

Bryniau Clwyd a Dyffryn Dyfrdwy Clwydian Range and Dee Valley

Draft

Management Plan Review 2020 – 2025 October 2021

Clwydian Range and Dee Valley Area of Outstanding Natural Beauty

Foreword - Minister for the Environment, Energy & Rural Affairs, Lesley Griffiths MS

On behalf of Welsh Government, I welcome the Clwydian Range and Dee Valley AONB Management Plan.

Areas of Outstanding Natural Beauty (AONBs) and National Parks contain some of the most beautiful, spectacular and dramatic areas of countryside in Wales. These are landscapes of national importance with designation conferring the highest status for the conservation of landscape. Millions of visitors enjoy these special qualities every year.

AONBs and National Parks have seldom been higher in the public and political consciousness. Green and wild spaces give people respite and opportunities to breathe freely. However they have also been placed under great pressure, and sadly abused by some. We must - through Management Plans and the actions that flow from them - enable visitors to have world-class experiences while ensuring the special qualities we seek to protect are not damaged. The interests of local communities, businesses and land managers must also be at the forefront of our minds.

Balancing these interests and priorities requires genuinely collaborative approaches. AONB Management plans are embodiments of this collaboration and as such I attach great importance to them.

The State of Natural Resources Report shows that none of Wales' ecosystems are currently showing all the attributes of resilience. Overall, biological diversity is declining, and the extent of some habitats has also declined significantly. We must take action to create resilient ecological networks across Wales. This includes restoring protected sites and peatlands, and creating a National Forest. Nature-based solutions are also helping us prepare for the impacts of climate change.

This Management Plan for the Clwydian Range and Dee Valley AONB exemplifies the practice of tackling complex environmental and social challenges through robust local collaboration in a way which enhances the Sustainable Management of Natural Resources and makes a strong contribution to the well-being of future generations of citizens in Wales.

AONBs cover around 5% of Wales's land area and are therefore key partners in delivering a wide range of national and local priorities. They have often been sidelined and overlooked when compared to National Parks. In the coming years I hope that the progress that has been made in raising the profile and ambition of our AONBs can continue.

The Welsh Government looks forward to supporting the implementation of this Plan.

Contents

1	Introduction	1
1.1	The AONB	1
1.2	Statutory Requirements of the Management Plan	2
1.3	Structure of the Management Plan 2020-2025	2
2	Development of the Management Plan 2020-2025	3
2.1	Purpose of the Management Plan	3
2.2	Governance	3
3	Context and Drivers of the 2020-2025 Management Plan	5
3.1	Introduction	5
3.2	Policy context	8
3.2.1	UNESCO World Heritage Status	8
3.2.2	Environment Minister's statement for Designated Landscapes, 2018	8
3.2.3	Planning (Wales) Act 2015	8
3.2.4	Environment (Wales) Act 2016	8
3.2.5	Welsh State of Nature, 2019	8
3.2.6	State of Natural Resources Report (SoNaRR) for Wales, 2020	8
3.2.7	Valued and Resilient: The Welsh Government's Priorities for Areas of	
	Outstanding Natural Beauty and National Parks, 2018	9
3.2.8	Well Being of Future Generation (Wales Act), 2015	9
3.2.9	The Colchester Declaration 2019	9
3.2.10	Historic Environment (Wales) Act 2016	9
3.2.11	North East Wales Area Statement	9
3.2.12	Local Development Plans	10
3.2.13	AONB Supplementary Planning Guidance, 2018	10
4	Ecosystem Services Approach	11
-	Leosystem Services Approach	ΤT
5	Special Qualities and Features of the Clwydian Range and	11
5	,	13
5 5.1	Special Qualities and Features of the Clwydian Range and	
5	Special Qualities and Features of the Clwydian Range and Dee Valley AONB	13
5 5.1	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features	13 13
5 5.1 5.2 6 7	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends	13 13 13 16 17
5 5.1 5.2 6 7 8	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage	13 13 13 16 17
5 5.1 5.2 6 7 8 8.1	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes	13 13 13 16 17 17
5 5.1 5.2 6 7 8 8.1 8.2	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims	13 13 13 16 17 17 17
5 5.1 5.2 6 7 8 8.1 8.2 8.3	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?:	13 13 16 17 17 17 18 19
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives	13 13 16 17 17 17 18 19 21
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate	13 13 16 17 17 17 18 19 21 22
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction	13 13 16 17 17 17 18 19 21 22 22
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims	13 13 16 17 17 17 18 19 21 22 22 23
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?:	13 13 13 16 17 17 17 18 19 21 22 22 23 23
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives:	13 13 16 17 17 17 18 19 21 22 22 23 23 23 24
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing	13 13 16 17 17 17 18 19 21 22 22 23 23 23 24 26
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10 10.1	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction	13 13 16 17 17 17 18 19 21 22 23 23 23 24 26 26
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10 10.1 10.2	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims	13 13 13 16 17 17 17 17 18 19 21 22 22 23 23 23 24 26 26 26
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10 10.1 10.2 10.3	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?:	13 13 13 16 17 17 17 17 17 17 17 18 19 21 22 22 23 23 23 24 26 26 26 27
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10 10.1 10.2 10.3 10.4	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?: Strategic Objectives	13 13 16 17 17 17 18 19 21 22 23 23 24 26 26 26 26 27 28
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10 10.1 10.2 10.3 10.4 11	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?: Strategic Objectives The Rural Economy	13 13 16 17 17 17 18 19 21 22 23 23 24 26 26 26 26 26 27 28 30
5 5.1 5.2 6 7 8 8.1 8.2 8.3 8.4 9 9.1 9.2 9.3 9.4 10 10.1 10.2 10.3 10.4	Special Qualities and Features of the Clwydian Range and Dee Valley AONB Defining the Special Qualities and Features Baseline conditions and trends A Vision for the Clwydian Range and Dee Valley AONB 2020-2025 The Management Plan Themes Nature, Landscape and Heritage Introduction Principle Aims What would success look like?: Strategic Objectives The Changing Climate Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?: Strategic Objectives: Recreation, Health & Wellbeing Introduction Principle Aims What would success look like?: Strategic Objectives	13 13 16 17 17 17 18 19 21 22 23 23 24 26 26 26 26 27 28

11.3 11.4	What would success look like? Strategic Objectives	31 32			
List of Figures					
-	1 Location and Key Features of the Clwydian Range and Dee Valley AONB 1 AONB Governance Structure		1 4		
List of	Tables				
Table 5-2	L Special Qualities and Features		15		

1 Introduction

1.1 The AONB

The Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB) is 390 square kilometres of some of the UK's most wonderful landscapes. From the coastal slopes of Prestatyn Hillside in the north to the remote Berwyn Mountains and the Pontcysyllte Aqueduct and Canal in the south, the Clwydian Range and Dee Valley AONB is a landscape of contrasts. To the North the Clwydian Range is a remarkable chain of heather-clad peaks crowned with Iron Age hillforts, to the South, the rolling Llandegla Moors give way to the expansive Ruabon Mountain and the spectacular limestone cliffs of the Eglwyseg escarpment. Here the Dee Valley is etched with reminders of a medieval landscape, with the picturesque remains of Castell Dinas Bran, Eliseg's Pillar and Valle Crucis Abbey and the mighty Chirk Castle which guards the entrance to the valley to the east. The Pontcysyllte Aqueduct and Canal, now a World Heritage Site, is a monument to the AONB's industrial past and the communities that shaped these areas.

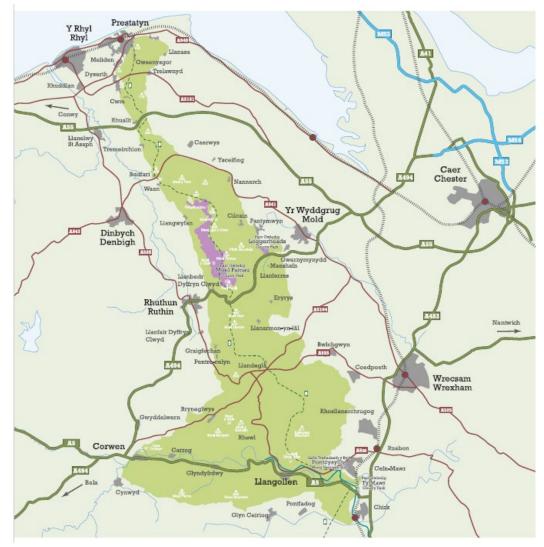


Figure 1-1 Location and Key Features of the Clwydian Range and Dee Valley AONB

1.2 Statutory Requirements of the Management Plan

This Management Plan is produced in accordance with regulations contained within Section 89 of the Countryside and Rights of Way Act 2000. It seeks to define the approach to conserving and enhancing the special qualities and features of the AONB through holistic management approaches accounting for current threats and drivers.

The 2020-2025 Management Plan establishes the management strategy for the AONB during a period of significant change and uncertainty driven by outside influences including Brexit, climate and ecological emergencies and consequences and recovery from the Covid-19 pandemic. The Management Plan 2020-2025 must rise to these challenge by establishing robust approaches for the proactive management of the AONB's special qualities and features. This Management Plan seeks to identify likely challenges and opportunities but also builds on flexibility of approach to ensure the integrity of the management of the AONB is maintained where future drivers and events are unforeseen.

1.3 Structure of the Management Plan 2020-2025

The 2020-2025 Management Plan differs in format from the previous Management Plan (2014-2019). It is structured to better address the key challenges that our landscape and communities face in the coming years and sets out how this can be achieved in a landscape that is already highly prized for its natural beauty.

The plan is set out against four key themes the reflect these challenges.

- **Nature, Landscape and Heritage:** Addressing decline in species and the impact of climate change on the habitats and landscapes of the AONB. Preservation of the unique cultural heritage features. Changes in land management practice (particularly in light of Brexit).
- Adapting to a Changing Climate: The resilience of the AONB's special qualities and features to climate change. The likely impact of our response to climate change on the special features and qualities of the AONB ensuring that our response to climate change takes into consideration the need to conserve landscape quality.
- **Recreation, Health and Wellbeing:** The value of the AONB in supporting physical and mental wellbeing. Pressures of recreation and tourism on sensitive landscapes and rural communities. The impact of the Covid-19 pandemic on visitor behaviour and associated pressures on the AONB.
- **The Rural Economy:** Opportunities and challenges facing the rural economy within the AONB in light of the Covid-19 pandemic, agricultural reform post Brexit and climate change adaptation and mitigation requirements.

