate populations						
9.1 Co-ordinate an invasive and non-native species assessment, both marine and on land, and establish a rapid follow-on programme to act on the findings	NE	SCAONB, CWT, LAs, RSPB, RT	2015-2020	Advocate	1	
9.2 Develop programmes of activity to encourage eradication of Himalayan Balsam, Japanese Knotweed, Giant Hogweed and other INNS within the AONB as part of wider initiatives	EA	NE, SCAONB, CWT, RT	2015-2020	Advocate	2	
9.3 Establish a rapid response plan and programme of activity to report, monitor and raise awareness of biosecurity and INNS within the AONB, also working with Solway Firth Partnership for the marine species	NE	RT, CWT, RSPB, SFP, SCAONB	2015-2020	Advocate	2	
9.4 Protect and monitor tree health with a focus on Chalara and Phytothphora through implementation of tree surveys and disease action plans, and monitor health and diseases for amphibians and reptiles	FC	NE, SCAONB, CWT, RSPB, ARC	2015-2020	Advocate	2	1.6 4.2
9.5 Contribute to monitor grey squirrel control in accordance with recognised red squirrel conservation strategy and guidance from the Red Squirrels Northern England Partnership	RSNEP	NE, SCAONB, CWT, RSPB, Owners	2015-2020	Advocate	3	
9.6 Continue to raise awareness of invasive non -native species of animals and plants and increase vigilance to prevent establishment of invasives where possible, through leaflets and ongoing volunteer activity	NE	SCAONB, SFP, MMO, WCIFCA, CWT, FC, SCCVG	2015-2020	Advocate	1	
Objective 10: To ensure conservation and understanding of geodiversity and its importance in the landscape and biodiversity of the AONB						
10.1 Carry out condition monitoring of geological SSSIs in the AONB to ensure they are in favourable condition	NE	SCAONB	2015-2020	Advocate	1	
10.2 Ensure that no features of interest are lost to development or unsympathetic land management including RIGGS	LAs/ NE	SCAONB	2015-2020	Advocate	1	
Objective 11: To ensure the conservation and protection of Marine Protected Areas and coastal dunes and marshes						

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
11.1 Conserve and enhance priority coastal habitats including saltmarsh, coastal and floodplain grazing marsh, maritime cliffs and slopes, vegetated shingle, coastal sand dunes and mudflats	NE	SCAONB, EA, CWT, RSPB, Owners	2015-2020	Executive	1	
11.2 Raise awareness of the risks of trampling and disturbance on Honeycomb Reefs in the proposed Allonby Bay Marine Protected Area	NWIFCA/MMO	NE, SCAONB, CWT	2015-2020	Advocate	2	

Theme: Water Environment						
Objective 12: To ensure freshwater courses are appropriately managed and their quality enhanced						
Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
12.1 Implement Catchment Management Plans for the area's main rivers, linked to Solway Tweed River Basin Management Plan and the AONB Management Plan (actions include achieving good water body status, reducing bankside erosion, reducing run-off into rivers, improving watercourse management and favouring natural solutions over engineered)	EA	NE, RT, Owners	2015-2020	Advocate	1	
12.2 Expand and improve programme of water quality monitoring in and around the AONB under the requirements of the WFD enabling appropriate measures to be defined and delivered to meet WFD targets	EA		2015-2020	Advocate	1	
12.3 Deliver improved standards of water quality for all river catchments that feed into the Solway Firth ensuring that the Solway Tweed River Basin Management Plan reflect the importance of the estuary and its designated wildlife sites	EA		2015-2020	Advocate	1	
12.4 Develop new opportunities to tackle issues of point source pollution from the outflow of effluent from septic tanks, also agricultural point-sources and diffuse groundwater pollution due to agricultural activity and other forms of nitrogen enrichment	EA	NE, RT, Owners	2015-2020	Advocate	1	
12.5 Implement the Catchment Sensitive Farming initiative within the AONB, in the Wampool and Waver Priority Catchments	EA	NE, SCAONB	2015-2020	Advocate	1	
Objective 13: To secure sustainable land management that regulates flooding						
13.1 Secure sympathetic management of the diverse array of high quality wetlands both inside and outside designated sites, including lowland raised bogs, coastal and floodplain grazing marsh	NE	EA, CWT, SCAONB, RSPB, Owners	2015-2020	Executive	1	
13.2 Engage with prospective Internal Drainage Board (IDB) to influence its aspirations and ensure best practise watercourse management is promoted and implemented by an IDB	EA	NE, CWT, SCAONB, Owners, RSPB, pIDB	2015-2020	Advocate	1	
13.3 Expand priority freshwater wetland habitats including wet grassland, peatlands and reedbed within and around the AONB, in particular the programme of lowland peatland and wetland restoration that meets quality thresholds.	NE	SCAONB, EA, RSPB, CWT, Owners	2015-2020	Catalyst	1	
13.4 Work to secure sustainable floodplain management in the AONB and its catchment to regulate downstream flooding, including increasing the capacity of the floodplain to regulate flows and store water	EA	NE, SCAONB, RSPB, CWT	2015-2020	Advocate	1	
Objective 14: To make a significant contribution to the delivery of the Water Framework Directive by improving water quality and water body status in and around the AONB and Coast						
14.1 Investigate and resolve with United Utilities, bathing water quality issues at Allonby Bay North	UU	EA, SCAONB, RT, Owners, NFU	2015-2016	Catalyst	1	

Theme: Historic Environment and Culture

Objective 15: To ensure the effective conservation and management of the Solway Coast AONB historic environment, including historic buildings, archaeological sites, heritage landscapes and heritage fisheries

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
15.1 Conserve and enhance the important sites and features linked to cultural heritage and surrounding cultural landscape with particular reference to Hadrian's Wall, Hadrian's Wall buffer World Heritage Sites and the historic Holme Cultram Abbey	EH	NNP, CaCC, CCC, ABC, Dioc, PCs, SCAONB, SM,	2015-2020	Advocate	1	
15.2 Promote increased awareness of the Roman and Cistercian Solway through improved interpretation and archaeology research (SWP)	SCAONB	EH, Dioc, SM, ABC, CCC, CaCC, TH	2015-2020	Advocate	2	
15.3 Continue to promote awareness of the surviving historic landscape both the built features and associated landscapes through improved access, rights of way network including long distance paths and cycleways	SCAONB	EH, ABC, CaCC, CCC, Sus, Owners, NE	2015-2020	Catalyst	1	
15.4 Work with agencies (ECOSAL) to conserve and maintain the Crosscanonby Salt pans and others in the AONB	SCAONB	Ecosal, Owners, EH, NE, ABC, CCC	2015-2020	Executive	1	
15.5 Through training schemes protect and restore traditional buildings and develop the skills to restore them using traditional techniques, including cobbles, clay dabbin and local sandstone	SCAONB	NE, EH, Owners, Trainers	2015-2020	Catalyst	2	
15.6 Through training and competitions protect and restore field boundary features such as North Cumberland Style hedgelaying and dry stone hedge kest building, ditching and gatestoop replacement projects	SCAONB	NE, EH, Trainers, Owners	2015-2020	Catalyst	1	
15.7 Improve and identify the location and the documentation of historic sites that are at threat from loss through inappropriate management and secure sympathetic land management at these sites	EH	NE, SCAONB, Owners, LAs	2015-2020	Catalyst	2	
15.8 Provide an improved visitor experience of, understanding of, and enjoyment of the AONB's natural and historic heritage and engage the local community in its future management through events celebrating its traditional management	SCAONB	EH, ABC, CaCC, CCC, Owners, Grampus	2015-2020	Catalyst	2	
15.9 Continue to improve interpretation of historic sites through both on site information and the use of web base resources and mobile technologies	SCAONB	EH, Grampus, NE	2015-2020	Catalyst	2	
15.10 Promote Haaf Fishing as a sustainable and traditional method of sea fishing for salmonids	SCAONB	EA, Haafs	2015-2020	Advocate	3	
15.11 Work with the custodians of Hadrian's Wall Heritage Site to monitor and preserve the Buffer Zone and Wall itself	EH	SCAONB, NE, LAs	2015-2020	Advocate	1	
Objective 16: To ensure and increase in professional and public knowledge and understanding of the AONB's historic environment						
16.1 Work with Development Planners to maintain local vernacular styles in new developments and to ensure the layout of new developments reflect local settlement structure	LAs	SCAONB, EH, NE	2015-2020	Catalyst	1	
16.2 Establish projects which empower local people to record and celebrate what's special to them about their local historic environment	SCAONB	Volunteers, Grampus, EH, NE	2015-2020	Catalyst	2	
16.3 Arrange workshops and other events primarily aimed at local landowners, farmers and land managers to raise awareness of the historic environment and good practice in its management, based initially on Cistercian Monastery sites in the AONB	SCAONB	Groups, EH, NE, Volunteers	2015-2020	Catalyst	2	



