



**Bryniau Clwyd a  
Dyffryn Dyfrdwy**  
Clwydian Range  
and Dee Valley

Ardal o Harddwch Naturiol Eithriadol  
Area of Outstanding Natural Beauty

# Clwydian Range and Dee Valley

Area of Outstanding Natural Beauty

State of the AONB Report

2014 – 2019



In setting an agenda that will ensure the special qualities and features of the Clwydian Range and Dee Valley are preserved, it is first necessary to make an assessment of their current extent and condition. It is also important that the issues impacting upon them are identified and that factors likely to impact upon them in the future are anticipated.

The State of the AONB Report identifies where possible the extent and condition of each feature and the factors impacting on them. It also seeks to identify an ideal state for these features and begins to establish indicators that will help to define what we are aiming for in pursuing the good health of the AONB. It is an on-going process that relies on constant data gathering and monitoring and should be able to respond to changing demands on the environment. There is a requirement for up to date information that will lead to informed responses to environmental change.



## Tranquillity, Remoteness and Wilderness

<p><b>Tranquillity, Remoteness and Wilderness</b></p>	<p><b>Intrusion</b></p> <p>A variety of factors can have an impact on the Tranquillity, Remoteness and Wilderness of the AONB. Traffic noise, light pollution, the impact of quarrying and utility installations can all have an effect on the tranquillity of the AONB and peoples enjoyment of the landscape.</p>	<ul style="list-style-type: none"> <li>• Light from the major settlements, particularly to the east and north of the AONB, have a significant impact on dark night skies.</li> <li>• Light and noise pollution from transport, development and recreation erodes tranquillity – A55, A494, A5, A542</li> <li>• Intrusive and degrading elements such as power lines / phone lines, transmitters, masts and wind turbines can have a significant impact.</li> <li>• Cumulative effects of small scale change can lead to a degradation of landscape character.</li> <li>• Permitted development completed within the AONB could also impact the landscape.</li> <li>• Accommodating visitor access and destination sites within sensitive locations.</li> </ul>	<p>Further intrusion mapping required</p> <p>Extent:</p> <ul style="list-style-type: none"> <li>• Illuminated bollards and signs within Denbighshire – 80 within AONB Wrexham - unknown Flintshire - unknown</li> <li>• Street lights 1,350 directly adjacent to or within AONB in Denbighshire.</li> </ul>						
<p><b>Tranquillity, Remoteness and Wilderness</b></p>	<p><b>Roads</b></p> <p>The principle roads and communication routes in the AONB primarily cross the</p>	<ul style="list-style-type: none"> <li>• Possible environmental impact of major road improvement schemes in the AONB.</li> <li>• Potential loss of rural character</li> </ul>	<ul style="list-style-type: none"> <li>• Length and class of roads in the AONB:  <table style="margin-left: 20px; border: none;"> <tr> <td>Dualled EuroRoute –</td> <td style="text-align: right;">1.6km</td> </tr> <tr> <td>Trunk Road -</td> <td style="text-align: right;">35.0km</td> </tr> <tr> <td>A Road -</td> <td style="text-align: right;">49.2km</td> </tr> </table> </li> </ul>	Dualled EuroRoute –	1.6km	Trunk Road -	35.0km	A Road -	49.2km
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	<p>Clwydian Range in an east – west direction, and run in an east – west direction along the Dee Valley and Morwynion Valley. The most significant road is the dualled A55 EuroRoute which passes through the narrowest part of the AONB at Rhuallt. Other important routes are the A5 and A494 Trunk Roads and the A542 Horseshoe Pass, A5104, A5151, A541, A539 and A525. However, the bulk of the network within the AONB is made up of smaller roads and lanes, many of which add to the character of the area.</p>	<p>and features as a result of highway maintenance, signage and minor improvement works.</p> <ul style="list-style-type: none"> <li>• Increasing traffic related to people working at a considerable distance from where they live, increasing commuter traffic, and use of cars for recreational visits.</li> <li>• Raising awareness of the AONB through threshold / village signs.</li> </ul>	<table border="0"> <tr> <td>B Road -</td> <td>23.6km</td> </tr> <tr> <td>Minor roads -</td> <td>338.8km</td> </tr> <tr> <td>Unclassified County Roads -</td> <td>60.9km</td> </tr> <tr> <td>Total length of road</td> <td>509.1km</td> </tr> </table> <ul style="list-style-type: none"> <li>• No. of AONB threshold signs – 16</li> <li>• No. of AONB branded village signs – 21</li> </ul>	B Road -	23.6km	Minor roads -	338.8km	Unclassified County Roads -	60.9km	Total length of road	509.1km
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<p><b>Tranquillity, Remoteness and Wilderness</b></p>	<p><b>Minerals</b></p> <p>The limestone and slate geology of the Clwydian Range and Dee Valley has been exploited for its mineral wealth for centuries. This has left its mark on the landscape; many abandoned or worked out mineral sites have been assimilated into the landscape over time but others still scar the area. There are two active slate quarries in the AONB, other sites are dormant but</p>	<ul style="list-style-type: none"> <li>• Restoration and aftercare of quarries, including these which are outside the AONB but visible from it or impact on views into the area.</li> <li>• Dormant sites – need to pursue Prohibition Notices under s102 of T&amp;CP Act 1990.</li> </ul>	<p><b>Within AONB</b></p> <ul style="list-style-type: none"> <li>• No. of active quarries – 2</li> <li>• Area of active quarries – 41.5 ha % of total AONB area – 0.11%</li> <li>• No. of dormant quarries - unknown</li> <li>• Area of dormant quarries - unknown % of total AONB area - unknown</li> <li>• No. of confirmed Prohibition Orders - unknown</li> </ul> <p><b>Within 3km of AONB</b></p> <ul style="list-style-type: none"> <li>• No. of active quarries - 8</li> <li>• Area of active quarries – 203.38 ha</li> <li>• No. of dormant quarries - unknown</li> <li>• Area of dormant quarries - unknown</li> </ul>								