For each of the key themes the 2020-2025 Management Plan considers the potential impacts on the AONB Special Qualities and Features and proposes Strategic Objectives and an associated Action Plan actions to mitigate impact and enhance the qualities and features that make the AONB special and unique.

2 Development of the Management Plan 2020-2025

2.1 Purpose of the Management Plan

The purpose of this Management Plan is to present a management framework and associated actions for the successful collaborative management of the AONB during the plan period 2020-2025. The Plan is relevant to all who undertake activities which may affect the AONB, including:

- **Relevant Authorities** All public bodies and statutory undertakers (as defined in Section 85 of the Countryside and Rights of Way Act 2000) that have the duty to have regard for the purposes of the AONBs. The Joint Committee of the AONB represents and acts on behalf of the three local Authorities of Denbighshire, Flintshire and Wrexham.
- **AONB Partnership** The AONB Partnership is an effective resource in its range and depth of political and professional expertise and experience. It represents the local authorities, landowners, farmers, conservation and recreation interests. The Partnership supports the delivery of the AONB Management Plan through its expertise and experience in a broad range of fields related to landscape management and reports to the Joint Committee.
- **Partners of the AONB** Organisations and individuals that have a key role in delivering and championing the programmes of the AONB. Partners are represented by the AONB Working Groups, including Natural Resources Wales (NRW), Cadw, RSPB and North Wales Wildlife Trust (NWWT).
- Landowners and Land managers The Plan seeks to work with landowners and land managers and recognises the key role they have to play in as guardians of significant areas of the AONB.
- Local Communities The plan commits to working with those who live and work within the AONB and identifies the importance of communities in defining and caring for the landscape. The plan sets out an agenda for working with the communities of the AONB.
- Users of and Visitors to the area Many people experience the AONB as a visitor and this plan recognises the impact that the AONB has on people and communities beyond its boundaries. Visitors will play an important role in the sustainable management of the AONB during the 2020-2025 plan period.

The Management Plan recognises that local communities, businesses, landowners and visitors all have pivotal roles to play in the successful management of the AONB and it's resilience to the challenges it faces during the 2020-2025 plan period and beyond. The 2020-2025 Management Plan has been designed to be clear and accessible; a practical plan for action for all to collaborate and innovate for the successful future of this unique area. In particular, the Management Plan seeks to engage areas of the population that are typically underrepresented in AONB.

2.2 Governance

The governance approach for the AONB reflects the collaborative nature of its management to include the joint approach by the three local authorities (Denbighshire, Wrexham and Flintshire) together with other partnerships. At the heart of the governance structure is the Joint Committee.

The **Joint Committee** was established by Denbighshire, Wrexham and Flintshire Councils by legal agreement in 2014 to jointly discharge their statutory AONB functions. The Committee is made up of Lead members (members of Cabinet) of each Local Authority and has the power to act on behalf of those Local Authorities in delivering the purposes of the AONB. It is supported by an Officers' Working Group of relevant officers from the constituent local authorities and Natural Resources Wales, and the AONB Partnership who provide expert advice on management issues within the AONB. The Joint Committee ensures a unified approach to the management of the AONB across the 3 Authorities both in terms of strategic approach and allocation of resources.

The AONB **Partnership** consists of individuals and organisations representing a wide range of interests throughout the AONB including local authorities, landowners, local businesses, residents and farmers. The Partnership supports the Joint Committee with a breadth of knowledge and expertise concerning the AONB, its provisioning services and management.

The Partnership **Working Groups** represent current issues and interests in the AONB and bring together members of the Partnership with specialist skills and interests to support decision making and best practice management of the AONB specific to each theme.

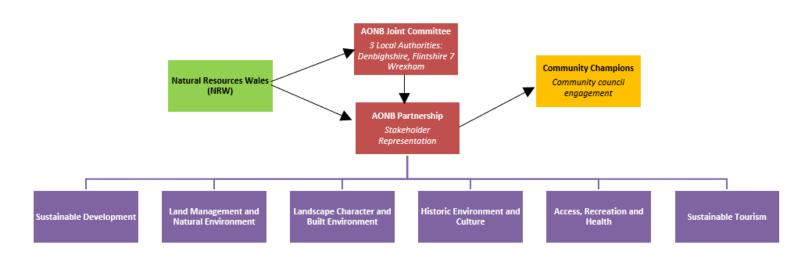


Figure 2-1 AONB Governance Structure

3 Context and Challenges for the 2020-2025 Management Plan

3.1 Introduction

The 2020-2025 Management Plan comes at a time of significant transitional change, which will have implications for the successful management of the AONB to protect and enhance the Special Qualities and Features during the forthcoming plan period.



Nature, Landscape and Heritage

The AONB supports a wide diversity of habitats and species reflecting the local variations in geology, topography, soils, land use and climate. The dramatic moorland ridges of the Clwydian Range and rolling hills of the Dee Valley are mixed with spectacular limestone cliffs, meandering, cascading rivers and scattered woodlands. They contain some of the UK's most important habitats and the significance of these areas for conservation

are recognised as over 26% of the AONB is designated as either Sites of Special Scientific Interest, Special Area for Conservation or Special Protection Area.

The first Statutory purpose AONB management is to conserve and enhance the natural beauty, wildlife and cultural heritage of the area. The State of Natural Resources Report 2016 (SoNaRR2016) provides strong evidence for the scale and extent of the Nature Emergency, declared by Welsh Government on 30 June 2021. It highlights sustained decline and continued vulnerability to biodiversity, both at present and in terms of climate change resilience. 17% of species in Wales are at risk of extinction. This condition assessment is reinforced by the State of the AONB Report, aligned to this management plan and highlights the imperative of this plan to put nature into recovery and enable greater resilience and adaptability to climate change. Nature locks up carbon as well as supporting essential adaptive measures such as clean water, flood risk reduction and improved well-being.

The AONB represents some of the finest landscapes in the country and their status receives Statutory protection equivalent to National Parks. But the landscapes, shaped by generations of management, will continue to evolve. Pressures will continue to increase from economic, recreational and well-being demands – especially post Covid-19 and post-Brexit and the risk of these demands diminishing the very landscape special qualities so valued by visitors and communities alike requires careful and sensitive management within this plan – some transformational and some bringing stability.

The outstanding heritage of the AONB ranges from the UNESCO World Heritage Site at Pontcysyllte to the humble milestone or village well. The cultural connections

to the area within communities and the Welsh language are very strong and form a key element of the sense of place and belonging.



Adapting to a Changing Climate

Climate change is one of the defining issues of our time and one which has become more prominent during the previous plan period. Denbighshire, Flintshire and Wrexham County Councils have all declared a Climate Emergency and are subsequently taking steps to respond through policy and practical actions. Climate change and our response to it has the potential to significantly impact the Special Qualities and Features of the

AONB. Impacts are likely to be broad and far reaching; an increase in extreme weather events such as flooding and wildfires, loss of agricultural crops and native species to invasive diseases, and damage to important cultural and historic assets to name but a few. The 2020-2025 plan period will require a robust adaptation response to address climate impacts already evident, and those predicted for the near future ensuring that landscape quality and character are key considerations in this process. Consideration is also required for the impact of activities within the AONB on carbon emissions contributing to further future climate change. The 2020-2025 Management Plan will need to identify opportunities for climate change mitigation, for example through management of peat bogs and woodland for carbon sequestration, non-fossil fuel transport, and renewable energy generation.



Recreation, Health and Wellbeing

Visitors have drawn inspiration from this landscape in art and poetry since the 18th century when early tourist first came in search of the sublime. Since then generations have followed to explore these hills and valleys finding adventure in its wild open expanses as well as peace and tranquillity in places to relax and unwind.

Key sites such as Loggerheads, Moel

Famau, Castell Dinas Brân, have been reproduced by early landscape painters such as Richard Wilson, Turner and Edward Pugh, and as have particular significance in the very early presentation of picturesque landscapes. They have in part contributed to the very strong tradition of tourism to these areas within the AONB.

The Covid-19 pandemic and the associated lockdowns have shone a spotlight on how important access to nature and the outdoors is for our mental and physical wellbeing. It has caused many people to re-evaluate their relationship with the natural environment and to recognise its importance to our quality of life. It has also highlighted issues of inequality of access and the impact this can have on some communities.

The diverse landscape of the Clwydian Range and Dee Valley has a broad appeal; from those seeking space for quiet contemplation in nature, to long distance trails for endurance endeavours, and mountains, white water and cliffs for adventure seekers, the AONB has a lot to offer. The number of visitors have increased significantly over the last 5 years and pressures in popular "honeypot" areas within the AONB have increased as a result. Sustainably accommodating additional visitor numbers brings the need to balance accessibility for all with the needs of local communities and the conservation of natural and built environment. A key challenge for the forthcoming plan period will be to ensure the critical health benefits of being able to access beautiful places can be realised without detrimental impact on the communities, livelihoods and natural environment of the AONB. The plan will also seek to ensure that the health benefits of the Clwydian Range and Dee Valley are accessible and reach areas of most need.



The Rural Economy

Following the exit of the UK from the European Union the resulting legislative changes are likely to have significant implications on agricultural practice and the rural economy within the AONB. The 2020-2025 Management Plan is produced at a time of uncertainty regarding future trading conditions, legislation and subsides. As more certainty is achieved throughout the plan period, there will be a need to respond proactively to manage risk and opportunities associated with

future rural economic support. AONBs have a key role to play in the delivery of a Green Recovery for Wales – a sustainable rural economy that places nature and climate at its heart through the sustainable management of our natural resources.

3.2 Policy context

This section provides an overview of the context for the 2020-2025 Management Plan, detailing pertinent policy and legislation drivers that will influence the management of the AONB. It is anticipated that policy and legislative drivers during the forthcoming plan period may change in response to transitional pressures of climate change, Covid-19 recovery and Brexit.

3.2.1 UNESCO World Heritage Status

The Dee Valley includes the Pontcysyllte Aqueduct and Llangollen Canal inscribed as a World Heritage Site in 2009. The designation sits within the three Counties of Denbighshire, Wrexham and Shropshire, and stretches from Llantysilio in the west to Gledrid Bridge in the east. Approximately 90% of the World Heritage Site is within the AONB.

The concept of World Heritage Sites is at the core of the World Heritage Convention. This was adopted in 1972 by UNESCO (United Nations Education, Scientific and Cultural Organisation), to which 193 nations belong. Through the convention, UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage sites around the world considered to be of outstanding value to humanity.