Theme: Development and Planning

Objective 17: To ensure the special qualities of the AONB and its setting are fully respected in all Local Plan (National Plans) documents and decision making processes have regard to the Statutory Management Plan

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
17.1 Establish robust detailed policies in local plans and neighbourhood development plans which support the purpose of AONB designation. Such policy should - reflect the national importance of AONBs and prioritise the conservation of tranquillity, wildness and remoteness, local distinctiveness and landscape quality and character. It should also protect the AONB from the adverse effects of development in its setting. Produce a dedicated DPD for any aspect of development in the AONB	LPA's	SCAONB, PCs	2015-2020	Advocate	1	
17.2 Support the development of parish, community and neighbourhood plans to include a strong focus on the conservation of the natural and cultural heritage of the Solway Coast AONB	PCs	LPA's, SCAONB	2015-2020	Catalyst	1	
17.3 Continue to comment on all planning and development proposals which may have a significant impact on the purpose of AONB designation or which may provide opportunities for enhancement, and comment on emerging policy in any draft local plan consultation or review	SCAONB	NE, EA, EH	2015-2020	Executive	1	
17.4 Work with other partners to resolve potentially conflicting management needs of coast, ecology and archaeology, particularly at the Roman Cemetery at Beckfoot and Crosscanonby Salt pans	EH	SCAONB, NE, LAs	2015-2020	Catalyst	1	
Objective 18: To ensure that development in the AONB and its setting, is of a nature, scale, location and design so that it meets community need without compromising the special qualities of the Solway Coast AONB						
18.1 Ensure robust detailed policies in local plans and neighbourhood development plans support the purpose of the AONB designation, and reflect the national importance of AONBs, to conserve local distinctiveness and landscape quality and character	LAs PC	SCAONB,	2015-2020	Advocate	1	
18.2 Support the development of parish, community and neighbourhood plans to include a focus on the natural and cultural heritage of the Solway Coast AONB	PCs	SCAONB, LPA's	2015-2020	Catalyst	1	
18.3 Comment on all development proposals which may have a significant impact on the purpose of AONB designation or which might provide opportunities for enhancement, and comment on emerging policy in any draft local plan consultation or review	SCAONB	NE, EA, LAs	2015-2020	Executive	1	
18.4 Support the retention of local services to support community life	LAs PC	SCAONB,	2015-2020	Advocate	1	
18.5 Consult the AONB partnership about new road management and improvement schemes in the AONB	CCC	SCAONB	2015-2020	Advocate	1	
18.6 Influence any proposals to minimise/negate any negative impacts with the Solway Energy Gateway Scheme for a Solway Barrage	SCAONB	BEC, NE, EA	2015-2020	Catalyst	2	

SECTION 2 UNDERSTANDING AND ENJOYMENT

Theme: 2.2.1 Access and Recreation

Objective 19: To ensure that a wide range of opportunities exist for all to gain physical access with sound infrastructure, and information about the AONB to understand its special qualities

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
19.1 Work with Cumbria County Council Rangers to maintain and improve the rights of way network, with the assistance of volunteer activity	CCC	LAs, SCAONB, SCCVG	2015-2020	Advocate	2	
19.2 Continue to work with Natural England and Local Authorities to develop and deliver safe and well informed coastal access	NE	ABC, CCC, CaCC, PCs, SCAONB	2015-2020	Advocate	2	
19.3 Deliver the England Coast Path within the AONB, working with owners and partner organisations to plan and implement an extended route which does not have significant detrimental impacts on key historic, geological and biodiversity assets	NE	Owners, CCC, CaCC, ABC, Partners, EH	2015-2020	Catalyst	2	
19.4 Encourage safe access for all to the lowland peat bogs through provision of boardwalks and up to date information at Campfield Marsh Visitor Centre	RSPB	NE, CWT, SCAONB	2015-2020	Catalyst	2	
Objective 20: To maintain, improve and promote access and quiet recreational opportunities in a sustainable way for a diverse group of people						
20.1 In collaboration with other lead organisations, provide walkers and cyclists on the Hadrian's Wall walking and cycling routes local information	CCC	NNP, SCAONB, EH, CT	2015-2020	Advocate	2	
20.2 Encourage the promotion of all forms of access via leaflets, interpretation panels, social media, web based information to increase the awareness of the vast opportunities of Access for All in the AONB	SCAONB	CCC, EH, ABC, CT	2015-2020	Advocate	1	
20.3 Encourage and promote access via public transport where possible and by engaging local transport firms to provide more regular rural services	CCC	SCAONB, CVS, Bus firms	2015-2020	Advocate	2	
Objective 21: To encourage and promote understanding, well informed access and enjoyment of the coast and AONB						
21.1 Promote with other agencies and partners the Countryside Code for considerate countryside behaviour, and information about any restrictions to access on sensitive wildlife sites at certain times to avoid disturbance to wildlife or breeding animals.	NE	CCC, ABC, CaCC, Owners, SCAONB, RSPB, CWT	2015-2020	Advocate	2	
21.2 Encourage dog owners to control their dogs closely and effectively (particularly on the intertidal zone, saltmarsh and farmland) and clean up after their dogs, by providing signage and raising awareness of the effects of disturbance of wildlife and farm animals	NE	Owners, RSPB, CWT, SCAONB	2015-2020	Advocate	2	
21.3 Promote coastal safety by ensuring effective signage is in place particularly around Allonby Bay	CCC	ABC, PCs, SCAONB, NE	2015-2020	Catalyst	2	
21.4 Encourage coordinated activity to tackle wildlife crime	Police	SCAONB, SCCVG, LAs	2015-2020	Advocate	2	
21.5 Encourage appropriate use of bridleways and the network of quiet roads and lanes by cyclists	CCC	NE, SCAONB, PCs, Owners	2015-2020	Advocate	3	
21.6 Identify the need to develop a unified strategy towards the provision of information and signage so that there is no duplication or wasted resources or proliferations of signage	SCAONB	All organisations providing signs	2015-2020	Advocate	2	



Theme: 2.2.1 Tourism

Objective 22:

To ensure the developing tourism industry and associated economy is environmentally sustainable, based on, and actively supports, the special qualities of the Solway Coast AONB and brings benefits to the community and has a consistent recognisable brand