	<p>have old planning permissions. Given the scale of mineral operations and their potential impact on a wide area, including important views out of the AONB, there is a need to have regard to both active and dormant quarries outside the designated area.</p>		<ul style="list-style-type: none"> <li>No of confirmed Prohibition Orders – unknown</li> </ul>
<p><b>Tranquillity, Remoteness and Wilderness</b></p>	<p><b>Utilities and Energy</b></p> <p>Overhead power transmission lines and communications masts are the most prominent utility infrastructure within the AONB. The largest power lines cross the AONB at its narrowest point near Rhuallt and travel through the AONB down the Morwynion Valley. Given the topography of the AONB it is an attractive location for communications infrastructure. The most prominent installations are the masts at Moel y Parc and Cynr y Brain, but there are also prominent masts at Gwaenysgor, Moel Gelli, Craigy-dduallt, Coed Mawr and Barber’s Hill.</p> <p>A relatively new feature of</p>	<ul style="list-style-type: none"> <li>Overhead cables and wires can degrade the local landscape character.</li> <li>Reluctance to share masts leads to duplication and an increase impact on the local landscape.</li> <li>Mobile phone coverage ‘blackspots’ lead to pressure for additional communication masts.</li> <li>Cumulative impact of large scale wind farm development in the setting of the AONB degrades landscape character and sense of tranquillity.</li> <li>The need to moving towards zero carbon development without harming the AONB.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>Length of National Grid high-voltage overhead cable (400kv) – 17.46km</li> <li>Length of 132kv overhead power lines – 1.38km</li> <li>Length of 33kv overhead power lines – 44.76km (87.85)</li> <li>Length of 33kv undergrounded power lines – 6.19km (12.15%)</li> </ul> <p>Communication masts:</p> <ul style="list-style-type: none"> <li>Moel y Parc (TV)</li> <li>Moel y Gelli (Emergency Services)</li> <li>Gwaenysgor</li> <li>Bryn Alyn</li> <li>Cynr y Brain</li> <li>Moel Gelli</li> <li>Craig-y-dduallt</li> <li>Coed Mawr</li> <li>Barber’s Hill</li> </ul> <p>Wind turbines:</p> <ul style="list-style-type: none"> <li>1 46m high wind turbine consented</li> </ul>

	regional energy infrastructure is the development of major on-shore and off-shore wind farms.		<p>within the AONB</p> <ul style="list-style-type: none"> <li>50m+ high wind turbines within 15km – 122</li> </ul>
<b>Tranquillity, Remoteness and Wilderness</b>	<p><b>Land Management Practices</b></p> <p>Land Management Practices are continually changing, adapting to government policy, climate change and agricultural improvements. These changes in management have the ability to impact on the landscape of the AONB.</p>	<ul style="list-style-type: none"> <li>Impact of European and Welsh Government agricultural and forestry policies can have a significant impact on landscape character and views</li> <li>It is important that habitat improvements and creation becomes a part of viable land management systems and businesses.</li> <li>Modern agricultural practices and equipment leads to larger fields with fewer internal boundaries and wider gateways, which can degrade the local landscape character.</li> <li>Geometrical forestry planting and harvesting, and heather cutting patterns can add intrusive lines into the landscape.</li> <li>Lack of buffer strips along watercourses.</li> </ul>	<ul style="list-style-type: none"> <li>6,441.35 ha of the AONB is Common Land (16.55% of total AONB area)</li> <li>7,786.98ha (20% of total AONB area) of land in the AONB in Glastir Agri-environment scheme in 2013. <ul style="list-style-type: none"> <li>5,232.24ha (67%) Entry Level</li> <li>793.75ha (10%) Glastir Advanced</li> <li>1,760.99ha (23%) Glastir Commons</li> </ul> </li> </ul> <p><b>Protection:</b></p> <ul style="list-style-type: none"> <li>8,028.37 ha of AONB designated as SAC (20.62% of AONB land area)</li> <li>9,097.34 ha of AONB designated as SSSI (23.36% of AONB land area)</li> <li>2,555.05 ha of AONB designated as SPA (6.56% of AONB land area)</li> <li>21.33 ha of AONB designated as LNR (0.05% of AONB land area)</li> <li>3,451.92 ha of AONB designated as Wildlife Sites (8.87% of AONB land area)</li> </ul>
<b>Tranquillity, Remoteness and Wilderness</b>	<p><b>Climate Change</b></p> <p>The AONB has evolved over time, shaped by geological</p>	<ul style="list-style-type: none"> <li>Adaption and mitigation measures may impact upon the AONB and its setting.</li> <li>Reduction in air and water</li> </ul>	<ul style="list-style-type: none"> <li>9,428 ha (24.2% of AONB area) is heather moorland.</li> <li>Total area of AONB covered by woodland 5,165.24 ha (13.27% of</li> </ul>