The Pontcysyllte Aqueduct and Canal inscription clearly sets out the Outstanding Universal value of the site and identifies a buffer zone around a core area which recognises the setting of the site.

3.2.2 Environment Minister's statement for Designated Landscapes, 2018

On 26 March 2018, the Environment Minister confirmed that all existing designated landscapes will be retained and their purpose of conserving and enhancing natural beauty will not be weakened. It was agreed that designated landscapes should play their part in the sustainable management of natural resources to protect nature and support vibrant rural communities.

3.2.3 Planning (Wales) Act 2015

The Act concerns development planning in Wales. It makes provision about sustainable development in the exercise of functions relating to development planning and applications for planning permission.

3.2.4 Environment (Wales) Act 2016

The Environment (Wales) Act sets out the legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way. The Act received Royal Assent in 2016. It delivers against Welsh Government's Programme for Government commitment to introduce new legislation for the environment.

3.2.5 Welsh State of Nature, 2019

The State of Nature report presents an overview of how the country's wildlife is faring, looking back over nearly 50 years of monitoring to see how nature has changed in the UK, its Crown Dependencies and Overseas Territories. The statistics demonstrate that the abundance and distribution of the UK's species has, on average, declined since 1970 and many metrics suggest this decline has continued in the most recent decade.

3.2.6 State of Natural Resources Report (SoNaRR) for Wales, 2020

In 2016 Natural Resources Wales published the first SoNaRR, as an understanding of the implications of the Environment Act were being developed. Since then the world has recognised the nature and climate emergencies that we face; and the Covid-19 pandemic has brought a new focus on well-being. The second (2020) SoNaRR has been written within that context.

3.2.7 Valued and Resilient: The Welsh Government's Priorities for Areas of Outstanding Natural Beauty and National Parks, 2018

This report establishes that the first purpose of National Parks and AONBs is 'to conserve and enhance the natural beauty, wildlife and cultural heritage of these areas' and AONBs have a similar statutory purpose to conserve and enhance natural beauty.

This statement contains four goals for National Parks and AONBs in Wales which relate to valued places, resilient environments, resilient communities and resilient ways of working.

3.2.8 Well Being of Future Generation (Wales Act), 2015

This Act sets about improving the social, economic, environmental and cultural well-being of Wales and to safeguard it for future generations. It requires public bodies listed in the Act, including Local Authorities to consider the long-term, and to work more effectively with people and communities.

3.2.9 The Colchester Declaration 2019

The Declaration is a pledge by The National Association for Areas of Outstanding Natural Beauty aimed at significantly increasing the scale and pace of nature conservation activity in AONBs. The Declaration includes a number of pledges to be achieved between 2020 and 2030.

3.2.10 Historic Environment (Wales) Act 2016

The Historic Environment Act is the legislative framework for the protection and management of the historic environment. It seeks to make improvements to the protection and management of the Welsh historic environment.

3.2.11 North East Wales Area Statement

Natural Resources Wales (NRW) has developed seven Area Statements for different areas of Wales. The North East Wales Area Statement encompasses the three separate counties of Denbighshire, Flintshire and Wrexham and includes the Clwydian Range and Dee Valley AONB. The Area Statement addresses the following key themes integral to the protection and enhancement of the natural and built environment within the North East of Wales:

- Climate emergency: resilience and adaptation
- Develop and improve urban/rural green infrastructure
- Increasing woodland cover for social, environmental and economic benefits
- Promoting the resilience of ecosystems in maintaining and enhancing biodiversity
- Protecting water and soil through farming and sustainable land management

3.2.12 Local Development Plans

Each council is required to produce a Local Development Plans which provide a framework for local decision-making relating to spatial change and growth within their respective boroughs. The Local Plans for Denbighshire, Wrexham and Flintshire each contains policies relating to the designation of the AONB and subsequent considerations when considering development proposals which may impact on the AONB.

3.2.13 AONB Supplementary Planning Guidance, 2018

The SPG has been adopted by Denbighshire, Wrexham and Flintshire Borough Councils. This guidance is primarily targeted at individuals and businesses proposing new development and for decision makers involved in the management of the AONB. The intention is to heighten awareness of the importance of the AONB, and, in doing so, raise the standard of new development and landscape design.

4 Ecosystem Services Approach

The National Association for AONBs (which includes the Clwydian Range and Dee Valley AONB) made a collective declaration through 'the Colchester Declaration 2019' to set out a strategy for change. One of the pledges by 2024 was to 'embed an ecosystems services approach into all AONB Management Plans'¹.

Simply put, ecosystem services are the benefits that people can obtain from the natural environment. Understanding the ecosystem service benefits the AONB provides is critical to a holistic understanding of the true value of the Clwydian Range and Dee Valley AONB.

Ecosystem services, are often broken down into four categories, as seen below. The ecosystem services listed in each category is not an exhaustive list.

- **Supporting**: Recognising that our landscape supports our Biodiversity, Soil formation;
- **Provisioning:** Recognising that our landscape provides us with food, fresh water wood and other materials
- **Regulating:** Recognising that our landscape helps to clean our air, regulate our climate, pollinate our plants and keep pests and diseases at bay; and
- **Cultural:** Recognising that our landscape provides us with peace and tranquillity connects communities and provides us with opportunities for recreation and tourism. Spiritual and religious value, Aesthetic value, Recreation and tourism.

The natural systems of the Clwydian Range and Dee Valley underpin our health, wealth and happiness and identity. If managed correctly, the AONB will continue to provide us with some of the essentials of life such as providing clean air and water, food, fuel and raw materials. This Plan therefore considers what benefits the AONB can provide to meet the needs of society and respond to current issues such as the mitigating against the effects of climate change.

It is also recognised that the landscape of the Clwydian Range and Dee Valley has an influence on ecosystems, communities and economies far beyond the boundary of the designation. For example, the river catchment of the Dee spans over Denbighshire, Wrexham, Flintshire and Cheshire. As such, implementation of management measures within the AONB are potentially wider reaching and consideration of impacts (positive and negative) are required.

¹ The Colchester Declaration 2019. Available from: https://landscapesforlife.org.uk/projects/colchester-declaration



5 Special Qualities and Features of the Clwydian Range and Dee Valley AONB

5.1 Defining the Special Qualities and Features

In setting out a programme of management for the protection and enhancement of the landscape of the Clwydian Range and Dee Valley it is first necessary to define those individual features and qualities that make up the special character of the area.

Whilst it is recognised that there are a number of elements within the landscape that are of particular value it is important to identify those features within the Clwydian Range and Dee Valley that represent the finest qualities nationally. It is also recognised that this special character is made up of the unique combination of all its Special qualities and features. This is a combination of the physical attributes (rolling hills, rushing rivers, heather topped moorlands) and non-physical attributes (tranquillity, community spirit, access to nature). These attributes are referred to within this Management Plan as "Features" and "Qualities" respectively. Whilst there are some elements of the landscape which are recognised for their national or international value and widely regarded, other special qualities are more subjective and dependant on our individual interaction and perception. This Management Plan establishes mechanisms for the protection and enhancement of the Special Qualities and Features within each of the four themes.

In 2009, consultation with local communities, public bodies and agencies with an interest in the area's management was undertaken in order to define the special qualities and features of the AONB. Similar work was undertaken in 2011 during the process of extending the AONB to include the Dee Valley. As part of the stakeholder engagement process for the 20202025 Management Plan, core stakeholders and community consultees were asked whether they thought the existing list of special qualities and features was still relevant and reflective of the AONB in the present day.

The special qualities and features of the AONB are identified in Table 5-1 below.

5.2 Baseline conditions and trends

The State of the AONB report is produced to inform the Management Plan 2020-2025. It provides an indication of trends and condition of the special qualities and features from which to measure the success of the Strategic Objectives and related Action Plan actions throughout the plan period. Key baseline statistics are summarised below. Further analysis is provided within the State of the AONB report.

Landscape	Tranquillity
Character and Quality	Tranquillity is associated with an atmosphere of calm and stillness; peace and quiet; and with dark night skies.
and Quanty	Remoteness and Wildness, Space and Freedom
	Remoteness and wildness is associated with a feeling of trepidation and sometimes even danger. The sublime.
	<i>Space and freedom are related to access to the landscape and the uninterrupted and extensive views from the high places within it.</i>
	Bro and the link between communities and their landscape.
	A sense of belonging and attachment to the landscape.
Habitats and	Heather Moorland and Rolling ridges
Wildlife	The dramatic moorland ridges of the central Clwydian Range, expansive Llandegla and Ruabon Moors, Llandtysillio and North Berwyn.
	Broadleaved woodlands and Veteran trees
	Bishops Wood, Cwm and Wheeler Valley. Ash dominated Alyn Valley woods and the small copses of the upper Alyn and upland oak woods of the Dee Valley.
	River Valleys and the River Dee
	The dramatic and powerful River Dee contrasted with the smaller twisting and winding River Alyn and River Wheeler. The Clwyd catchment with flows from the Clwydian Range.
	Limestone grasslands, cliffs and screes
	Graig Fawr, Loggerheads and Bryn Alyn – Llanarmon yn lal and the spectacular Eglwyseg Escarpment.
Historic	Historic Settlement and Archaeology
Environment	<i>Historic settlement patterns and conservation areas. The diverse patterns and features in the landscape left by previous generations.</i>
	Industrial Features and the World Heritage Site
	Limestone quarrying and lead mining, slate quarries and associated tramways and workings – the Pontcysyllte
	Aqueduct and canal, Horseshoe Falls.
	Historic Defence Features
	The dramatic chain of Iron Age Hillforts of the Clwydian Range, Castell Dinas Brân, Chirk Castle and medieval Motte and Baileys at Tomen y Rhodwydd, Tomen y Fadre and Glyndwr's Mount, Carrog.
	Prehistoric funerary and rituals.
	Small historic features

	<i>Often unlisted or scheduled a rich mixture of small historic features that are an important part of the rich cultural layer of the landscape – wells, pumps, boundary stones, waymarkers, milk stand and K6 telephone boxes.</i>
	Traditional boundaries
	Drystone walls and hedges reflecting traditional skills and craftsmanship and often reflecting local styles and geology.
Access	Iconic Visitor and Cultural Attractions
Recreation and Touris	Siles that have helded to shade the identity of the AOND as a visitor destination- Loggerheads, moei ramad,
	The Offa's Dyke National Trail and Promoted Routes
	Stretching from Prestatyn Hillside in the north to Llangollen in the south, the National Trail makes the AONB particularly accessible. The Dee Valley Way, North Berwyn Way and a network of community paths. Together with extensive areas of Access Land the landscape of the AONB is particularly accessible.
Culture an	The Built Environment
People	The villages and towns, hamlets and scattered settlements.
	People and Communities
	A rich mix of culture and strong sense of community – the facilities and services that are essential to sustaining rural life.
	Welsh language and rural traditions.
le 5-1 Special Q	ualities and Features

6 A Vision for the Clwydian Range and Dee Valley AONB 2020-2025

The Clwydian Range and Dee Valley AONB is a dynamic landscape with flourishing communities and a thriving local economy. The landscape supports a rich biological and cultural resource delivering benefits to the communities, economies and ecosystems far beyond its boundary. The landscape of the Clwydian Range and Dee Valley is cherished by those living in and visiting the AONB. Its Special Qualities and Features are widely promoted, understood and appreciated. Local communities, businesses and visitors are engaged in the protection and enhancement of these qualities and features.