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
22.1 With other destination management organisations develop a single destination management plan for the AONB with a consistent and recognisable brand	CT	SCAONB, EH, CCC	2015-2020	Executive	1	
22.2 Work alongside local businesses to improve their environmental and 'green' credentials and visitor payback schemes	SCAONB	CT, Businesses	2015-2020	Advocate	2	
22.3 Promote locally produced food and other products to reinforce local distinctiveness and add value to the local economy	SCAONB	Businesses, CT, LEP	2015-2020	Advocate	3	
22.4 Work with Cumbria Tourism and the Local Enterprise Partnership to implement a sustainable visitor strategy for the AONB	CT	SCAONB, LEP, CCC, ACT	2015-2020	Catalyst	2	
22.5 Continue to work with Cumbria ACT, other partnerships and local businesses to improve working relationships between communities in the AONB and promote tourism opportunities	CT	ABC, LEP, CaCC, CCC, ACT, Businesses, SCAONB	2015-2020	Catalyst	2	
22.6 Through partnership working promote the peatlands as an important destination for wildlife and a unique habitat.	NE	RSPB, CWT, SCAONB	2015-2020	Catalyst	1	
22.7 Establish events programmes for residents, day visitors or tourists celebrating aspects of community or cultural heritage	SCAONB	CT, CWT, NE, RSPB, Diocese, WCAS	2015-2020	Executive	2	
22.8 Seek ways to obtain added value from users of the national trails that pass through the AONB	SCAONB	NE, RSPB, CWT, Businesses				
22.9 Use the 'Walk Unlimited' website or similar sites including the AONB website, to provide information on national trails and to promote local businesses that offer services to visitors	SCAONB	Businesses	2015-2020	Advocate	2	
Objective 23: To ensure an increase in heritage management, tourism, hospitality and outdoor education to help secure the future of the area						
23.1 Continue to work with English Heritage, Holme Cultram Abbey, custodians of Hadrian's Wall, Tullie House and other heritage organisations to promote sustainable management of heritage assets in the AONB	EH	SCAONB, TH, Diocese, WCAS	2015-2020	Catalyst	2	
23.2 To provide outdoor education through the Solway Wetlands Partnership Scheme and its legacy of partnerships to promote the special qualities of the AONB	SCAONB	NE, RSPB, CWT	2015-2020	Executive	1	
Objective 24: To monitor and manage recreational pressure to avoid harmful impacts on the special qualities of the AONB						
24.1 Market and promote the AONB and its special qualities and accessibility on an upgraded AONB website, including pre-arrival marketing, also monitoring uptake of enquiries	SCAONB	CT, LAs	2015-2020	Executive	1	
24.2 Through the promotion of public transport, reduce the number of other vehicles using the limited parking facilities on the coast within the AONB	SCAONB	CCC, ABC, CaCC, PCs	2015-2020	Catalyst	2	
24.3 Promote alternative means of transport within the AONB such as cycle hire, tramper hire, with looped access routes promoted in leaflet production	SCAONB	CT, ACT, CCC, CaCC, ABC	2015-2020	Advocate	2	
24.4 Improve the infrastructure of parking areas for visitors through further provision of bins, furniture, surfacing and interpretation panels highlighting the special qualities of the area	LAs	PCs, SCAONB, CT	2015-2020	Catalyst	2	

SECTION 3 SOCIAL AND ECONOMIC WELL-BEING

Theme: 3.1.1 Employment and Business						
Objective 25: To ensure that access to securing of funding such as AE, will support sustainable farming practices and support implementation of identified measures that support the conservation of natural beauty						
Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
25.1 Promote locally produced food and other products to help reinforce local distinctiveness and support local product development	SCAONB	Groups, CT	2015-2020	Advocate	2	
25.2 Through the NAAONB's influence, including Natural Environment White Paper Initiatives, ensure that investment is targeted at supporting land managers	NAAONB	NE, SCAONB, Defra, LEP	2015-2020	Catalyst	1	
25.3 Provide bespoke advice and practical support to encourage landowners and managers to apply for grants through the environmental land management scheme and other rural development schemes	NE	SCAONB, NFU, RDP	2015-2020	Advocate	2	
25.4 Through grants and advice, support farm diversification which increases economic sustainability and helps to conserve and enhance the natural environment including sensitive renovation of traditional barns	NE	SCAONB, LEP, NFU, EH, LAs	2015-2020	Advocate	1	
Objective 26: To ensure opportunities are there to access training and employment and build skills base in sectors related to the purpose of designation such as land management and sustainable tourism						
26.1 Deliver and host an annual programme of land management and rural skills training and events including North Cumberland Style Hedgelaying and dry stone kist facing, to landowners, contractors and those working in the countryside of the AONB	SCAONB	NE	2015-2020	Executive	1	
26.2 Continue to work with Cumbria ACT, other partnerships and local businesses to improve working relationships between communities in the AONB and promote tourism opportunities	CT	ACT, SCAONB, partners, PCs	2015-2020	Catalyst	2	
26.3 Work with Coastal Communities Schemes (and FLAG) where possible to promote coastal businesses and sustainable tourism	FLAG	CCC, SCAONB, CT	2015-2020	Catalyst	2	
26.4 Work with partners and organisations to deliver high-speed broadband to support tourism and farm businesses and improve their outputs ensuring the sensitive siting of necessary infrastructure	CCC	SCAONB, UU, BT, CT	2015-2020	Advocate	2	
Objective 27: To ensure planning for housing is both appropriate to the needs of communities and has regard to the AONB character						
27.1 Promote best practice in design and influence local authorities to provide suitable housing developments which do not have an adverse impact on tranquillity or on traditional village structure	LAs	SCAONB, EH	2015-2020	Executive	1	
27.2 Continue to respond to property development applications from the Local Authorities within the AONB. Also to respond to large scale developments outside the AONB boundary, such as wind turbines, that could have a significant impact and adverse effects on the AONB landscape	SCAONB	LAs, NE, EH	2015-2020	Executive	1	
27.3 Engage with local communities in their Neighbourhood Plans with regards to the special quality of the AONB	SCAONB	PCs, ACT	2015-2020	Catalyst	1	
27.4 Establish robust detailed policies in local plans and neighbourhood development plans which support the purpose of AONB designation. Such policy should reflect the national importance of AONBs and prioritise the conservation of tranquillity, wildness and remoteness, local distinctiveness and landscape quality and character. It should also protect the AONB from the adverse effects of development in its setting	SCAONB	LAs, NAAONB, NE, EH	2015-2020	Executive	2	
Objective 28: Across the sectors, develop an economy based on the valuing of, and support of, the key attributes of the AONB with a consistent brand that makes the link to the landscape						

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
28.1 Work with businesses and organisations such as Cumbria Tourism, Cumbria ACT and NFU, to facilitate projects that support sustainable growth in the AONB whilst valuing the key attributes of the landscape	CT	ACT, NFU, LAs, EH, Groups	2015-2020	Catalyst	2	
28.2 Provide clear, accurate and positive messages about the special qualities of the Solway Coast AONB that can be used in marketing literature	SCAONB	CT, ACT	2015-2020	Executive	1	
Objective 29: To ensure maximisation of opportunities for the AONB's designation, special qualities and management to drive and support rural economic growth						
29.1 Involvement in projects which encourage further development of nature and culture based attractions, including Campfield Barn, Holme Cultram, Senhouse Museum and Tullie House Museum	SCAONB	NE, RSPB, TH, SM	2015-2020	Executive	1	
29.2 Support Green Business networks and others on economic and environmental benefits of greening business	Operators	SCAONB	2015-2020	Advocate	1	
29.3 Promote seasonal activities, such as bird watching, walking and cycling and promotion of nature/culture based activities/packages in the AONB to extend the visitor season from the traditional summer window by supporting niche markets	SCAONB	Operators	2015-2020	Advocate	1	
29.4 Engage with Cumbria Local Economic Partnerships to develop new opportunities to facilitate growth linked to the natural environment	LEP	SCAONB	2015-2020	Executive	2	