	<p>forces, climate and human activity, and this evolution is ongoing. Climate change is expected to have a major influence in the coming decades, and we need to manage this process, taking action to adapt to the impacts and make the best of the opportunities.</p> <p>Although the global climate has been relatively stable for thousands of years, recent extreme weather events and longer terms trends suggest it is now changing due to human activity. Climate change is expected to continue, causing hotter, drier summers, warmer wetter winters, more extreme weather and sea level rise in Wales and the rest of Britain.</p> <p>Global climate change is projected to continue, causing hotter drier summers, warmer, wetter winters, more extreme weather, droughts, heat waves, heavier rainfall, and accelerating sea-level rise in Wales and the rest of Britain over coming decades.</p>	<p>quality impacting on the health of the population and ecosystem.</p> <ul style="list-style-type: none"> <li>• Seasonal reduction / increase in water flow.</li> <li>• Pressure for inappropriate flood defences with dredging and development degrading the local landscape character.</li> <li>• Long dry spells of weather could lead to increased fire risk, particularly on heathlands.</li> </ul>	<p>AONB area).</p>
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Resource / Special Feature	Description	Issues	State
<b>Cultural Heritage and Bro</b>	<p><b>Bro/Welsh Language</b></p> <p>'Bro' is a Welsh word which describes a sense of belonging and community cohesion within an area. It is an intangible concept which is difficult to define, but is nonetheless a valid component of sustainable Welsh communities. The Welsh language is part of the traditional character and cultural make-up of the AONB. The use of Welsh is greater than the Wales average (21.3%) and remains a significant feature of the area. The greatest proportion of Welsh language users live in the western and south western parts of the AONB.</p> <p><b>Picturesque and romantic movement</b></p> <p>The story of the picturesque movement in the AONB goes back to the late 18<sup>th</sup> century, particularly in the Dee Valley</p>	<ul style="list-style-type: none"> <li>• Community involvement and participation in local events and traditions.</li> <li>• Inward migration is changing the makeup of communities</li> <li>• Need to raise community awareness of the AONB and the benefits it brings, especially in the south.</li> <li>• Need to raise local business awareness of the AONB and the benefits it brings.</li> <li>• Sustaining the Welsh language</li> <li>• Lack / loss of facilities to celebrate cultural associations.</li> <li>• Visitor pressure degrading landscape character at key locations.</li> <li>• Loss of significant views depicted in art or prose due to vegetation encroachment, or insensitive development.</li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of population speaking, reading and writing Welsh in the AONB (2011): North – 26.7% West – 37.2% East – 24.2% South – 29.1%</li> <li>• No. of active community groups – Unknown</li> <li>• No. of community shows – 6</li> <li>• No. of community publications – Unknown</li> <li>• Cylch Meithryn / Ty a fi clubs – 7</li> <li>• Welsh medium primary schools in the AONB – 2</li> </ul>



	<p>around Llangollen, painted by Turner and Wilson amongst others. Richard Wilson also has close links to the Loggerheads area.</p> <p>The ladies of Llangollen established the Dee Valley as a centre for picturesque appreciation from their home at Plas Newydd.</p> <p>Poets and authors such as Wordsworth, Gerald Manley Hopkins and Mendelssohn have also taken inspiration from the AONBs landscape.</p> <p><b>Eisteddfodau</b></p> <p>Building on these artistic traditions, Llangollen is known throughout the world for the International Eisteddfod, held annually in the town since 1947. Corwen was the location of the first public national eisteddfod in 1919.</p>		
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## Natural Environment

RESOURCE/ SPECIAL FEATURE	DESCRIPTION	ISSUES	STATE
<p><b>Natural Environment</b></p>	<p><b>Natural Benefits and Services</b></p> <p>The landscape of the AONB is important for the resources it offers which benefit everyone, such as water, food and locations for quiet enjoyment.</p> <p>These benefits, known collectively as Ecosystem Services indicate that the landscape of the AONB not only provides a rich variety of habitats and species, but also contributes positively towards the production of food, the control of climate and recreational provision.</p>	<ul style="list-style-type: none"> <li>• There is a need for natural systems and networks that are fit for purpose, with more and better places for nature for the benefit of wildlife and people.</li> <li>• There is a need to identify all the benefits and services delivered by the natural system.</li> <li>• Lack of data and knowledge makes it difficult to manage within environmental limits.</li> <li>• There is no baseline for assigning a value to the services and benefits received from the natural system.</li> </ul>	
<p><b>Natural Environment</b></p>	<p><b>Habitat Resilience</b></p> <p>Habitat resilience is a habitats ability to respond to natural or man-made disturbance through fast recovery or by resisting damage.</p>	<ul style="list-style-type: none"> <li>• Resilience and condition of the natural system is not fully understood.</li> <li>• Attention given to priority habitats at the expense of other locally important sites,</li> </ul>	

		<p>such as road verges and other corridors.</p> <ul style="list-style-type: none"> <li>• There is a need for the expansion of and connectivity between wildlife rich habitats.</li> </ul>	
<b>Natural Environment</b>	<p><b>Designations / SAC</b></p> <p>Special Areas of Conservation (SAC) and Special Protection Areas (SPA) are legal protections for sites of European importance for habitats and birds, to protect against damaging activities. These designations form part of a larger European network called Natura 2000.</p> <p>Sites of national importance are designated and given protection as Sites of Special Scientific Interest (SSSI)</p> <p>Land designated as a County Wildlife sites are often the finest local examples of habitats, and are given material consideration in the planning process.</p> <p>These and other designations provide a level of protection for important sites against potentially damaging activity.</p>	<ul style="list-style-type: none"> <li>• Need to bring sites into favourable conservation status.</li> <li>• Visitor pressure in key conservation areas.</li> <li>• Designations do not address all conservation interests.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• There are 22 SSSI's in the AONB, covering 9,097.34 ha (23.36% of total AONB area).</li> <li>• There are 3 SAC's covering 8,028.37 ha (20.62% of AONB)</li> <li>• There is 1 SPA covering 2,555 ha (6.56% of AONB)</li> <li>• There are 162 Wildlife Sites covering 3,451.92 ha (8.87% AONB)</li> <li>• There is 1 LNR covering 21.33 ha (0.05% AONB)</li> <li>• There are 73 RIGS sites covering 676.45 ha (1.74% AONB)</li> </ul> <p><b>Condition:</b></p> <p>NRW continue to monitor the condition of SSSIs, SACs and SPAs. All geological SSSIs are in favourable condition.</p>