The AONB is managed through sound and effective partnerships which ensure that communities and visitors are fully engaged in decision making and are empowered to have investment in the future of the AONB.

The Clwydian Range and Dee Valley is a flagship for sustainable development and forward planning, and its international protection is influential on an international, national and local stage.

Those living in, working in and visiting the AONB are engaged in understanding the risks and opportunities posed during the forthcoming plan period including climate change, visitor pressures and agricultural reform. The AONB is managed in such a way that it is adaptable to change and agile in response to adverse environmental, social and economic challenges.



7 The Management Plan Themes

The following sections of the Management Plan sets an agenda for responding to the challenges facing the AONB during the 2020-2025 plan period in the context of protecting the Special Qualities and Features under the four themes. Each theme section sets out the context within the introduction. The Principle Aims establishes the high level objectives for the theme in the face of pertinent drivers during the 2020-2025 plan period. "What Would Success Look Like" seeks to imagine optimal outcomes for the Special Qualities and Features if the Management Plan is successful in achieving its Strategic Objectives over the course of the Plan period. Finally, the Strategic Objectives outline theme goals for the plan period, against which actions for delivery are established within the accompanying Action Plan.

8 Nature, Landscape and Heritage

Introduction



The AONB forms one of the UK's finest protected landscapes. Early visitors, poets and artists such as, Richard Wilson and William Turner, were drawn to the area, inspired by a landscape rich in culture, heritage and nature. The dramatic moorland ridges of the Clwydian Range and rolling hills of the Dee Valley are intertwined with spectacular limestone cliffs, meandering and cascading rivers and scattered woodlands, all overseen by ancient hill forts and castles. Iconic species such as curlew, skylark and black grouse are supported by the AONB's extensive and diverse array of habitats, shaped over the millennia by natural processes and human intervention. Its starry night skies offer a sense of tranquillity and remind us of our place in the universe.

The diversity of habitats and species supported within the AONB reflects the local variations in geology, topography, soils, land use and climate. They contain some of the UK's most important habitats.. Whilst many of its natural features have evolved and adapted over time, the underlying current climate and nature emergencies create both long and short terms pressures for change that threaten the diverse ecology of the AONB. Loss of biodiversity within the AONB is accelerating and requires a concerted effort from all sectors to stem this decline. This message was a key headline from stakeholder

consultations to support this management plan and is reinforced by the evidence from the Wales State of Natural Resources Reports (SoNaRR 2016 and 2020). These reports identify an overall decline and loss of resilience of many of the habitats and species within the AONB, through loss of connectivity, land-use pressures and spread of invasive species.

The distinctive landscapes of the Clwydian Range and Dee Valley offer tranquillity in abundance, with its wide and expansive moors and grasslands, dramatic screes and cliffs, intimate valleys and secluded woodlands. The LANDMAP Cultural Landscape Survey (2019) identified over 60% of the AONB to be classed as either Spiritual, Tranquil or Wild. However, barriers exist in terms of accessibility and inclusion of people from a range of minority groups.

Generations of communities have shaped the land, farming, building and moulding the landscape to meet their needs and provide the area with its diverse physical and cultural heritage. With limited light pollution (92% of the AONB is within top two darkest night sky categories, (out of nine categories - All Wales Light Pollution Map 2018), the area offers a stunning perspective of the night sky, but also a vital refuge for the growing number of species threatened by increasing illumination from houses, businesses, conurbations, streets and roads. The significance of the AONB's landscape to inspire visitors and residents and provide a place to support health and well-being cannot be understated.

The large number of historical and archaeological sites in the AONB are part of the continuous imprint of human activity that contribute to the landscape character. They represent human activity from around the last ice age, 12,000 years ago, to the more recent but important industrial landscapes associated with mineral and stone extraction. Whilst many of these archaeological and heritage sites such as the medieval strongholds of Castell Dinas Brân and Chirk Castle and the chain of Iron Age hillforts are Statutorily protected and the Pontcysyllte Aqueduct listed as a World Heritage Site, other historic features such as boundary stones, village wells and milestones remain vulnerable. The association of Owain Glyndŵr, with Corwen and Ederynion give a strong cultural and historical root in defence of national identity. The Historic Environment (Wales) Act 2016 sets out legislation for the registration, protection and enforcement against offences relating to Scheduled Monuments, Historic Parks and Gardens, Listed Buildings, historic place names and historic environment records. However positive action to maintain, improve understanding and prevent deterioration of these features requires a sustained effort, building on the successes of earlier projects.

8.1 Principle Aims

Halting and reversing the decline in biodiversity is of national and global concern and is deepened with the impacts of climate change. AONBs hold a key position in delivering this vital shift away from decline and towards nature recovery, in line with their key Statutory Purposes, the Colchester Declaration and the unique partnerships embedded within the management of the areas. The extend and diversity of habitats within Clwydian Range and Dee Valley AONB offer not only multiple ecosystem services within the area, but also a reservoir to effective support habitat connectivity beyond its margins, providing both quiet refuges for species but also connecting people closer to wildlife.

The well-being of communities, visitors and those who work within the AONB are deeply connected to the sense of place, Bro (describing belonging to the heartlands of Welsh communities and Welsh language), and the cultural and landscape heritage of the area. This is key to supporting people's understanding of the issues and pressures facing the Area and the changes that may be needed to enable a sustainable future for all.

Consistently applied planning and environmental regulatory regimes are essential to support sustainable land-use planning, management and development. Effective land management approaches need to deliver multiple benefits for biodiversity, businesses and

communities and the AONB partnership will be central to support necessary changes, building resilient ecosystems and landscapes, whilst enabling social well-being and economic improvements.



- Restore, reconnect and expand key features, special qualities, heritage, habitats and species at a landscape scale in order to increase resilience to environmental change
- Ensure that the natural, landscape heritage and cultural benefits and services of the AONB landscape are properly understood and valued
- Support and enable progressive land management change to enable wildlife to thrive within the AONB and its dependent landscapes, adapting to a changing climate whilst supporting climate mitigation measures
- Contribute to sensitive development planning, informed by landscape character assessments and historic landscape characterisation and promote consistent application of the AONB supplementary planning guidance.

8.2 What would success look like for the Special Qualities and Features of the AONB?:

There is a significant amount of change and transition expected within this Management Plan period, including the need to address, with urgency, the climate crisis, uncertainty over future land-use and rural economic support mechanisms, measures to halt and reverse biodiversity loss and the need to improve our flood risk, water and soil management.

The plan will set out an agenda for how the landscape of the Clwydian Range and Dee Valley can sustainably contribute to meeting some of these challenges whilst recognising the intrinsic value of its special qualities and features. These success, therefore will be reflected in the effectiveness of the governance, advocacy and leadership of the AONB, including its role in developing and promoting best practice, securing resources and championing the unique qualities of the Area.

Landscape character and quality: The varied and distinctive landscape features of the AONB and perspectives of them are sustained and enhanced. Landscape quality and character are key considerations for landscape scale responses to climate change adaptation and mitigation. Measures to reduce intrinsic and peripheral light pollution are effectively implemented and the AONB's Dark Sky status is recognised and appreciated by communities and visitors. People respond to positively to the well-being environmental and economic benefits of the AONB's landscapes and support its safeguarding and promotion.

Development proposals submitted and determined in line with the adopted supplementary planning guidance for the AONB.

Habitats and Wildlife: People understand and support measures to improve biodiversity resilience, habitat connectivity and safeguarding of key indicator species such as curlew, black grouse, adder, skylark. There is a sustained and growing uptake – higher than the national average - of land management measures to enhance and protect biodiversity, including those through Wales's Sustainable Farming Scheme.

All nationally protected sites are assessed as being in Improving or Favourable Condition and, similarly, trends of improvement are identified within European sites' (SAC and SPA) through regular condition monitoring and reporting by JNCC.

Connectivity between core sites for biodiversity is enhanced, including links with sites beyond the AONB, where these improve net resilience.

A robust monitoring regime of habitats and species is in place and actively supported.

Historic Environment: People have a growing understanding of the historic sites and features of the AONB and the cultural and language connections to the present day. Owners of sites and features of historic, cultural and heritage importance actively support safeguarding measures and activities to improve knowledge and understanding of them.

Communities are actively contributing to building local understanding of their heritage, including the Welsh language and Welsh culture.

The objectives of the Management Plan for the Pontcysyllte Aqueduct and Canal World Heritage Site are supported and implemented.

Access Recreation and Tourism: Innovative means of engaging and educating visitors on the pressures and opportunities across all themes are implemented in addition to more traditional signage and information leaflets (e.g. performing arts, workshops, ranger led task days). Honeypot sites are adequately resourced to minimise localised visitor impacts on the environment and people respond positively to safeguarding measures.

Local businesses support sustainable tourism activities, focussing on appreciation and enhancement of the AONB's special qualities. Pressures on the public rights of way network and access land are effectively managed, such that measures to enhance biodiversity, heritage, cultural and landscape features are not compromised.

Culture and People: Local communities are engaged and empowered to develop actions to mitigate and adapt to climate change. Farmers and land owners are consulted and supported in land management practice which will mitigate climate change and ensure viability of the rural economy in future climate conditions. Green businesses and eco-tourism ventures are supported and play a key role in climate change education and readiness throughout the AONB.

The AONB as an educational resource is fully realised, with schools, colleges and universities and study groups all using opportunities for improving understanding of the environmental qualities of the area and contribute towards monitoring and innovative research to address longer term challenges and risks from climate change, changing land management practices and visitor and development pressures.