Theme: 3.2.2 Services						
Objective 30: To ensure the current level of local services and access to those services by all is maintained and enhanced where possible to support sustainable communities						
Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
30.1 Promote local services, businesses and products in all AONB communications including the AONB website and publications delivered in and around the AONB	SCAONB	CCC, ABC, Businesses, CaCC, ACT	2015-2020	Executive	2	
30.2 Support local businesses and services which contribute to the AONB objectives through project funding or other sources of external funding	SCAONB	Businesses, LEP, ACT	2015-2020	Advocate	2	
30.3 Work with the Local Authorities and Cumbria County Council to retain and promote local services	SCAONB	CCC, CaCC, ABC	2015-2020	Advocate	2	
30.4 Provide training, through the AONB Partnership, for developing skills around services linked to its special quality, such as tourism, traditional skills and environmental skills	SCAONB	CWT, REPB, NE, CT, ACT	2015-2020	Catalyst	1	
30.5 Use the NAAONB network to identify information share case studies to learn more from other AONBs	NAAONB	SCAONB	2015-2020	Executive	1	
30.6 Support the retention and expansion of local services to support community life. Apply the AONB Partnership's Sustainable Development Fund (where budgets allow) and other funds to suitable projects	SCAONB	NE	2015-2020	Executive	1	
Objective 31: To encourage infrastructure improvements to achieve superfast broadband and mobile phone coverage for the whole of the AONB without a significant adverse impact						
31.1 Support positive action to achieve the roll-out of superfast broadband, ensuring the sensitive siting of necessary infrastructure	CCC	SCAONB, PCs, BT	2015-2020	Advocate	1	
31.2 Support positive action to improve mobile phone signal within the AONB, ensuring the sensitive siting of necessary infrastructure	CCC BT	SCAONB	2015-2020	Advocate	3	
31.3 Work with partners and organisations to deliver high-speed broadband to support tourism and all businesses and services and improve their outputs ensuring the sensitive siting of necessary infrastructure	SCAONB	BT, Partners, CT, NE, EH, Owners	2015-2020	Catalyst	2	

Theme: 3.2.3 Transport

Objective 32: To ensure the special qualities of the AONB are respected in the planning, design, provision and management of all types of transport and associated infrastructure

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
32.1 Consult the AONB Partnership about new road management and improvement schemes in the AONB and link to the next round of Local Transport Plans	CCC	SCAONB, ABC, CaCC	2015-2020	Catalyst	1	
32.2 Encourage the Local Highway Authority through the SMP process to identify a long-term solution to storm damage on the coastal B5300 road	SCAONB	CCC, ABC, NE, EA	2015-2020	Catalyst	1	
32.3 Through partnership working with the Highways Department, introduce lorry routing schemes away from the B5300 and other quiet roads.	SCAONB	CCC, ABC	2015-2020	Catalyst	3	
32.4 With the Highways Authority develop and undertake audits of excessive cluttering of transport signage and that any signage should be in keeping with the special qualities of the AONB, including traditional finger posts.	CCC	SCAONB, PCs, CT	2015-2020	Catalyst	2	
32.5 Facilitate roll out of 20mph speed limits within villages while ensuring signage is appropriate to its setting	CCC	SCAONB, PCs	2015-2020	Catalyst	3	
32.6 Engage with Highways Departments, Local authorities and Parish councils on road infrastructure improvements and signage within the AONB	SCAONB	CCC, CaCC, ABC, PCs	2015-2020	Catalyst		
32.7 Consult the AONB Partnership about management and maintenance of Rural Roads and new improvement schemes in the AONB	SCAONB	CCC, ABC, Highways, CaCC	2015-2020	Advocate	1	
Objective 33: To ensure opportunities are taken to promote walking, cycling and public transport and enhance schemes where possible to provide an alternative to private car use						
33.1 Promote walking and cycling through AONB Partnership guides and publications and ensure that user infrastructure provision ensures the Coast Path and Hadrian's Wall Trail and Cycleway are effectively supported	SCAONB	CCC, Sustrans, NE, CT	2015-2020	Advocate	1	
33.2 Engage with Sustrans in initiatives under Local Transport Plans to stimulate better use of public transport and cycling events. Integrate with hub sites, such as The Wave in Maryport, as a centre for electric cycle hire and point for integration of public transport network	Sustrans	SCAONB, CCC, ABC, CaCC, Businesses	2015-2020	Catalyst	2	
33.3 Work with partner organisations to enable more buses to be run over the weekend period from Carlisle to Bowness on Solway, enhancing Hadrian's Wall walkers ability to travel more frequently	SCAONB	CCC, CaCC, ABC, NNP	2015-2020	Catalyst	3	
33.4 Develop and promote walking and cycling loops that integrate with public transport	SCAONB	CCC	2015-2020	Executive	2	
33.5 Work with Local Councils to promote opportunities in the AONB at key public transport 'get on points'.	LAs	SCAONB, PCs	2015-2020	Catalyst	2	
33.6 Link events and activities to available local transport wherever possible, e.g., volunteer events and workdays	SCAONB	SCCVG	2015-2020	Executive	2	
33.7 To further extend the Hadrian's Cycleway off-road section between Allonby and Maryport, north of Allonby towards Silloth	CCC	SCAONB, NE	2017-2020	Catalyst	3	



SECTION 4: ENGAGEMENT

Theme: Awareness and Communication (Education)

Objective 34: To ensure fostering a community interest and culture linked to the AONB's strong sense of placey

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
34.1 To research, monitor, analyse and address data gaps by developing data sharing protocols with key partners and improve GIS capability in the AONB team.	SCAONB	NE, TH, ABC	2015-2020	Executive	2	
34.2 To be involved in the BARS2 process of wildlife data gathering	SCAONB	NE	2015-2020	Executive	2	
34.3 Maintain a high quality AONB website as the key information resource for visitors, local residents, partner organisations and other relevant audiences, ensuring it is accessible, customer focussed, well designed and regularly updated, and has interesting and stimulating content	SCAONB	Partners, CT	2015-2020	Executive	2	
34.4 Continue to pursue highway signage with the AONB England's Solway Coast logos beyond the AONB boundary	SCAONB	CCC, CT	2016-2020	Catalyst	2	
34.5 Continue to produce interpretative leaflets, booklets, AONB Coaster and 2 monthly newsletters to inform the wider public of the special qualities of the AONB, including material produced by the wider partnership	SCAONB	Partners	2015-2020	Executive	1	
34.6 Promote the importance of Holme Cultram Abbey, peatlands, and other unique areas of the AONB through activities with schools and groups within and outside the AONB	SCAONB	EH, WCAS, Groups	2015-2020	Executive	1	
34.7 Maintain an active social media presence and promote events, activities and stories through the media	SCAONB	Partners	2015-2020	Executive	1	
34.8 Deliver talks and presentations as needed on the special qualities and works of the AONB Partnership and establish events programmes for visitors and residents to celebrate community or cultural heritage	SCAONB	Partners	2015-2020	Executive	2	



Theme: 4.1.2 Community Involvement

Objective 35: To enable local communities to become involved in the custodianship of the AONB through engaging with management and support of key assets