## Natural Environment

RESOURCE/ SPECIAL FEATURE	DESCRIPTION	ISSUES	STATE
<p><b>Limestone Grassland, cliffs and screes</b></p>	<p>Calcareous grasslands typically occur on shallow base-rich soils derived from the underlying limestone rocks. They are characterised by a short species-rich turf containing a variety of grasses and herbs. In the AONB calcareous grassland primarily occurs in the north from Prestatyn to Cwm, centrally along the Alyn Valley, including the second largest limestone pavement in Wales at Bryn Alyn, and in the south around the Eglwyseg rocks where large areas of scree are also located.</p> <p>Limestone pavement is an area of limestone which lies wholly or partly exposed on the surface of the ground and has been fissured by natural erosion. They can be wooded or open and both types exist within the AONB.</p> <p>There are a number of geologically and archaeologically important</p>	<ul style="list-style-type: none"> <li>• Under-grazing encouraging scrub encroachment.</li> <li>• Over-grazing resulting in loss of species diversity</li> <li>• Enrichment of soils from fertilisers, herbicide application, ploughing and re-seeding from agricultural purposes.</li> <li>• Acidification and nitrogen enrichment caused by atmospheric deposition.</li> <li>• Recreational pressure bringing about floristic changes associated with soil compaction.</li> <li>• Recreational pressure on Limestone geological SSSI features such as Eglwyseg scree slopes and Panorama Drive limestone grassland.</li> <li>• Invasion by no-native plant species.</li> <li>• Limited knowledge of underground systems.</li> </ul>	<p><b>Limestone Grassland Ideal state:</b> Favourable condition will be comprised of short species-rich mixtures of herbs, grasses, sedges and mosses on lime-rich soil. Balanced management ensures a scrub grassland mosaic that supports a wide range of wildlife without the scrub spreading to replace the grassland.</p> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• Unimproved Calcareous Grassland: 292.24 ha (0.75% of AONB area)</li> <li>• Semi-improved Calcareous Grassland: 39.74 ha (0.1% of AONB area)</li> </ul> <p><b>Limestone Pavement Ideal state:</b> Limestone pavements require structural diversity to maximise transitions, shelter invertebrates and keep a variety of structural niches open. There should be a mixture of flora characteristic of rocky and woodland habitats. Wooded pavements should have clearings created naturally by clint and gryke structure or through woodland management.</p>

	<p>caves associated with the Limestone areas of the AONB. Caves studied have been found to be important archaeologically for human and animal activity. Cave systems at Tremerchion, Llanarmon-yn-Ial and Loggerheads are among the more well known. In 2015, there is currently a Cadw funded project running to discover more about Limestone caves in north east Wales.</p> <p>Scree slopes on the Eglwyseg rocks are an important geological feature, across which the Offa's Dyke National Trail passes.</p>	<ul style="list-style-type: none"> <li>• Removal of Limestone rocks for rockeries.</li> <li>• Quarrying.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• Limestone Pavement: 1.88ha (13.82% of Limestone Pavement in Wales – Wales total 13.6 ha)</li> <li>• Scree: 22.89 ha</li> </ul> <p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li>• There are 12 SSSIs in the AONB containing Geological features.</li> <li>• There are 73 RIGS sites in the AONB covering 676.45 ha (1.74% of the AONB).</li> <li>• 315.52 ha (88.23%) within SAC, SSSI or Wildlife Site.</li> <li>• 230.3 ha (64.4%) international and national designation with commitments to maintain / restore favourable condition (SAC and SSSI).</li> </ul> <p><b>Limestone Cave systems indicators:</b></p> <ul style="list-style-type: none"> <li>• No. Caves in the AONB - unknown</li> <li>• 4 cave systems protected as SSSI; Alyn Gorge Caves (Alyn Valley Woods &amp; Alyn Gorge Caves SSSI), Coe Gwyn &amp; Ffynnon Beuno Caves, Tremeirchion Caves (both Ffynnon Beuno &amp; Cae Gwyn Caves SSSI) and Minera Caves (Ruabon / Llantysilio Mountains &amp; Minera SSSI).</li> </ul> <p><b>Limestone Habitats Favourable Management:</b></p> <ul style="list-style-type: none"> <li>• 1.05 ha (0.29% resource) are within</li> </ul>
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			<p>DCC Countryside Service owned / managed sites.</p> <ul style="list-style-type: none"> <li>• 5.47 ha (1.53% resource) are within NWWT managed sites.</li> </ul> <p><b>Condition:</b></p> <ul style="list-style-type: none"> <li>• NRW continue to monitor the condition of SSSIs and SACs.</li> <li>• All geological SSSIs are in a favourable condition.</li> </ul> <p>From 2015 to 2018 there is to be significant investment into Limestone features in the AONB through the Limestone Legacy project which has received NRW competitive bid funding.</p>
<p><b>Heather moorlands and rolling ridges</b></p>	<p>Dominated by heather, bilberry and western gorse with ideally a diverse range of age communities. It has a distinct range of bird life associated with it, including grouse, stonechat and whinchat.</p> <p>The uplands of the North Berwyn, Llantysilio, Ruabon and Llandegla mountains in the south of the AONB are predominantly heathland. Heather moorland is also found in large blocks along the ridge of the Clwydian Range between Llandegla and Bodfari.</p>	<ul style="list-style-type: none"> <li>• Conversion to grassland through ploughing, reseeding, liming and fertilisation for agricultural purposes.</li> <li>• The division of common through internal fences and subsequent loss of hefted flocks.</li> <li>• Under-grazing / abandonment.</li> <li>• Localised over-grazing caused by lack of heathland management and structure.</li> <li>• Poorly managed burning / wildfires.</li> </ul>	<p><b>Ideal state:</b></p> <p>Upland heath in 'favourable condition' is typically dominated by a range of dwarf shrubs such as heather, bilberry, crowberry, bell heather and western gorse. They are generally structurally diverse, containing stands of vegetation with heather at different stages of growth, including areas of mature heather. This habitat supports an important assemblage of birds, a diverse invertebrate fauna and, in some cases, assemblages of rare and local mosses and liverworts.</p> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• 9,428 ha (24.2% of AONB area) (includes degraded areas / potential</li> </ul>