8.3 Strategic Objectives

NLH01 - Promote and develop programmes to conserve and enhance, the features that maintain the Special Qualities, landscape character and natural environment of the AONB.

NLH02 – Support and enable land management practices, individually and collectively, contribute to the natural beauty, environmental resilience, enjoyment and understanding of the AONB's Special Qualities.

NLH03 - Enable partnership working to conserve and enhance features and sites of archaeological, cultural and historic importance having key regard to cumulative impacts and pressures.

NLH04 - Enable the management and safeguarding of the Poncysyllte Aqueduct and Canal World Heritage Site and its Buffer Zone, in line its Management Plan (2019-29) objectives.

NLH05 - Enable and influence the effective understanding of landscape condition and habitat change and pressures driving change, through effective and systematic monitoring and recording of key sites, features, habitats and species.

NLH06 - Facilitate, develop and deliver, in partnership with others, Nature Recovery Plans for key sites and species throughout the AONB

NLH07 - Support the Planning and Regulatory systems and regulatory organisations to safeguard and protect the AONB's Special Qualities.

NLH08 – Enable and encourage effective broadleaf woodland, veteran tree and hedgerow management, including strategic planting, tree protection, thinning and natural regeneration.

NLH09 - Increase biosecurity awareness and support projects to address the impacts from Invasive Non-native Species.

NLH10 - Safeguard and enhance heather moorland, calcareous grasslands and limestone pavements within the AONB through sustainable land management measures, safeguarding of protected sites and improving understanding of their significance.

9 The Changing Climate

Introduction



The climate is changing. The IPPC 2021 report *Climate Change 2021: The Physical Science* Basis confirms that it is unequivocal that human influence has warmed the atmosphere, ocean and land. Human-induced climate change is already affecting many weather and climate extremes and global temperature is predicted to increase until mid-century under all emissions scenarios. UKCP18 climate projections for Wales suggest that climate trends during the course of this century will see an increase in high temperatures and low rainfall in the summer. Warmer and wetter weather will prevail in winter months. These trends are already being observed within the AONB with high impact extreme weather events such as the Llantysilio Mountain wildfire in summer 2018, and flood damage caused by Storm Christophin January 2021. The future sustainability of the special qualities and features of the AONB depend on a decisive and multi-level response to climate change, both with regards to responding to imminent change and reducing emissions that will further exacerbate climate change in the future. Predicted future impacts of climate change are as complex as the tapestry of landscapes, natural and cultural features which comprise the Clwydian Range and Dee Valley AONB. Impacts and adaptation measures for key landscape types within the AONB are proposed within the Clywdian Range and Dee Valley AONB guidance document *Working with a changing climate*"² which highlights the intrinsic link between climate change and biodiversity loss and land management. Key issues for the AONB include:

Long periods of dry weather could lead to drought, reduced flows in rivers and streams, drier soil, and more frequent wildfires.

At other times of year heavier rainfall and storms could increase the risk of flooding, erosion and landslip.

Along the coast, sea-level rise and coastal storms could increase flood risk and erosion, while putting further pressure on fragile coastal habitats such as salt marshes and dunes.

The local climate could become less suitable for some habitats and species, while upwards and northwards migration could bring other species into parts of the AONB.

The timing of seasonal events could change, including flowering, breeding and migration, which could affect synchronisation between species and important events like pollination.

Agriculture and forestry could face changing yields, increased risks of pests and diseases, and damage from flooding, drought and storms.

² Clwydian Range and Dee Valley AONB (2020), *Working with a Changing Climate- A guide to adaptation in the Clwydian Range and Dee Valley AONB*. Available at: https://www.clwydianrangeanddeevalleyaonb.org.uk/wp-content/uploads/2020/07/1996434094-Working-with-Climate-Change-pdf-Eng.pdf

The types of food we have access to could change, and prices and availability could be affected, for example by damage to crops or disruption of supply chains.

Extreme weather could affect the health and wellbeing of communities and damage buildings and infrastructure, but milder winters could reduce cold-related deaths.

In setting Strategic Objectives for the 2020-2025 Management Plan relating to climate change, it is necessary to consider both how management can contribute to the resilience of the AONB to climate change, but also how management practices within the AONB can reduce emissions to minimise further future climate change.

9.1 Principle Aims

The following principle aims for the 2020-2025 Management Plan are built on an understanding that education and collaboration will be key to successfully mitigating against, and building in resilience for, climate change impacts on the Clwydian Range and Dee Valley AONB:

- Ensure the current and future impacts of climate change on landscapes, communities and livelihoods in the AONB are widely understood.
- Establish local ways to ameliorate the adverse effects of climate change, without causing detriment to our landscape & nature.
- Empower and educate land owners and managers to adopt measures to increase their resilience to climate change with regard for landscape character and quality.
- Ensure that the impact on, and of, climate change within the AONB is integral to decision making at all levels.
- Understand the current and optimum carbon store and sequestration potential of the AONB and establish means to safeguard and enhance these whilst maintaining the Special Qualities and Features of the AONB..
- Recognise that climate change impacts transcend land and administrative boundaries. Harness the power of collaborative action for enhancing mitigation and resilience to climate change.

9.2 What would success look likefor the Special Features and Qualities of the AONB?

In developing the strategic objectives and actions for the climate change theme of the 2020-2025 Management Plan, a future where mitigation and resilience are successfully integrated into management at all levels is visualised. This approach helps aid wider understanding of the intent of objectives in the context of the special qualities and features for which the AONB is designated. This is of particular importance for the theme of climate change which is often perceived as a daunting risk.

Landscape character and quality: Natural native habitats including peat bogs and heather moorlands are preserved and enhanced to increase carbon sequestration value and provide natural flood management in upland areas. Native woodlands are preserved and protected. The location of new tree planting is considerate of value to climate change resilience (flood mitigation, natural shade and cooling) as well as the impact of the landscape character and community/visitor interaction.

Habitats and Wildlife: The risks from climate change to special landscapes (heather moorlands, broadleaved woodlands, river valleys and limestone grasslands) are understood and adaptation planning undertaken to minimise loss of habitats and wildlife during extreme weather events. Opportunities for enhancing carbon sequestration value of habitats are balanced against the needs of local communities and the rural economy.

Historic Environment: Climate change risk assessment and adaptation planning is undertaken for all significant historic features within the AONB and collectively for smaller features and traditional boundaries. Opportunities to educate and engage visitors in the risks of climate change to the historic environment to the AONB are sought (e.g. through signage and information leaflets, digital media, local press).

Access Recreation and Tourism: Innovative means of engaging and educating visitors are implemented in addition to more traditional signage and information leaflets (e.g. performing arts, workshops, ranger led climate change mitigation/adaptation task days). Visitors are provided with accessible and affordable alternatives to private car travel (e.g. park and ride service, electric bike hire, waymarked walking/cycling routes). The visitor economy is supported predominantly by a local supply chain (e.g. catering supplies and produce, building materials).

Culture and People: Local communities are engaged and empowered to develop actions to mitigate and adapt to climate change. Farmers and land owners are consulted and supported in land management practice which will mitigate climate change and ensure viability of the rural economy in future climate conditions. Green businesses and eco-tourism ventures are supported and play a key role in climate change education and readiness throughout the AONB.

9.3 Strategic Objectives:

- ACCO1: Make accessible and promote UKCP18 climate projections and encourage and facilitate climate change risk assessment and adaptation planning in the context of landscape quality.
- ACCO2: Help communities and land owners to recognise how land management practices will need to change to respond to future climate change (e.g. change in growing seasons, prevalence of pests and diseases).
- **ACCO3**: Develop an understanding of the likely impact of climate change on special qualities and features of the AONB
- **ACCO4**: Work with land owners and tenants to promote best practice and identify opportunities for carbon sequestration, water catchment management and climate adaptation through agricultural practice.
- **ACCO5**: Encourage opportunities for eco innovation development and implementation to tackle climate change where this does not negatively impact on landscape quality.
- **ACCO6**: Collaborate with partner organisations and academic institutions to better understand the implications of climate change on the AONB and implement measures to mitigate and adapt.
- ACCO7: Encourage a sustainable approach to tourism within the AONB which practices and promotes action to mitigate and adapt

to climate change. Support eco-tourism and green businesses within the AONB.

- **ACCO8**: Develop an understanding of the impacts of land management and climate change on carbon stores and sequestration and manage to mitigate degradation.
- **ACCO9**: Develop and support partnerships for collaborative action towards climate resilience.
- **ACCO10:** Explore options for natural flood management and other catchment scale solutions to flood mitigation.

10 Recreation, Health & Wellbeing

10.1 Introduction



The benefits of access to nature and green, open spaces upon our mental and physical wellbeing are well documented with te cost of physical inactivity estimated to cost Wales' Health Service over £35 million per year.

The Clwydian Range and Dee Valley is well provided with access opportunities, crossed by multiple access corridors such as main roads, upland passes and rail routes. It serves as a historic gateway to North Wales and can be explored on foot, bike and water, amongst many other recreational and outdoor pursuits.

The AONB's position on the Welsh/English border and transport links means it has longbeen a popular day trip destination for nearby cities such as Liverpool and Chester. The rise in 'staycations' and days out to the countryside across the UK as a result of Covid-19 restrictions led to visitor numbers soaring across the AONB, particularly at honeypot locations such as Loggerheads, Moel Famau and Llangollen. The rising demand for recreation and access brings with it pressure on local infrastructure and communities, highlighting the increasingly challenging but essential task of promoting sustainable recreation that protects the special qualities and features of the AONB. Key to achieving this is our continuing partnerships with local organisations, communities and landowners to monitor and reduce impacts; coordinate campaigns and education; and promote responsible activities.

10.2 Principle Aims

The following principle aims for the 2020-2025 Management Plan are built on an understanding that demand for access and recreation need to be balanced with the protection of special qualities, whilst also ensuring the opportunities the AONB has to offer are accessible to all.

- Balance the pressures of increased demand for access to the countryside with the needs of local residents and businesses
- Manage the impacts of visitors upon honeypot sites and the AONB's special qualities
- Maintain high quality transport infrastructure that promotes sustainable travel for all.
- Raise awareness of the health and wellbeing benefits of spending time in the AONB and engaging with its special qualities

- Improve the accessibility of the AONB to those who would benefit most from its health and wellbeing benefits
- Improve access for local residents to access the countryside from their front door



10.3 What would success look like for the Special Features and Qualities of the AONB?

Landscape character and quality: The landscape's relative tranquillity and pockets of wilderness have been retained and enhanced and are being enjoyed by visitors and local residents alike. Visitors from nearby population centres and cities can appreciate the dark night skies and extensive views, their minds able to switch off and relax. Local residents' sense of belonging and attachment to the landscape has grown as they are able to access remote spaces via sustainable infrastructure such as local bus routes, bridleways and footpaths.