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
35.1 Build the capacity of community-based projects linked to natural and cultural heritage through grant aid and in kind support	SCAONB	SCCVG, Partners	2015-2020	Advocate	1	
35.2 Establish oral history projects focusing on peatland and farming history	SCAONB	CWT, RSPB, NE	2015-2020	Catalyst	2	
35.3 Develop and support projects which give communities, networks and individuals opportunity to express what their 'place' means to them e.g. through the Solway Wetlands Landscape Partnership Scheme	SCAONB	Partners	2015-2020	Catalyst	2	
35.4 Develop a successor to the Archaeology programme carried out in the Solway Wetlands Landscape Partnership Scheme	SCAONB	Partners	2015-2020	Catalyst	2	
35.5 Develop new opportunities for people to participate in survey, monitoring and hands-on conservation activities for the natural and historic environment	SCAONB	NE, RSPB, EH, WCAS	2015-2020	Catalyst	1	
35.6 Develop a Junior or Youth Rangers programme to engage involve young people in new ways, and optimise opportunities from linking with the Europarc Federation network. Seek funding to maintain a schools programme	SCAONB	SCCVG, Europarc	2016-2020	Executive	3	
35.7 Develop opportunities to promote volunteering as part of corporate social responsibility programmes	SCAONB	SCCVG, LAs, CVS, Businesses, Groups	2015-2020	Executive	2	
35.8 Continue to run events and workdays for the Solway Coast Community Volunteer Group and other partners, including beach litter picks and land management on reserves and SSSI's in the AONB	SCAONB	SCCVG, SFP	2015-2020	Executive	1	
35.9 Seek opportunities to extend stewardship of natural environment to new areas	NE	SCAONB, CWT, RSPB	2015-2020	Catalyst	2	
35.10 Continue to promote volunteering in the AONB through partnerships and seek best practise for volunteers and activities carried out in the conservation of the area	SCAONB	SCCVG, Groups, Partners, CVS	2015-2020	Advocate	2	
35.11 Actively engage with communities within the AONB to help identify local issues and develop solutions, whilst conserving and enhancing the special qualities of the local natural and built environment	SCAONB	LAs, PCs, EH, NE, CWT, RSPB	2015-2020	Catalyst	2	
35.12 Continue to promote walking, cycling, wildlife watching and other healthy recreational activities through the AONB website, leaflets, social media and electronic media	SCAONB	Sustrans, RSPB, LAs, CWT, RSG	2015-2020	Advocate	2	
Objective 36: To support local communities in moving towards sustainable low carbon living						
36.1 Promote alternative forms of transport such as walking, cycling, and public transport where available, as a means of moving about in the AONB	SCAONB	Sustrans, LAs	2015-2020	Advocate	2	
36.2 Promote, where appropriate, small scale renewable energy schemes to help contribute to energy reduction targets	SCAONB	LAs, Owners	2015-2020	Advocate	2	
36.3 Promote energy and water efficiency measures in any new development within the AONB	SCAONB	EA, UU, Owners, NE	2015-2020	Advocate	2	
36.4 Promote reduction of car use and using public transport where possible, and purchasing locally sourced food and services	SCAONB	LAs, CCC, PCs, Groups	2015-2020	Advocate	2	
Objective 37: To ensure less waste is produced through waste minimisation and recycling of waste materials generated by Communities						
37.1 Encourage recycling schemes in AONB villages and continue with beach litter picks with local communities and volunteers	PCs	LAs, SCAONB, SCCVG, Groups	2015-2020	Executive	1	

SECTION 5: CLIMATE CHANGE

Theme: Climate Change

Objective 38: To ensure carbon emissions within the AONB are reduced by reducing energy consumption, applying energy conserving measures, encouraging more sustainable patterns of development, and utilising renewable energy generation technologies that are of an appropriate type and scale for their siting

Action	Initial Lead	Partners	Timescale	AONB Team Role	Priority	Linked Objective
38.1 Promote renewable energy sources that are complementary to the AONB character	CCC, CaCC, ABC, FLD	NE, SCAONB	2015-2020	Advocate	2	1.10
38.2 Continue to work with planning authorities on matters relating to housing development, wind turbine development and possible Solway Barrage	LAs	SCAONB, NE, PCs, EA	2015-2020	Catalyst	2	
38.3 Promote energy and water efficiency measures in any new development within the AONB	EA	SCAONB, NE, LAs	2015-2020	Advocate	2	
38.4 Continue to restore lowland raised bogs by restoring appropriate hydrology for their biological value, historic value and as a climate regulator by both securing the storage of carbon in peat and by enabling sequestration of Carbon dioxide from the atmosphere	NE	SCAONB, CWT, RSPB, EA, EH, Owners	2015-2020	Catalyst	1	
Objective 39: To ensure land is managed sustainably in accordance with best practice to minimise erosion and water pollution and maximise resilience to drought services						
39.1 Continue to work with partners and volunteers to deliver ongoing habitat enhancement and stability	NE	EA, EH, SCAONB, RSPB, CWT	2015-2020	Catalyst	1	
39.2 Implement Catchment Management Plans for the area's main rivers, linked to River Basin Management Plans and the AONB Management Plan (actions include achieving good water body status, reducing bankside erosion, reducing run-off into rivers, improving watercourse management and favouring natural solutions over engineered)	EA	SCAONB, NE, Owners, LAs	2015-2020	Catalyst	1	13.1
Objective 40: To work with SMP2 policy in managing coastal change and securing adaptive management of coastal habitats						
40.1 Work with partners to address coastal squeeze as part of the delivery of SMP2 and also embrace adapting to coastal change along the Outer Coast.	CCC	ABC, NE, CaCC, SCAONB, Owners	2015-2020	Catalyst	1	
40.2 Work with partners to secure coastal management regimes that mitigate impacts, e.g. through agri-environment schemes to allow saltmarsh accretion and land level rise to offset sea level rise	LAs	SCAONB, NE, EA, Owners	2015-2020	Catalyst	1	
40.3 Work with partners to manage access to the coastal zone so that fragile 'barrier' habitats are not damaged comprising their coastal protection function	NE	SCAONB, LAs, Owners, NWIFCA	2015-2020	Catalyst	1	
40.4 Work with partners to reduce the need for unsustainable infrastructure in the coastal zone	NE	LAs, SCAONB, Owners,	2015-2020	Catalyst	1	
40.5 Raise awareness of the inevitability of coastal change through partnership literature and media articles	SCAONB	LAs, NE, EA, EH, RSPB	2015-2020	Advocate	2	



Appendix 1

Glossary of terms

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).

Affordable Housing

Housing provided for those whose income does not allow them to compete in the open market for house purchase, or for whom private sector economic rents are too high.

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

Renewable energy made available from materials derived from biological sources (bioenergy or biomass energy).

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.

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

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.

Clay Dabbin

Cottages or barns, with walls constructed in the original clay daub mixed with straw and pebbles called clay dabbin

Conservation Area

An area of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.

Corridor

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

Countryside and Rights of Way Act 2000

An Act of Parliament that creates new rights to walk on ‘open country’; moor, mountain, heath, down and common land. It also covers public rights of way, nature conservation, Areas of Outstanding Natural Beauty and National Parks.

County Wildlife Site (CWS)

Sites recognised by Cumbria Wildlife Trust, which are non-statutory areas of wildlife value and are protected in local plans.

Drumlins

Streamlined elliptical hills of glacial till formed parallel to the direction of ice movement.

Ecosystem

A dynamic complex of plant, animal and microorganism 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 Assessment

The assembling of information in relation to a proposed development which by virtue of its siting, design, size or scale would have a significant effect on the environment

Environmentally Sensitive Area (ESA)

Areas designated by the Department of Food and Rural Affairs (Defra) within which financial assistance is available to farmers to help maintain traditional farming practices in areas where landscape and wildlife are under threat from the intensification of agriculture.

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 are currently developing a new scheme, which will be funded through the successor to the Rural Development Programme for England (RDPE) 2007-13. Defra aim to build on and enhance what has already been delivered through Environmental Stewardship (ES), the English Woodland Grant Scheme (EWGS) and Catchment Sensitive Farming (CSF).

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.