		<ul style="list-style-type: none"> <li>• Inappropriate methods of supplementary feeding.</li> <li>• Bracken invasion.</li> <li>• Heavy recreation pressure causing erosion, particularly illegal off road vehicle use in the south of the AONB.</li> <li>• Lack of appropriate rotational heather management.</li> <li>• Afforestation.</li> <li>• Nitrogen enrichment caused by atmospheric deposition.</li> </ul>	<p>for restoration / expansion).</p> <p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li>• 9,317.2 ha (98.9%) has some form of designation conferring a level of protection.</li> <li>• 7,776.6 ha (82.48%) is protected as SSSI or SAC.</li> </ul> <p><b>2. Favourable management:</b></p> <ul style="list-style-type: none"> <li>• 683.51 ha (7.25% resource) are within DCC Countryside Service owned / managed sites.</li> </ul> <p><b>3. Condition:</b></p> <ul style="list-style-type: none"> <li>• The majority of the heathland areas in the AONB are currently being managed through cutting and burning of heather, and cutting and bruising of bracken.</li> <li>• Bracken extent unknown. Between 2008 and 2012, in the Heather and Hillforts project area, 1,029 ha of bracken were sprayed, and 270.5 ha cut / bruised. Bracken dominated heathland reduced from 788 ha to 303 ha.</li> <li>• Between 2008 and 2012, in the Clwydian Range and Llantysilio mountains, mature / degenerate heather reduced from 384 ha to 367 ha</li> </ul> <p>The Heather and Hillforts project Landscape</p>
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			Partnership Scheme ran from 2008 to 2012, focusing on the Clwydian Range and Llantysilio mountains heathland areas. Significant work was undertaken to reduce the extent of bracken through aerial spraying, as well as work with landowners and graziers to improve the condition of heathland. Heather condition surveys were carried out in 2005 and 2010, showing an improvement in the age structure of heather as well as a reduction in the extent of bracken cover.
<b>Woodland and veteran trees</b>	<p>Many of these woodlands represent a link with the landscape as it appeared following the last ice age and support a diverse range of flora and fauna. Ash woodlands are particularly important in the Alyn Valley where it has been designated SAC. In other parts of the AONB oak woods are significant.</p> <p>Veteran trees are trees which, because of their size and age are considered of exceptional cultural, landscape and nature conservation value. Veteran trees are often associated with parkland, and are usually found in more lowland areas. There are few in the north of the AONB and are found in greater</p>	<ul style="list-style-type: none"> <li>• Grazing preventing natural regeneration.</li> <li>• Loss due to localised quarrying.</li> <li>• Lack of specific woodland management and cessation of traditional management.</li> <li>• Fragmentation of ownership.</li> <li>• Invasion by naturalised species leading to a change in structure and composition (sycamore and beech).</li> <li>• Loss of species such as red squirrel.</li> <li>• Development pressures.</li> <li>• Effects of air pollution.</li> <li>• Acidification of base-rich soils through the scavenging effect of commercial conifers.</li> </ul>	<p><b>Ideal State:</b> A woodland in 'favourable condition' has a varied structure with at least three age classes spread across the average life expectancy of the commonest trees, areas of open space – both temporary and permanent relatively undisturbed mature / old growth stands, understory and some build-up of fallen and standing dead wood. It should be comprised predominantly of native species and there should not be signs of rapid loss of native trees and shrubs. There should also be signs of seedlings growing through to saplings to young trees at sufficient density to maintain canopy density.</p> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• Broadleaved (including mixed) woodland: 1809.43 ha (4.65% of</li> </ul>