Habitats and Wildlife: Habitats and wildlife are thriving thanks to the extensive volunteer activity that has been promoted by the AONB and its partners. Visitors and local residents are taking up the opportunity to give back to the natural environment that they rely on for their physical and mental wellbeing. There is less litter jeopardising wildlife as fewer people leave it behind and more people pick it up. Resources previously spent on cleaning up the AONB and repairing damage are being used to invest in the improvement and enhancement of the natural environment. Water quality has improved as organised events encourage users of the rivers work to clean the environment whilst they enjoy it.

Historic Environment: Historic features, listed or unlisted, small or vast, are enjoyed by a variety of visitors and local residents that are evenly distributed across the AONB and its historic environment. Educational campaigns and signage allow visitors to learn more about the rich history of the area, and local residents to connect with the heritage of the place they call home.

Access Recreation and Tourism: Visitors from all walks of life are visiting the AONB and have travelled via sustainable transport such as rail, bus or bike. 'Honeypot sites' are a term of the past as visitors are dispersed evenly across the landscape, enjoying the wide variety of special qualities it has to offer. Some visitors have been encouraged to visit and enjoy the natural environment as a result of a local health initiative in partnership with the AONB. There are a wide variety of activities, outdoor pursuits and events on offer to

suit every interest, made possible by a thriving local economy and tourism industry that enjoys year-round income. The Offa's Dyke Path attracts visitors from across the world who are attracted by a trail steeped in history and local culture and enjoy the variety of local businesses providing unique products and experiences along the route.

Those living within the boundaries of the AONB are able to access a public right of way or bus service within the local vicinity of their community that takes them to a variety of locations to enjoy with ease. Traffic levels have decreased as a result of improved transport infrastructure and the tranquillity of the AONB can be felt in the towns and villages just as much as it can atop the rolling ridges.

Culture and People: There is a balance of the needs of both visitors and local communities, both of whom have a shared appreciation of and respect for the AONB and its special qualities. Visitors understand and respect the rich mix of culture and community, including the language and traditions of the local area, and benefit from the variety of cultural attractions and events on offer. The local economy is thriving and intrinsically linked to the culture and people of the AONB.

10.4 Strategic Objectives

- **RHWO1**: Monitor the pressures of tourism upon the special qualities and honeypot sites and develop a programme of measures to reduce the impacts and increase resilience, working in partnership with local authorities, NGOs and other partners
- **RHWO2**: Work with partners to encourage and promote responsible behaviour through education, campaigns and the promotion of activities that are linked to understanding and appreciation of the landscape.
- **RHWO3**: Work in partnership to continue providing high quality facilities and infrastructure to enable visitors and local communities to enjoy and protect the special qualities of the AONB.
- **RHWO4**: Improve the accessibility of the AONB to local and nearby towns and villages through increased connectivity of sustainable transport infrastructure and public rights of way.
- **RHW05**: Strengthen relationships with local health and social organisations to raise awareness and increase opportunities for all to access the health and wellbeing benefits of connecting with the AONB's special qualities.
- **RHWO6**: Continue to provide and promote volunteer opportunities for all across the AONB and support activity that engages communities in their local environment.
- **RHW07**: Develop opportunities to maximise the health benefits that access to the landscape can bring and target this to areas of most need within the communities within and around the AONB.
- **RHWO8**: Continue work with the NOS Dark Sky Partnership to safe-guard and increase areas of protected dark skies across the AONB and raise awareness of the wellbeing benefits to local communities and visitors.
- **RHWO9**: Ensure the Offa's Dyke National Trail and other promoted routes are maintained to a high standard and promoted as gateways to the AONB.

• **RHW010**: Continue strengthening partnerships with access users and managers through the AONB Partnership Working Groups to build trust and relationships between access users and landowners.

RHW011: Improve representation in AONB Partnership and Working groups to represent modern society.

11The Rural Economy

Introduction



Having a thriving sustainable economy is vital to the wellbeing of the Clwydian Range and Dee Valley's landscapes, nature, and people. Significant changes to the economic environment, including those resulting from the UK's withdraw from the EU, the Covid-19 Pandemic and innovative Welsh Government legislation all have potential to impact on the economy of the AONB in different ways.

It is essential to protect the distinctive character, beauty, and cultural heritage that are so precious that it was safeguarded in the national interest as an AONB in 1985. However, the AONB also needs to have thriving communities, businesses, and a living culture if it is to be able to sustain the activities that created and maintain that character and beauty.

11.1 Principle Aims

In the current time of significant change, the AONB, communities and businesses must work together to ensure a sustainable, living economy for the AONB. We need an active partnership with all land managers to understand their businesses, the pressures they are under and how they are developing in this time of change, while at the same time ensuring that the special qualities of the AONB and protected and enhanced.

The concept of holistic marketing of the AONB as a brand for businesses operating within it should be considered, to benefit the businesses and to raise understanding of the AONB as a working protected landscape.

It is also very important to work with businesses as opportunities for new enterprises such as marketing carbon credits from well managed peatlands and new tree planting and new sustainable visitor accommodation and attractions develop.

- Managing and conserve a rich and diverse landscape as a product of the sustainable rural economy that supports it.
- Support rural businesses of all kinds to encourage the sustainable use of the AONB and its natural resources for the benefit of the local people, communities, and economy.
- Retain and improve essential services for communities and businesses in the AONB.



11.2 What would success look like for the Special Features and Qualities of the AONB?

The period of this Management Plan will likely see major changes in the economy of the AONB. Success within the period of this Management Plan needs to reflect the need to respond to these factors as they emerge and how they relate to the existing situation and adapt. Leadership from the AONB in partnership with other specialist bodies, farming unions and individual businesses is vital if the response is to be in tune with the Special Qualities of the AONB and protect them into the future.

Landscape character and quality: A strong partnership to sustain and enhance the landscapes of the AONB with land managers and those seeking to attract people to the area working with the AONB. It is in the interest of all those interested parties that the landscape character and quality is maintained into the future and enhanced to make them more resilient and relevant to the challenges we face. At the same time, they will be working landscapes still providing for those who depend on them for their livelihoods, providing the beauty and places for physical and spiritual enjoyment.

Habitats and Wildlife: Success will mean that the land management within the AONB increasingly supports biodiversity, and the quality and quantity of wildlife increases, while at the same time, the economic viability of farming is improved, benefiting communities within the area. Valuable habitats such as heathland or species will be resilient to or protected from visitor pressure. Those visiting the landscape will aware and appreciative of the fragile nature of its ecology and sensitive to its culture and heritage.

Historic Environment: The historic environment is an intrinsic part of the attraction to the AONB, visitors and local communities alike value and cherish the features from iron age hill forts and the remnants of Offa's Dyke to lime Kilns and local chapels and churches. The economic benefits of maintaining and where possible sensitively re using these features is seen as the appropriate thing to do and is encouraged by the AONB team.

Access Recreation and Tourism: The benefits of accessing the AONB sustainably for quiet enjoyment, exercise and relaxation is recognised as an important part of the economy of the Area and provision of services to enable and enhance this becomes a significant employer. These opportunities are provided by local companies, based within the AONB and the economic benefits are primarily for local communities. People visiting the AONB for recreation of all types are welcome and the economic benefits they bring are recognised by communities within the Area. Opportunities are available for those people to stay in high quality accommodation, eat out and enjoy the rich local culture. They perceive the AONB as an area to visit at all times of the year, recognising it sensitivity and valuing the local culture and environment.

Culture and People: The local communities within the AONB recognise the economic opportunities that the designation offers and are keen to engage in partnership with the AONB team and other organisations to realise the benefits of the designation to their marketing. The changes in agricultural support maintain farm incomes and encourage stable, sustainable land management, which enhance the environment and provide more good quality employment opportunities. The enhanced economic activity within the AONB does not lead to a dilution of the local culture and a loss of the intrinsic Welsh nature of the area. The Welsh language flourishes and numbers of people using the language day to day increases.

11.3 Strategic Objectives

- **REO1** Engage constructively with landowners and farmers to ensure a collaborative sustainable future for land management in the AONB.
- **REO2** Work with landowners and farmers to ensure the most effective uptake and delivery of public goods through the Sustainable Farming Scheme and other land management schemes
- **REO3** Support the development of affordable, sustainable housing for local people in appropriate locations whilst maintaining the highest standards of design.
- **REO4** Support local businesses in and around the AONB to recognise and promote the unique and distinctive local produce they offer to residents and visitors to the AONB.
- **REO5** Work to promote a deeper understanding of the Welsh culture and language of the AONB and its contribution towards the Areas special quality.
- **REO6** Promote the Special Qualities of the AONB with local tourism businesses as vehicle for enhancing marketing of the Clwydian Range and Dee Valley AONB brand.
- **REO7** Develop and support thriving rural economies, local produce markets and year-round tourism which supports communities.

ACTION PLAN

How will we deliver the Objectives during the life of the Plan?