European Water Framework Directive

Aims to protect and improve the environmental condition of all waters, including rivers, lakes, groundwater, estuaries and coastal waters to 1 nautical mile. Nearly all surface and groundwaters are to achieve ‘good’ status by 2015. This will be done by establishing a river basin district structure within which demanding environmental objectives will be set, including ecological targets for surface waters. First cycle of river basin management plans to run 2009-2015.

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.

Geomorphological Feature

Landform shaped by the physical and chemical interactions between the earth’s surface and the natural processes acting on it.

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.

Listed Buildings

Buildings of special architectural or historic interest listed by the Secretary of State for the Department of Culture, Media and Sport under the Planning (Listed Buildings and Conservation Areas) Act 1990.

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 Plan

A written statement and Proposals Map formulating the District Planning Authority’s detailed policies for the development and use of land in its area.

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 Transport Plan

Plan produced by the Highway Authority setting out transport policies and proposals.

Local Wildlife Sites

Commonly known 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 well-being.

Marine Protected Areas (MPAs)

Zones of the seas and coasts where wildlife is protected from damage and disturbance. The Government is committed to establishing a well-managed ecologically coherent network of MPAs in our seas.

Marine Conservation Zones (MCZs)

A type of Marine Protected Area. They protect areas that are important to conserving the diversity of nationally rare or threatened habitats and/or species and those places containing habitats and/or species that are representative of the biodiversity in our seas. The Marine and Coastal Access Act 2009 (Part 5) enables Defra Ministers to designate and protect Marine Conservation Zones (MCZs). These are a type of marine protected area, which will exist alongside European marine sites [Special Areas of Conservation (SACs) and Special Protected Areas (SPAs)], SSSIs and Ramsar sites to form an ecologically coherent network of marine protected areas.

National Planning Policy Framework

The National Planning Policy Framework was published on 27 March 2012. This is a key part of Government reforms to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth.

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 (SAC) designated under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) designated under the 1979 Birds Directive.

Nature Improvement Area

Nature Improvement Areas (NIAs) were introduced by the Government’s Natural Environment White Paper (2011) to ‘enhance and reconnect nature on a significant scale’ in England.

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 (NERC) Act came into force on 1st Oct 2006. Section 41 (S41) 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.

Ramsar Site

Wetlands of International Importance designated by the Government following its signing in 1973 of the Convention on Wetlands of International Importance, especially as wildfowl habitat (The Ramsar Convention).

Regionally Important Geological Site (RIGS)

Geological or geomorphological site protected because of its educational, research, historical or aesthetic importance.

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 dynamically and effectively respond 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.

Settlement

A grouping of buildings where there is, or historically has been, a mixture of land uses providing homes, social facilities, commerce and employment giving evidence of a present or past community. The description can cover towns to villages or hamlets.

Shoreline Management Plan (SMP2)

A non-statutory document which sets out strategic level guidance designed to assist sustainable coastal defence decision making over the next 50 years.

Sites of Special Scientific Interest (SSSI)

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 (SACs)

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 (SPAs)

Areas that are protected under the EC Birds Directive 1979 for vulnerable species listed on Annex1 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.

Statutory

Authorised by law.

Stoop

Traditionally, a red sandstone gate post.

Strategic Environmental Assessment (SEA)

This is a process to ensure that significant environmental effects arising from policies, plans and programmes are identified, assessed, mitigated, communicated to decision makers, monitored and that opportunities for public involvement are provided.

Supplementary Planning Documents

Guidance to developers additional to that contained in the Local Plan applying to a localised area or individual site. It highlights options, acceptable and unacceptable uses and sets out guidelines.

Sunken Lanes

Lanes and tracks in the Solway areas that have been constructed up to a metre below surrounding field levels. The excavated material has been used to increase the heights of the hedges to each side of the road, the hedges being planted on the cobble 'banks' or 'kests'.

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 Solway Coast AONB Sustainable Development Fund is a local grants scheme, to enable individuals, groups or businesses to deliver projects that will improve the AONB both now and in the future. The Sustainable Development Fund is given to the Solway Wetlands Partnership Project during its lifetime to deliver projects in the project area.

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

Traditional Buildings

Buildings constructed in an architectural style and materials which have been characteristic of the area in which they are found.

Village

Group of dwellings and associated uses (e.g. small industries, shops, village hall, church) which together form a coherent whole.

World Heritage Site (WHS)

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) encourages the identification, protection and preservation of cultural and natural heritage across the world considered to be of outstanding value to humanity – World Heritage Sites.

Abbreviations (Acronyms)

This Glossary provides a brief description of some of the terms used in the Management Plan and does not provide a full comprehensive list or legal definitions.

ABC	Allerdale Borough Council	LAF	Local Access Forum
ACT	Action with Communities in Cumbria	LAG	Local Action Group
AE	Agri-environment Schemes	LC	Local Community
AONB	Area of Outstanding Natural Beauty	LCA	Landscape Character Assessment
ARC	Amphibian and Reptile Conservation	LEP	Local Enterprise Partnership
BAP	Biodiversity Action Plan	LNR	Local Nature Reserve
BARS2	Biodiversity Action Reporting System (upgraded 2013)	LTP	Local Transport Plan
BC	Butterfly Conservation	LUC	Land Use Consultants
BEC	Britain's Energy Coast	MC	Marsh Committee
BT	British Telecom	MCS	Marine Conservation Society
Buglife	The Invertebrate Conservation Trust	MOD	Ministry of Defence
CRoW	Countryside and Rights of Way	MMO	Marine Management Organisation
CCF	Coastal Communities Fund	MPA	Marine Protected Areas
CAP	Common Agricultural Policy	MPZ	Marine Protected Zones
CaCC	Carlisle City Council	NAAONB	National Association for Areas of Outstanding Natural Beauty
CCC	Cumbria County Council	NCA	National Character Area profiles
CFMP	Catchment Flood Management Plan	NE	Natural England
CHAM	Coastal Habitat Action Plan	NERC	Natural Environment and Rural Communities Act (2006)
CLA	Country Land and Business Association	NFU	National Farmers Union
CLC	Cumbria Landscape Character	NIA	Nature Improvement Area
CQC	Countryside Quality Counts	NSA	National Scenic Area
CRF	Catchment Restoration Fund	NNR	National Nature Reserve
CSF	Countryside Stewardship Funding	NWCF	North West Coastal Forum
CT	Cumbria Tourism	NWIFCA	North Western Inshore Fisheries and Conservation Authority
CVS	Cumbria Voluntary Service	NWGeo	NW Geodiversity Partnership
CWMET	Cumbria Waste Management Environment Trust	Owners	Landowners and managers
CWT	Cumbria Wildlife Trust	PC	Parish Councils
CWS	Cumbria Wildlife Site	PISCES	Partnership of Irish Sea Coast & Estuary Strategies
Defra	Department for Environment, Food and Rural Affairs	PRoW	Public Right of Way
Dioc	The Diocese of Carlisle	PSA	Public Service Agreement
DWP	Diffuse Water Pollution Plan	RA	The Ramblers
EA	Environment Agency	RDA	Rural Development Agency
ECOSAL	Ecosal atlantis- Traditional Saltmaking 'The Atlantic Route'	RIGS	Regionally Important Geological and Geomorphological Sites
EH	English Heritage	RoWIP	Rights of Way Improvement Plan
EIA	Environmental Impact Assessment	RDPE	Rural Development Programme for England
ELC	European Landscape Convention	RSNEP	Red Squirrel Protection (Northern Red Squirrel Group)
EMS	European Marine Site	RSPB	Royal Society for the Protection of Birds
ENW	Electricity North West	RT	Rivers Trusts
ERT	Eden Rivers Trust	SAC	Special Area of Conservation
ES	Environmental Stewardship	SCAONB	Solway Coast AONB
EU	European Union	SCCVG	Solway Coast Community Volunteer Group
FLD	Friends of the Lake District	SEA	Strategic Environmental Assessment
FC	Favourable Condition	SFP	Solway Firth Partnership
FCom	Forestry Commission	SHNA	Solway Haaf Netters Association
FLAG	Fisheries Local Action Group	SMP	Shoreline Management Plan
GIS	Geographic Information System	SMP2	Shoreline Management Plan 2
GTBS	Green Tourism Business Scheme	SNH	Scottish Natural Heritage
Grampus	Grampus Heritage	SPA	Special Protection Area
Haafs	Haaf netters	SSSI	Site of Special Scientific Interest
HLF	Heritage Lottery Fund	SSWA	South Solway Wildfowling Association
HLS	Higher Level Stewardship	STAG	Silloth Tourism and Action Group
HWT	Hadrian's Wall Trust	SUS	SUSTRANS
ICT	Information and communications technology	SWLPS	Solway Wetlands Landscape Partnership Scheme
IDB	Internal Drainage Board	TCs	Town Councils
INNS	Invasive non-native species	TH	Tullie House Museum
ICZM	Integrated Coastal Zone Management	TPO	Tree Preservation Order
JAC	Joint Advisory Committee	UNI	Universities
LAs	Local Authorities	UU	United Utilities
		WCAS	West Cumbria Archaeological Society
		WCIFCA	West Cumbria Inshore Fisheries and Conservation Authority
		WFD	Water Framework Directive
		WHS	World Heritage Site
		WWT	Wildfowl and Wetlands Trust
		ZPVI	Zones of Potential Visual Impact