	<p>number in the south. Some fine examples can be found on the Eglwyseg (Yew / Field Maple), at the Horseshoe Falls, at Trevor Church and Chirk Castle.</p>	<ul style="list-style-type: none"> <li>• Many semi-natural woodlands have declined as a result of replanting with exotic conifers.</li> </ul> <p><b>Pests and diseases</b></p> <ul style="list-style-type: none"> <li>• Present / future tree diseases could have a significant impact on the local landscape character.</li> <li>• Phytophthora Ramorum – Bilberry and Larch (is listed as an EU controlled organism).</li> <li>• Chalara fraxinea – Ash dieback.</li> <li>• Phytophthora Alni – alder.</li> <li>• Canopies opened by disease may be subject to higher rates of wind-throw, and invasion by unrepresentative species becomes more likely.</li> </ul>	<p>AONB area) of which 795.8 ha (2.04% of AONB) is Semi Natural Ancient Woodland or Replanted Ancient Woodland.</p> <p><b>1. Indicators:</b></p> <ul style="list-style-type: none"> <li>• 199.9 ha (11.04%) are within international and national designation (SAC and SSSI).</li> </ul> <p><b>2. Favourable Management:</b></p> <ul style="list-style-type: none"> <li>• 54.79 ha (3.03% resource) are within Country Parks and DCC Countryside Service managed sites.</li> <li>• 17.72 ha (0.98% resource) are within NWWT managed sites.</li> </ul> <p><b>3. Condition:</b> Woodland SSSIs</p> <ul style="list-style-type: none"> <li>• NRW continue to monitor the condition of all SSSIs and SACs.</li> </ul>
<p><b>River Valleys</b></p>	<p>River valleys are not only important for the watercourse itself but also the bank and associated land or riparian zone. They are dynamic systems and provide a wide range of ecological niches supporting a diverse flora and fauna. They also form important wildlife corridors, enabling dispersion and migration</p>	<ul style="list-style-type: none"> <li>• Water pollution from sewage, acidification, urban drainage, agricultural run-off and mine and industrial damage.</li> <li>• Loss of bank-side vegetation through overgrazing and poaching. This can also lead to erosion of river margins</li> </ul>	<p><b>Ideal state:</b> The morphology of rivers and streams and their associated plant and animal assemblages vary according to their geographical area, underlying geology and water chemistry. However, all rivers in their natural state are dynamic systems, continually modifying their form. A healthy river will have good water quality, free from</p>

	<p>of species.</p> <p>There are three significant river valleys in the AONB. The River Dee from Corwen to Newbridge, the River Alyn from Cilcain to Llanferres and the River Wheeler from Bodfari to Melin-y-Wern.</p>	<p>and siltation of the river channel with losses of fish spawning gravels and habitat diversity.</p> <ul style="list-style-type: none"> <li>• Modification of the shape and course.</li> <li>• Potential loss of indicator species such as otters, water voles and fresh water pearl mussel.</li> <li>• Invasive non-native species such as Himalayan balsam, Chinese mitten crabs and mink competing with native species.</li> <li>• Recreational impacts such as walking, angling, boating and canoeing can cause disturbance to both the habitat and resident species.</li> <li>• Inappropriate land drainage and flood defence works.</li> <li>• Climate change may affect the habitat and species through flooding and temperature change.</li> <li>• Abstraction and discharge of water for hydro-power generation.</li> <li>• Meeting the requirements of the Water Framework Directive and Catchment Management Plans.</li> </ul>	<p>outside pollution, and marginal and bank-side vegetation that supports an array of wild flowers and animals and provides corridor links between fragmented habitats. Rivers which display a mosaic of features such as riffles and pools and exposed sediments can support a diverse range of plant and animal species.</p> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• 62.77 km (34.53 km River Dee, 19.55 km River Alyn and 8.69 km River Wheeler)</li> </ul> <p><b>Indicators:</b></p> <ul style="list-style-type: none"> <li>• The River Dee is designated at SAC and SSSI.</li> <li>• 3.31 km (16.93%) of River Alyn are within SAC.</li> <li>• 1.43 km (16.46%) of River Wheeler passes through wildlife sites.</li> </ul> <p><b>2. Favourable management:</b></p> <ul style="list-style-type: none"> <li>• 1.06 km (8.16%) of the River Alyn falls within Loggerheads Country Park.</li> <li>• 1.73 km (5.01%) of the River Dee falls within Ty Mawr Country Park, and Denbighshire Countryside Sites.</li> </ul> <p><b>3. Condition:</b></p> <ul style="list-style-type: none"> <li>• Otters are known to be present on all three rivers. Water voles have been recorded on the Llangollen Canal,</li> </ul>
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			<p>and at either end of the Wheeler valley with extensive field ditches giving population potential to expand. There is only one pocket of water vole records in the Alyn valley, though further surveys may reveal more.</p> <ul style="list-style-type: none"><li>• Invasive species are known to be present on all three river systems, both mink and Himalayan balsam in particular, although Japanese Knotweed is more widespread on the River Dee. The River Dee also has populations of Signal Crayfish.</li><li>• All three rivers have wet woodland and meadow habitats supported by back channels in many places providing good bank-side cover and corridors for wildlife.</li><li>• A number of rights of way cross and run parallel to all three rivers, in particular the Alyn indicating recreation pressure is present. Recreation pressure on the River Dee is significant; it is popular for fishing, canoeing and rafting. A number of businesses use and are dependent on access to the river.</li></ul>
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## The Historic Environment

RESOURCE/ SPECIAL FEATURE	DESCRIPTION	ISSUES	STATE
<p><b>Historic Environment</b></p>	<p><b>Historic Settlement and Archaeology</b></p> <p>There are a number of historic settlements within the AONB. Llangollen is the largest with a population of around 3,000. The town was granted its charter in 1284 and straddles the Dee via an arched bridge built in about 1500. The historic core of the town lies on the southern side, focusing on the church and the river crossing. Later development occurred largely as a result of the woollen industry. Since early times, the town has been an important stopping place, especially for people travelling from London to Ireland. Until the early 1800s, roads were notoriously hazardous but Telford's new road to Holyhead (now the A5) had a profound effect on the development of early 19<sup>th</sup> century Llangollen and North Wales in general, allowing the London mail coaches to travel faster and more safely.</p>	<ul style="list-style-type: none"> <li>• Deterioration and lack of funding for the upkeep of structures and monuments.</li> <li>• Erosion of sites following archaeological excavations.</li> <li>• Lack of awareness of ancient monuments and sites.</li> <li>• Lack of facilities for study groups.</li> <li>• Inappropriate land management.</li> <li>• Lack of archaeological data.</li> <li>• Damage from metal detection.</li> <li>• Off Road Motorcycle and 4x4 damage, particularly on the Llantysilio and North Berwyn mountains.</li> <li>• Historic Parks and Gardens are privately owned; dependant on landowners to maintain and enhance.</li> <li>• Not all open to the public.</li> </ul>	<p><b>Protection:</b></p> <ul style="list-style-type: none"> <li>• Scheduled Ancient Monuments are nationally important archaeological sites or historic buildings, afforded protection against unauthorised change.</li> <li>• There are 95 Scheduled Ancient Monuments in the AONB, the protection of which are overseen by Cadw. Many of these sites provide evidence of past mining, quarrying and settlements.</li> <li>• Scheduled Ancient Monuments cover 156.04 ha (0.4% of the AONB).</li> <li>• There are 17 Conservation Areas in the AONB, covering 88.85 ha (0.23% of the AONB).</li> <li>• There are 645 Listed Building in the AONB.</li> <li>• Valle Crucis Abbey, Eliseg's Pillar and Llangar church are guardianship sites and managed by Cadw.</li> </ul>