	Objective	Action to deliver this objective	Who	Timescale
NLHO1	Support and enable programmes to	 Engage with WG and NRW in the development of the Sustainable Farming Scheme. 	AONB	Annual
	conserve and enhance, the features that	2) Develop and Promote the Landscape and Nature Recovery in a Changing Climate amongst key organisations and partners?	AONB NRW	Year 1
	maintain the Special Qualities, landscape character and natural	 Utilise the National Grid Landscape Enhancement Initiative to deliver schemes that will enhance the Special Features of the AONB. 	AONB Landowners NWWT	Annual
	environment of the AONB.	 Work with Farming community and Unions to promote management works linked to positive landscape conservation. 	AONB	Annual
		 Support local food supply chains and local produce where this is linked to positive landscape conservation 	AONB DCC/FCC Cadwyn Clwyd	
NLHO2	Enable partnership working to conserve and enhance features and	 Monitor the Buildings at risk Register across the AONB and support a programme of works to respond to issues. 	AONB Local Authorities Cadw	Annual
	sites of archaeological, cultural and historic importance having key	 Maintain and develop a partnership with key agencies to ensure a collaborative approach to the conservation of the build and historic environment. 	AONB	Annual
	regard to cumulative impacts and pressures.	 Develop a project to research and protect Welsh language place names and promote their use and understanding. 	AONB Mentr Iaith	Year 2
		 Developing a programme to engage the public and community groups in the Historic Environment. 	AONB CPAT Cadw	Annual

NLHO3	Enable the management and safeguarding of the	1)	Support the World Heritage Site Working Groups through being key members in the delivery of the WHS Management Plan.	AONB	Annual
	Poncysyllte Aqueduct	2)	Deliver the Our Picturesque Landscape Heritage Lottery Programme.	AONB	Year 1
	and Canal World			CRT	Year2
	Heritage Site and its			Wrexham CBC	Year3
	Buffer Zone, in line its	3)			
	Management Plan	-			
	(2019-29) objectives.				
NLHO4	Enable and influence the	1)	Continue annual monitor of black grouse across the Clwydian Range and	AONB	Annual
	effective understanding		support monitoring across Llantysilio, Ruabon and North Berwyn	NRW	
	of landscape condition			RSPB	
	and habitat change and	2)	Carry out a heathland condition survey across the Clwydian Range and	AONB	Year 2
	pressures driving		establish a regular monitoring programme	NRW	
	change, through	3)	Support monitoring programmes for key species with particular emphasis	AONB	Annual
	effective monitoring of		on reptiles, butterflies and curlew.	NRW	
	key sites, features,			RSPB	
	habitats and species.	4)	Identify key ffridd habitats in the AONB and establish and support	AONB	Year2
	-		management and monitoring programmes for them		
	To silitate develop and	1)	Werkwith Culfinin Communes to summarize an annual size the lass extend		No an 2
NLHO5	Facilitate, develop and	1)	Work with Gylfinir Cymru to support recovery works in the Important	AONB	Year 2
	deliver, in partnership		Curlew Areas in the AONB to determine current population and deliver	Landowners	Year 3
	with others, Nature Recovery Plans for key		recovery works.		Year4
	sites and species	2)	Carry out an assessment of the current condition of moorlands in the	AONB	Year 2
	throughout the AONB	,	AONB and develop a response plan with graziers and partners for each	NRW	
	Ŭ		site.		
		3)	Pursue funding that will support upland management programmes.	AONB	Annual
		4)	Support farmers and graziers to deliver moorland management across the AONB	AONB	Annual

		5)	Bring all public sector and third sector grassland into Management Agreements with NRW and other sites into management schemes.	AONB	Annual
NLHO6	Support the Planning	1)	Continue to comment on Planning applications in the AONB where they	AONB	Annual
	and Regulatory systems		may impact on the Special Qualities and Features.		
	and regulatory	2)	Develop a SPG for Dark Skies and ensure its adoption by the 3 Authorities.	AONB	Year 1
	organisations to			Local Authorities	
	safeguard and protect	3)	Develop a Guidance document for Highways infrastructure within the	AONB	Year 2
	the AONB's Special		AONB.	Local Authorities	
	Qualities.	4)	Review and promote the existing SPG for the AONB.	AONB	Year 2
				Local authorities	
		5)	Monitor the TPOs across the AONB and work with owners to protect and	AONB	Year 2
			management these areas.	Local Authorities	Year 4
NLHO7	Encourage and enable	1)	Utilise the SDF Countryside Grant Scheme and National Grid LEI to support	AONB	Annua
	effective broadleaf		native planting, woodland management and hedgerow restoration.		
	woodland, veteran tree	2)	Bring all public sector and third sector woodlands into positive	AONB	Annual
	and hedgerow		management regimes.	NWWT	
	management, including				
	strategic planting, tree				
	protection, thinning and				
	natural regeneration.				
NLHO8	Increase biosecurity	1)	Support DINNS events through the OPL Project in the Dee Catchment - 2	AONB	Annua
	awareness and support		events per year.	NWWT	
	projects to address the	2)	Work with NRW and Bionet to assess the extent of cotoneaster and other	AONB	Year2
	impacts from Invasive		INNS and develop a project for removal from key sites. Promote the issue	NRW	Year3
	Non-native Species.		with communities and the horticulture sector. Use the planning system to	NWWT	Year4
			support this project in new developments.	Local Authorities	

		3)	Promote the issues of tree diseases and biosecurity at key sites such as Moel Famau and Prestatyn Hillside	AONB NRW	Annual
	•				
NLHO9	Safeguard and enhance	1)	Work with volunteers and partners such as NRW to remove the spread of	AONB	Annual
	heather moorland,		non-native conifers on special habitats of the AONB.	NRW	
	calcareous grasslands			Landowners	
	and limestone	2)	Work with partners to introduce sustainable grazing regimes where	AONB	Year 1
	pavements within the		appropriate in order to maintain key habitats	NRW	Year 2
	AONB through	3)	Continue to support farmers and graziers in the management of heathland	AONB	Annual
	sustainable land		through advice and practice assistance through the Denbighshire	NRW	
	management measures,		Moorland Project		
	safeguarding of	4)	Work with NRW to secure management agreements for positive works at	NRW	Annual
	protected sites and		Prestatyn Hillside, Alyn Valley, Dinas Bran and Llantysilio		
	improving		· · · · · ·		
	understanding of their				
	significance.				

	Adapting to Climate ch	nange		
	Objective	Actions to deliver this objective		
ACCO1	Make accessible and promote 1) UKCP18 climate projections and encourage and facilitate	project with partners and communities – through publication of guidance and a toolkit.	AONB NRW	Year 1 Year 2
	climate change risk assessment and adaptation planning in the context of landscape quality.	 Organise workshops with the farming community into the benefits of regenerative farming practices. 	AONB NWR	Year 2
ACCO2	Help communities and land owners to recognise how land management practices will	 Work through the Area Statements and Cadwyn Clwyd Green Villages to facilitate greater understanding and implement Green projects 	AONB Cadwyn Clwyd	Year 2 Year 3 Year 4
	need to change to respond to future climate change (e.g.	 Promote the Landscape Conservation and Nature Recovery in a Changing Climate Project and develop a delivery pilot in the AONB. 	AONB NRW	Year 2
	change in growing seasons, prevalence of pests and diseases).	 Support the Llangollen and Dee Valley Community Supported Agriculture project. 	AONB	Annual
С	,			
ACCO3	Develop an understanding of the likely impact of climate	 Develop and promote the Landscape Conservation and Nature Recovery in a Changing Climate project with NRW. 	AONB NRW	Annual
	change on special qualities and features of the AONB	2) Develop a pilot to develop best practice in landscape adaptation	NRW AONB	Year 2 Year 3
ACCO4	Work with land owners and farmers to identify	 Utilise the SDF Countryside Grant Scheme and LEI to target works that will benefit carbon and water management in the AONB 	AONB Landowners	Annual
	opportunities for carbon sequestration and water	 Work with Denbighshire County Council Catchment Project to support land management that will improve carbon sequestration and water flow management in the AONB. 	DCC AONB	Annual

	catchment management through agricultural practice	3)	Engage with Local Authority's Agricultural Estates to develop a pilot carbon and nature recovery project on a county Farm within the AONB.	AONB DCC	Year3
		4)		4.0110	
ACCO5	Encourage opportunities for eco innovation development	1)	Utilise SDF and the SLSP programme to support eco-innovation projects	AONB	Annual
	and implementation to tackle climate change where this does not negatively impact on landscape quality.				
ACCO6	Collaborate with partner organisations and academic institutions to better understand the implications of climate change on the AONB	1)	Contribute to the North Wales local Resilience Forum multi- partnership disaster response plan for future extreme climate events (wild fire, drought, flooding), accounting for projected increase in frequency and scale of events.	AONB DCC NRW	Annual
	and implement measures to mitigate and adapt.	2)	Influence and contribute to the delivery of the North Wales Wildfire Response Plan in partnership with NRW and NWFRS	AONB NWFRS NRW	Annual
		3)	To lead on the Denbighshire Wildfire and Moorland Management and	AONB	Year 1
			Wildfire Prevention Project in partnership with NRW and NWFRS.	NRW DCC	Year 2 Year 3
		4)	Develop Wildfire risk assessments for moorlands across the AONB and carry out work to reduce fuel load through heathland management.	AONB	Year 1
ACCO7	Encourage a sustainable approach to tourism within the	1)	Publish a Sustainable Tourism Strategy in partnership with the tourism sector and the local authority DMPs.	AONB CRTG	Year 2
	AONB which practices and promotes action to mitigate	2)	Support businesses to improve external lighting by publishing and promoting a Lighting Guide for businesses	AONB NOS	Year 1