Appendix 2

Core Functions of the AONB Partnership

An AONB Management Unit with support from its Officer Steering Group (OSG) and its Joint Advisory Committee (JAC) must meet its core functions, they are:

- a) Developing reviewing, preparing and publishing the AONB vision and the CRoW Act AONB Management Plan
- b) Promoting the AONB vision and management plan to help distinguish the AONB from adjacent countryside
- c) Advising upon, facilitating and co-ordinating implementation by others of the Management Plan
- d) Advising Local Authorities on their activities within AONBs, to encourage them to go beyond normal levels of service(attain the highest possible standards) in countryside management
- e) Monitoring and reporting on progress against AONB Management Plan targets
- f) Monitoring AONB landscape condition
- g) Accessing resources for management activities
- h) Working with and contributing to the NAAONB activities, sharing advice and best practice nationally and regionally.
- i) Providing a management role to co-ordinate AONB protection through the actions of the AONB unit, the AONB partnership and other partners at a local and strategic level.
- j) Developing an involvement by the community in the management of the AONB
- k) Providing landscape related planning advice

Appendix 3

The External Review Process and Public Consultation

The revised Consultation Draft Plan went out for public consultation on 15th December 2014 for an eight week consultation period until February 6th 2015. The draft consultation documents were accompanied by the Strategic Environmental Assessment. Under European Directive 2001/42/EC the AONB Partnership was required to carry out a Strategic Environmental Assessment (SEA) in order to ensure the Plan provides a high level of protection for the environment and contributes to the integration of environmental considerations and promotion of sustainable developments.

A further environmental assessment through a Habitats Regulation Assessment (HRA) was also carried out in consultation with Natural England and Scottish Natural Heritage to ensure the AONB Management Plan will not impact on the significant wildlife value of the designated European Habitat sites in and adjacent to the AONB as required under European Community Habitats Directive (Conservation (Natural Habitats, &c.) Regulations 1994)

At the same time all consultation documents were available on the AONB website and hard copies or e-mails were sent to all Parish and Town Councils, District Councils, Silloth Library, Wigton Library, Aspatria Library, Carlisle Library, Cockermouth Library and all AONB Partnership members.

Press releases and articles were also issued. A total of 98 contacts were individually informed of the review as part of the consultation. The Environmental Report for the SEA, a non-technical report of the SEA, formed part of the consultation documentation and this was also posted on the AONB website.

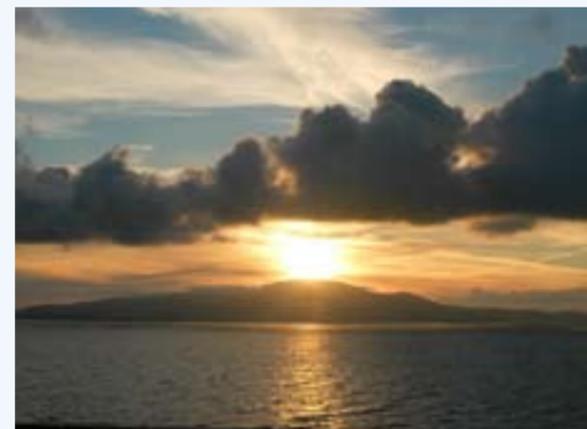
All the documents were placed on Cumbria County Council website platform 'haveyoursay.org.uk' In addition the Management Plan and accompanying SEA and HRA documents and reports were sent to the statutory consultees, Natural England, English Heritage and the Environment Agency. There were 4 responses to the Management Plan, a number were very lengthy and helpful. There were no consultation responses to the SEA.

During the eight week period the public were able to respond to the Draft Management Plan using the consultation document displayed throughout.

How the results of the consultation were used

The results of the consultation were combined and used to review, re-draft and reinforce the Management Plan's objectives, policies, actions and visions. This process involved:

- The results from consultation with partner organisations and other stakeholders were used to produce a new set of draft objectives, and actions for the AONB, including new changes and ideas.
- The results from consultation with communities allowed locally-specific issues and ideas to be identified and incorporated within the Management Plan, where appropriate.
- Overall the results from statutory consultees, stakeholders, partnerships and community were combined to form a single document. The combined results were then analysed in order to:
 - o Identify the key issues, ideas and aspirations by looking for patterns and trends in the results, e.g., areas where the same or similar comments have been made by many consultees.
 - o Identify uncommon comments that may require further consideration
 - o Identify any specific or detailed comments that may be used to help in project planning and delivery
- Finally, any new issues and ideas from the consultation were, where appropriate, included in the final draft Management Plan with some new or altered text, facts and figures, objectives, policies, and actions included.



A Summary of the Main Issues Arising from the Public Consultation and the SEA and How These Have Been Addressed.

This document contains a summary of changes to the Management Plan following public consultation with AONB partners; the amends listed are in response to partners' comments.

Issues	How we addressed these
There was a general need for consistent use of wording, grammar, facts and spelling (NE, EH)	Changes have been made accordingly
Layout needed to be better differentiated as to main section headings, subheadings, etc. (EH)	The layout has been changed accordingly
Need to recognise an updated agenda and a changed context, and revised policies including Local Flood Risk Management, Cumbria Minerals and Waste Local Plan and 'Cumulative Impact of Vertical Infrastructure' work and the Cumbria Landscape Character Guidance and Toolkit. (CCC)	This has been noted and amends have been made
General comments for the water retention of the mosses and B5300 infrastructure repairs, strategic approach to coastal defence work promoted by CCC as Highway Authority and Lead Local Flood Authority (CCC)	The comments have been included in the Plan
Lorry routing in the AONB, CCC publishes a HGV route map noting access to minor roads is still needed for access to properties and sites (CCC)	This was acknowledged and amended
The Plan needs to be expanded to include references to detail the nature of the historic environment and how it shaped the landscape within the AONB (EH)	This was acknowledged and amended
The Plan needs to include where the significance of the AONB lies, what the specific issues affecting this significance are, how this significance is affected and what specific actions need to be taken to address these issues, by whom and in what timescale (EH)	The Plan has included these in Objectives, and actions
A reduction in the number of actions, with a priority for those to be delivered, and who will deliver them (EH)	The actions have a priority with each one, a lead on delivery and some actions are the same in different sections therefore, an overall reduction
There is a need for a shorter and SMART-er action plan and a review of the previous Plan (EH)	This was acknowledged and amended to make target setting more SMART
The Plan needs to identify the number of heritage assets and key assets in the AONB (EH)	This has been amended
The Plan needs to ensure it reflects the requirements of the NPPF (EH)	This has been amended
The historic environment could be integrated within each character area rather than a stand-alone section (EH)	This would have altered the layout of the Plan to a great extent which was not possible to change at the late stage before publishing it
It would be useful if forces for change could be considered to have positive, neutral or negative impacts on the AONB (EH)	This information is found in the SEA, HRA and Scoping Reports
Some of the management options which accompany issues do not appear to be related (EH)	The tables have been changed accordingly.
The Plan should ensure that the justification behind the management options is clear (EH)	This has been amended
There is a lack of detail and more information is needed as to how conservation and enhancement of heritage assets is going to be delivered (EH)	This has been amended