	<p>The Cistercian Abbey of Valle Crucis lies near the confluence of the Eglwyseg and the Dee rivers, north of Llangollen. The fragmentary 9<sup>th</sup> century cross, the Pillar of Eliseg, is set on a small circular mound which is a Bronze Age Barrow, just to the north of the Abbey.</p> <p>Historic parks and gardens form an important and integral part of the historic and cultural fabric of an area. They are listed in the Cadw / ICOMOS Register of Parks and Gardens of Special Historic Interest in Wales. The registered sites are Penbedw, Golden Grove, St Beuno's, Colomendy, Valle Crucis, Bryntysilio, Llantysilio Hall, Vivod, Plas Newydd, Trefor Hall, Chirk Castle and Argoed Hall. Although not protected in the same way as Listed Buildings they are graded in a similar way. It is anticipated that legislation in the new heritage Bill to be announced shortly will give more weight to this designation</p>	<ul style="list-style-type: none"> <li>• Not statutorily protected; need to engage with and support landowners.</li> <li>• No arrangements for monitoring the condition of Historic parks and gardens.</li> <li>• No Management / Enhancement Plans.</li> </ul>	<p><b>Ideal state:</b></p> <ul style="list-style-type: none"> <li>• Sites are maintained in a favourable condition. Cadw are currently reappraising their monument condition surveys and are developing a Monuments at Risk methodology, as yet information is not available for the AONB but this will be extremely valuable information in the future.</li> </ul> <p><b>State:</b></p> <ul style="list-style-type: none"> <li>• Sites are visited by Cadw every 5 or 10 years.</li> <li>• SAM condition data is not consistently available yet, but Cadw are working towards this.</li> <li>• Of the 645 Listed Buildings in the AONB, 56 are considered to be 'at risk'.</li> </ul> <p><b>Understanding:</b></p> <ul style="list-style-type: none"> <li>• Recent archaeological work on Elisegs Pilar has been undertaken by Bangor and Chester Universities, this has identified that the pillar sits on a pre-existing Bronze Age burial mound.</li> <li>• Excavations have also taken place at Penycloddiau by Liverpool University, Moel y Gaer Bodfari by Oxford University and at Fron Newydd near Caer Drewyn by</li> </ul>
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			<p>Bangor University.</p> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• There are 12 Historic Parks within the AONB covering 611.67 ha (1.57% of the AONB). The essential settings of 14 Historic Parks are within the AONB covering a total of 1,152.01 ha (2.96% of the AONB).</li> <li>• 9 more Historic Parks and Gardens are directly adjacent to the AONB.</li> </ul>
<p><b>Historic Environment</b></p>	<p><b>Industrial Features and World Heritage Site</b></p> <p>When Thomas Telford finished Pontcysyllte Aqueduct in 1805, it was the tallest canal boat crossing in the world. On 27 June 2009, UNESCO made this masterpiece of civil engineering a World Heritage Site, along with 11 miles of canal including Chirk Aqueduct and the Horseshoe Falls at Llantysilio, near Llangollen. Pontcysyllte represents a ‘masterpiece of human creative genius’ and is an outstanding example of a construction that ‘illustrated a significant stage in human history’.</p> <p>Construction work on the</p>	<ul style="list-style-type: none"> <li>• Prevention from decay and need for on-going maintenance.</li> <li>• Inappropriate methods or materials for repairs through lack of understanding, skills or materials, or changing modern standards.</li> <li>• Vegetation growth in the World Heritage Site and the Buffer Zone affecting views in and out.</li> <li>• Maintenance of effective protection of the Site and Buffer Zone through designations and planning policies.</li> </ul>	<p><b>Protection:</b></p> <ul style="list-style-type: none"> <li>• The World Heritage Site is afforded protection as such.</li> <li>• Much of the World Heritage site is owned by the Canal and Rivers Trust.</li> </ul> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• The World Heritage site covers 62.62 ha within the AONB (0.16% of the AONB).</li> <li>• The World Heritage Site Buffer Zone covers 3,129.54 ha within the AONB (8.04% of the AONB).</li> </ul> <p><b>Status:</b></p> <ul style="list-style-type: none"> <li>• Not currently on UNESCOs list of World Heritage in Danger. 46 sites</li> </ul>