and adapt to climate change. Support eco-tourism and green	 Utilise the Sustainable Develop Fund and SLSP to support green tourism initiatives. 	AONB	Annual
businesses within the AONB	 Encourage tourism businesses to understand their carbon footprint and support offset measures. 	AONB	Annual
Develop an understanding of	 Draw on the ERAMMP modelling work of WG to better understand 	AONB	Year 1
the impacts of land management and climate	the current and potential carbon store and sequestration of habitats of the AONB	WG NRW	Year 2
change on carbon stores and sequestration and manage to	 Commission work to determine the carbon impacts of key land management techniques across the AONB and draw on existing work. 	AONB	Year 2
mitigate degradation.			
Develop and support partnerships for collaborative	 Create a Climate Change working group with partners supported by the AONB's Climate Change and Green Infrastructure Officer. 	AONB	Year 1
action towards climate resilience.	 Support and feed into Denbighshire's Climate Emergency working Group. 	AONB	Annual
	 Develop a joint project with the other Designated Landscapes in Wales to better understand the potential for DLs to deliver for Climate Change mitigation. 	AONB	Year 1
Explore options for natural flood management and other	 Work with NWWT Woodlands for Water project to deliver projects that will improve water flow from upland areas. 	NWWT AONB	Annual
catchment scale solutions to	2) Work with Denbighshire's Clwyd Catchment Project to deliver	AONB	Year 1
flood mitigation.	targeted land management and tree planting for water flows	DCC	Year 2
_	3) Work with Flintshire CC and NRW to produce a plan for Moel Famau	AONB	Year 1
	that reflects the potential for carbon and flood risk management.	FCC NRW	
	Support eco-tourism and green businesses within the AONB Develop an understanding of the impacts of land management and climate change on carbon stores and sequestration and manage to mitigate degradation. Develop and support partnerships for collaborative action towards climate resilience. Explore options for natural flood management and other catchment scale solutions to	Support eco-tourism and green businesses within the AONB tourism initiatives. 4) Encourage tourism businesses to understand their carbon footprint and support offset measures. Develop an understanding of the impacts of land management and climate change on carbon stores and sequestration and manage to mitigate degradation. 1) Draw on the ERAMMP modelling work of WG to better understand the current and potential carbon store and sequestration of habitats of the AONB Develop and support partnerships for collaborative action towards climate resilience. 1) Create a Climate Change working group with partners supported by the AONB's Climate Change and Green Infrastructure Officer. 2) Support and feed into Denbighshire's Climate Emergency working Group. 3) Develop a joint project with the other Designated Landscapes in Wales to better understand the potential for DLs to deliver for Climate Change mitigation. Explore options for natural flood management and other catchment scale solutions to flood mitigation. 1) Work with NWWT Woodlands for Water project to deliver projects that will improve water flow from upland areas. 2) Work with Denbighshire's Clwyd Catchment Project to deliver targeted land management and tree planting for water flows 3) Work with Flintshire CC and NRW to produce a plan for Moel Famau	Support eco-tourism and green businesses within the AONB tourism initiatives. 4) Encourage tourism businesses to understand their carbon footprint and support offset measures. AONB Develop an understanding of the impacts of land management and climate change on carbon stores and sequestration and manage to mitigate degradation. 1) Draw on the ERAMMP modelling work of WG to better understand the current and potential carbon store and sequestration of habitats of the AONB AONB Develop and support partnerships for collaborative action towards climate resilience. 1) Create a Climate Change working group with partners supported by the AONB's Climate Change and Green Infrastructure Officer. AONB 3) Develop a joint project with the other Designated Landscapes in Wales to better understand the potential for DLs to deliver for Climate Change mitigation. AONB Explore options for natural flood matagement and other catchment scale solutions to flood mitigation. 1) Work with NWWT Woodlands for Water project to deliver projects that will improve water flow from upland areas. AONB 2) Work with Denbighshire's Cliwyd Catchment Project to deliver AONB AONB

	Recreation, Health an	d Wellbeing		
	Objective	Action to deliver this objective		
RHWO1	Work with partners to monitor the pressures of tourism upon	 Implement improvement plans for to increase resilience at Moel Famau, Llantysilio and Prestatyn Hillside. 	AONB NRW	Year1,2
	the special qualities and honeypot sites and develop a programme of measures to	 Develop and implement monitoring programme for key sites to assess the impact of visitors on the special qualities of the AONB. 	AONB CRT NRW	Annual
	reduce the impacts and increase resilience.			
	-			
RHWO2	Work with partners to encourage and promote responsible behaviour through	 Continue to run the Sustainable Access Campaigns with particular regard for dogs in the countryside, cycling, fire, litter and safety – 4 campaigns per year 	AONB	Annual
	education, campaigns and the promotion of activities that	 Continue to support and promote the Adventure Smart Campaign and Countryside Codes. 	AONB	Annual
	are linked to understanding and appreciation of the landscape	 Attend DMP and Local Access Forums meetings to promote key issues and campaigns. 	AONB	Annual
RHWO3	Work in partnership to	 Provide weekend Ranger cover at key sites at weekends 	AONB	Annual
	continue providing high quality facilities and	 Continue to provide key visitor information and services at the Centres at Loggerheads and Plas Newydd 	AONB	Annual
	infrastructure to enable visitors and local communities	 Maintain a programme of site safety audits at key sites including Loggerheads, Moel Famau and Horseshoe Falls. 	AONB	Annual
	to enjoy and protect the special qualities of the AONB.	4) Maintain the network of promoted routes across the AONB including the Dee Valley Way, North Berwyn Way and Offa's Dyke National Trail	AONB NRW Local Authorities	Annual
		 Work with Flintshire Countryside Service to improve facilities at Gwaenysgor View Point. 	FCC AONB	Year 1

		 Develop mobile catering and information for Moel Famau and Horseshoe Falls 	AONB	Year 2
RHWO4	Improve the accessibility of the AONB to local/nearby towns and villages through increased connectivity of sustainable transport infrastructure and public rights of way.	 Develop and deliver new Community Miles routes for Cilcain, Nannerch and Dyserth and Froncysyllte and Picturesque Walks in the Dee Valley through the OPL Project. Improve rights of way links between the key sites in the Loggerheads and Moel Famau area. Connect the old railway line at Wenffrwd with Llangollen and the Canal in order to provide access for cycling Create a circular urban greenway for Llangollen. 	AONB FCC-WCBC Cadwyn Clwyd AONB DCC AONB CRT AONB	Year 1,2,3 Year 2 Year 2 Year 3
	-	5) Support the development of the Picturesque Bus Service	AONB DCC	Year 1,2,3
RHWO5	Strengthen relationships with local health and social	 Attend Lets Get Moving Partnership to strengthen relationships and develop potential projects. 	AONB	Annual
	organisations to raise awareness and increase	 Engage the with the NERS (National Exercise Referral Scheme) Officers and GP Surgeries at Llangollen, Corwen and Prestatyn 	AONB	Annual
	opportunities for all to access the health and wellbeing benefits of connecting with the AONB's special qualities.	 Maintain links with Public Health Wales through the AONB Partnership 	AONB PHW	Annual
RHWO6	Continue to provide and	1) Produce a events programme to promote opportunities for	AONB	Annual
	promote volunteer opportunities for all across the	volunteering in the AONB 2) Provide regular training for volunteers	DCC AONB	Annual
	AONB and support activity that engages communities in their local environment.			

RHWO7	Develop opportunities to	1) Continue to develop the Nature for Health project with	AONB	Annual
	maximise the health benefits that access to the landscape	Denbighshire housing and develop new partnerships with other agencies.	DCC	
	can bring and target this to areas of most need within the	2) Hold at least one Walk Leader training day per year.	AONB DCC	Annual
	communities within and around the AONB.	3) Target SDF to support health initiatives with partners.	AONB	Annual
RHWO8	Continue work with the NOS Dark Sky Partnership to safe-	1) Secure Dark Sky status for the AONB with IDA	AONB NOS	Year 2
	guard and increase areas of protected dark skies across	Develop an annual programme of Dark Sky events to promote the importance of dark skies for our health and wellbeing.	AONB NOS	Annual
	the AONB and raise awareness of the wellbeing benefits to local communities and visitors.			
	Ensure the Offa's Dyke National Trail and other promoted routes are	 Implement a programme of annual improvement and maintenance across the National Trail with support from NRW and the National Trail Officer 	AONB NRW	Annual
	maintained to a high standard and promoted as gateways to	 Replace the wooden boardwalk across Cyrn y Brain in order to improve access and reduce the impact of the trail on the SAC. 	AONB	Year 1
	the AONB.			
RHWO10	Continue strengthening partnerships with access users	 Access, Recreation and Health Working Group of the AONB to meet at least twice per year. 	AONB	Annual
	and managers through the AONB Partnership Working	 Maintain a diverse membership of access users and land managers across the working group. 	AONB	Annual
	Groups to build trust and relationships between access	 Improve representation in AONB Partnership and Working groups to better reflect diversity in society. 	AONB	Year 1
	users and landowners.			

	Rural Economy			
	Objective	Action to deliver this objective		
REO1	Engage constructively with land owners and farmers to	 Maintain representatives of the farming community on the AONB Partnership 	AONB	Annual
	ensure a collaborative, sustainable future for land management in the AONB.	 Actively engage with landowners to build positive relationships and mutual understanding as changes emerge 	AONB	Annual
REO2	Work with landowners and farmers to ensure the most effective uptake and delivery	 Hold 4 demonstration projects in upland management best practice and diversification with farming community and other practitioners 	AONB NRW	Year2,3,4,5
	of public goods through the Sustainable Farming Scheme	2) Produce and promote a best practice guide for ffridd management	AONB / OPL Pont	Year 2
	and other land management schemes	 Promote the Nature Recovery and Landscape in a changing Climate Guide with land managers and agencies 	AONB NRW	Annual
REO3	Support the development of affordable, sustainable housing for local people in	 Support local authorities in carrying out housing needs assessments and affordability surveys in areas of high demand for affordable housing. 	AONB Local Authorities	Annual
	appropriate locations whilst maintaining the highest standards of design.	 Work with local planning authorities to promote affordable housing schemes for local people as part of new market schemes. 	Local Authorities	Annual
REO4	Support local businesses in and around the AONB to	 Continue to support Clwydian Range Food and Drink and Llangollen and Dee Valley Food and Drink to promote local produce? 	AONB NEW Partnership	Annual
	recognise and promote the unique and distinctive local	 Work with businesses and partners to produce a Sustainable Tourism Strategy for the AONB 	AONB	Year 2

	produce they offer to residents and visitors to the	3)	Develop directory of relevant local businesses linked to traditional	AONB	Year 3
	AONB.	4)	rural skills and sustainable land management. Strengthen the visibility of local produce and crafts at Loggerheads,	AONB	Year 3
		5)	Plas Newydd and other AONB outlets. Support appropriate new businesses and initiatives through SDF	AONB	Annual
	I				
REO5	Work to promote a deeper understanding of the Welsh	1)	Further develop the Tro App to promote Welsh Place names along the Offa's Dyke National Trial.	AONB Menter laith	Year 1,2
	culture and language of the AONB and its contribution	2)	Develop a Welsh Place names project to identify and interpret key place names across the AONB.	AONB Menter laith	Year 2
	towards the Areas special quality	3)	Safeguard Welsh Place names in place and access management.	AONB	Annual
REO6	Promote the Special Qualities of the AONB with	1)	Foster the use of the AONB Brand on approved commercial activities/products	AONB	Annual
	local tourism businesses as vehicle for enhancing marketing of the Clwydian Range and Dee Valley AONB brand.	2)	Work with partners to enhance the prestige of the AONB brand with local communities	AONB	Annual
REO6	Develop and support thriving rural economies,	1)	Promote the benefits of dark night skies for Winter tourism and support events through the NOS Partnership	AONB	Annual
	local produce markets and year-round tourism which	2)	Through the Landscape Solutions Project investigate the feasibility of branded produce connected to landscape conservation	AONB	Year 1,2
	supports communities.	3)	Bring Producers and seller together to help develop new products and supply chains	AONB	Year 1





Bryniau Clwyd a Dyffryn Dyfrdwy Clwydian Range and Dee Valley Ardal o Harddwch Naturiol Eithriadol Area of Curstanding Naturil Beauty