Detailed comments were given for sections 1, 2 and 3 which highlighted changes in the Action Plan and wording to text and objectives (EH)	The comments have been incorporated into the relevant sections
Should the vision be set in a wider Solway context? (NE)	This has been amended
The special qualities section doesn't bring out the 'why' it is designated (NE)	This has been amended
Natural England commented on Objectives 2,8-12, 10, 13-16, 15,21 ,23, 24, 27, 36, 39 and 40 (NE)	The comments have been incorporated and altered accordingly
The Plan needs an objective to rebuild a common Solway identity on both sides, Scotland and England (NE)	This has been amended
Five recent developments were highlighted to be added into the list crucial to the conservation and enhancement of the Solway Coast AONB (NE)	These points were added
On the Action Plan it was noted that some actions are duplicated and could be removed with the action left residing with the main objective (NE)	This has been amended
Many actions read as sub objectives without a SMART structure to monitor success (NE)	This has been amended where possible
Action specific comments were provided in detail from NE with 74 actions/ objectives to be reworded or altered (NE)	All action/ objective specific alterations were amended
Specific comments were made for sections, 1.2, 1.4, 1.5, 1.6, 2.1.1, 2.1.2, 2.1.3, 2.1.6, 2.1.7, 2.1.8, 2.1.9, 2.2.1, 2.2.2, 2.3.1, 2.3.3, 2.4.1, 2.5.1 (NE)	All comments and changes were taken into account and relevant changes made
The Plan will be used by NE working with the AONB to deliver the Plan and Government policy within the remit of NE's statutory purpose (NE)	Questioned answered by NE on the Consultation Questionnaire
Informal car parks along the AONB coast were referred to as not being informal and required protection. (Crosscanonby PC)	This issue will be monitored over the 5 years of the Plan

Appendix 4

An Ecosystem Approach

The table below sets out (left hand side) the area's 1aBD2020 Priority Habitats. The top row is a list of the main natural services that we can derive from these special qualities of our AONB landscape. It suggests how conserving these priority Habitats will help to sustain our natural services into the future.

What will matter is not just identifying our natural services, and saying that this plan promotes an ecosystems approach; it will be in ensuring that recognition of these things drives better and more integrated policy and action on the ground across Local Authorities, Local Enterprise Partnerships, NGOs and others.

Natural Service

	Carbon Storage	Nutrient Dispersal and Cycling	Pollination	Biodiversity	Food	Clean Air	Clean Water	Flood Risk Mgt	Jobs	Building Materials	Renewable energy	Recreation/ Tourism	Well-being
BD2020 Habitat	Coastal Saltmarsh	•	•	•	•	•	•	•	•			•	•
	Coastal and Floodplain Grazing Marsh	•	•	•	•	•	•	•	•			•	•
	Coastal Sand Dunes	•	•	•	•	•	•	•				•	•
	Coastal Vegetated Shingle		•	•	•	•	•					•	•
	Deciduous Woodland	•	•	•	•	•	•	•	•	•	•	•	•
	Lowland Dry Acid Grassland	•	•	•	•	•	•					•	•
	Lowland Fens	•	•	•	•	•	•	•	•			•	•
	Lowland Heathland	•	•	•	•	•	•	•	•			•	•
	Lowland Meadows	•	•	•	•	•	•	•	•		•	•	•
	Lowland Raised Bog	•	•	•	•	•	•	•	•			•	•
	Maritime Cliffs and Slope	•	•	•	•	•	•	•	•			•	•
	Mudflats	•	•	•	•	•	•	•	•			•	•
	Traditional Orchards	•	•	•	•	•	•	•		•		•	•

Appendix 5

IUCN Protected Areas and International Classification.

Categories of protected Landscape

Guidelines published by IUCN and the World Conservation Monitoring Centre set out of a "protected area" as: "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means" and further described six categories of Protected Landscape as areas managed mainly for:

- i. Strict protection
 - 1a) Strict Nature Reserve
 - 1b) Wilderness area
- ii. Ecosystem conservation and protection (i.e. National Park)
- iii. Conservation of natural features (i.e. Natural Monument)
- iv. Conservation through active management (i.e. Habitat/species management area)
- v. Landscape/seascape conservation and recreation (i.e. Protected Landscape/Seascape)
- vi. Sustainable use of natural resources (i.e. Managed resource protected area)

All Protected Areas should aim to:

- Conserve the composition, structure, function and evolutionary potential of biodiversity;
- Contribute to regional conservation strategies (as core reserves, buffer zones, corridors, stepping stones for migratory species etc.);
- Maintain diversity of landscape or habitat and of associated species and ecosystems;
- Be of sufficient size to ensure the integrity and long-term maintenance of the specified conservation targets or be capable of being increased to achieve this end;
- Maintain the values for which it was assigned in perpetuity;
- Be operating under the guidance of a management plan, and a monitoring and evaluation programme that supports adaptive management;
- Possess a clear and equitable governance system.

Where the UK fits into the International Classification

Both National Parks and Areas of Outstanding Natural Beauty are assessed under the criteria developed by the IUCN as being Category V landscapes. This reinforces the accepted UK legislation position of giving equal value to both AONBs and National Parks.

It must be noted that British "National Parks" do not comply with the IUCN assessment criteria to be classified as National Parks i.e. Category II – Ecosystem conservation and protection areas. However the IUCN recognises that names given to individual protected landscapes are matters for individual governments and nations and the guidance does not seek to be prescriptive regarding naming of reserves or landscapes

Category V: Protected Landscape/Seascape

Primary objectives

- To maintain a balanced interaction of nature and culture through the protection of landscape and/or seascape and associated traditional management approaches, societies, cultures and spiritual values
- To contribute to broad-scale conservation by maintaining species associated with cultural landscapes and/or by

providing conservation opportunities in heavily used landscapes

- To provide opportunities for enjoyment, well-being and socio-economic activity through recreation and tourism
- To provide natural products and environmental services
- To provide a framework to underpin active involvement by the community in the management of valued landscapes or seascapes and the natural and cultural heritage that they contain
- To encourage the conservation of agrobiodiversity and aquatic biodiversity
- To act as models of sustainability so that lessons can be learnt for wider application

Appendix 6

Acknowledgements

The preparation of this Management Plan has involved many individuals and organisations. It is not possible to name all the individuals and organisations who have contributed to the review, the AONB Joint Advisory Committee acknowledges their invaluable contributions during all the review stages and the consultation involvement.

The Joint Advisory Committee is indebted to the following for their guidance and advice: Bart Donato (Natural England); Mike Collins (English Heritage); Emily Hrycan (English Heritage) Jeremy Pickup (Environment Agency)

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Solway Coast Landscape and Seascape Character Assessment 2010, prepared for the Solway Coast AONB Partnership by Land Use Consultants, November 2010.

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