<p>Llangollen Branch of the Shropshire Union Canal began in 1795 and was completed in 1808. The canal gave access to the Ruabon collieries and stimulated the growth of the limekilns and pottery works at Froncysyllte and Tref-y-nant.</p> <p>The Vale of Llangollen Railway was opened in 1861. For nearly a century, the railway took over much of the traffic formerly carried by road and canal. The Llangollen Railway Society now operates the line between Llangollen and Corwen.</p> <p>World Heritage Status means that the Pontcysyllte Aqueduct and Canal has been inscribed on the World Heritage List, offering it increased awareness. This awareness leads to an increase in the level of protection and conservation given to inscribed sites. It is one of 28 properties inscribed in the UK. Worldwide there were 1,007 World Heritage Sites in 2014.</p> <p>Loggerheads was the focal point for lead mining in the 18<sup>th</sup> and 19<sup>th</sup> century and remnants of this industrial past remain along the</p>	<ul style="list-style-type: none"> <li>• Management of visitor pressure.</li> <li>• Need to develop the presentation of the Outstanding Universal Value – how to get the story across.</li> <li>• Site surveys not followed up.</li> <li>• Sites being lost to land use change.</li> <li>• Some industrial remains are in poor condition.</li> <li>• Much of the industrial heritage of the Alyn Valley is outside the public estate.</li> <li>• Lack of awareness of archaeological heritage, the relationship of quarries, inclines and associated works which together have cultural integrity.</li> <li>• Some sites unrecorded or with no scheduled protection.</li> <li>• Some sites recommended for scheduling in the Metal Mines survey of the 1990s have not taken place.</li> <li>• The vast majority of industrial (and indeed all other periods of site) are undesignated. They are noted on the HER Historic Environment Record which is set to become statutory in</li> </ul>	<p>listed in 2014.</p> <p><b>Industrial Archaeology Protection:</b></p> <ul style="list-style-type: none"> <li>• Some of the key industrial sites are protected as scheduled. The canal and many associated monuments are scheduled. The Nant y Pandy tramway and slate works at Glyndyfrdwy are scheduled but in poor condition. Parts of the Minera lead mines at Meadow shaft are a SAM as is the Hoffman kiln in the Minera Quarries.</li> </ul> <p><b>Condition:</b></p> <ul style="list-style-type: none"> <li>• The Glyndyfrdwy slate works buildings and parts of the tramway are in a poor condition.</li> <li>• Key features like the Leete at Loggerheads Country park, Cascade Woods lead mining site and others are unprotected</li> </ul>
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	<p>river and in the woods. There was extensive lead mining in the Alyn Valley, Prestatyn Hillside, Bryn Alyn, and areas of Esclusham Mountain, World's End and Minera.</p> <p>The name Loggerheads derives from a dispute over mineral rights which was eventually settled in the high court. The boundary stone adjacent to the A494 and boundary stones within the Park mark the position the legal boundary was determined to be.</p> <p>There was extensive slate quarrying in the south of the AONB, on the Llantysilio and North Berwyn mountains. Only the Berwyn quarry on the Horseshoe Pass remains open today.</p> <p>There are a number of features associated with these mines, such as the Leete at Loggerheads, and tramways from the Moel y Faen quarry to Llangollen canal, and Moel Fferna to Glwyndyfrdwy through Nant y Pandy, where there are extensive ruins relating to slate working.</p>	<p>the new Planning Bill.</p>	
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<p><b>Historic Environment</b></p>	<p><b>Hillforts and Defensive Structures</b></p> <p>The chain of Iron Age Hillforts along the ridgeline of the Clwydian Range are its most high profile and unique archaeological sites. These 6 hillforts, between Moel Hiraddig near Dyserth and Moel Fenlli near Llanferres, provide one of the highest concentrations in Western Europe.</p> <p>Moel y Gaer is one of the summits of Llantysilio Mountain, on the north side of the river Dee and west of the Horseshoe Pass. There is evidence for human activity here dating back to at least the Bronze Age (2,300 – 1,200 BC), with a large burial cairn on the summit of Moel Gamelin. Several centuries later, during the Iron Age (1200 BC – 74 AD), Moel y Gaer was chosen as the site for a small hillfort.</p> <p>Castell Dinas Bran, a medieval castle located within the earthworks of an earlier Iron Age Hillfort, towers over the town of Llangollen giving it a strong sense of place and historic context. Similarly, Caer Drewyn Iron Age Hillfort, along with the 6<sup>th</sup> century church at St Mael and St Sulien and associations</p>	<ul style="list-style-type: none"> <li>• Erosion to the hillforts and other defensive structures through recreation and sheep scrapes.</li> <li>• Damage through inappropriate land management, such as quarrying, tree planting and over grazing.</li> <li>• Ploughing / Agricultural pressure.</li> <li>• Damage from metal detection.</li> <li>• Increased awareness and access could lead to increased erosion issues.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• 10 Iron Age Hillforts in the AONB, covering 105.14 ha (0.27 % of total AONB).</li> <li>• 3 Motte and Bailey castles.</li> <li>• Small remnants of a 12<sup>th</sup> century castle at Dyserth.</li> <li>• 2 later 13<sup>th</sup> Century stone castles.</li> </ul> <p><b>Protection:</b></p> <ul style="list-style-type: none"> <li>• 5 Iron Age Hillforts are owned by the Local Authorities.</li> <li>• All Iron Age Hillforts are designated as Scheduled Ancient Monuments.</li> <li>• Dinas Bran Castle, owned by Denbighshire County Council, is designated as a SAM, SSSI and it is also within the buffer zone of the WHS and within the Historic landscape of the Vale of Llangollen</li> <li>• Chirk Castle is jointly managed by Cadw and the National Trust.</li> <li>• Tomen y Rhodwydd, Tomen y Faerdre and Glyndwr’s Mount are all SAMs.</li> <li>• Remains of Dyserth Caslte are a SAM.</li> </ul> <p><b>Condition:</b></p> <ul style="list-style-type: none"> <li>• Erosion work was carried out on Moel Fenlli, Moel Arthur, Penycloddiau , Moel y Gaer Llanbedr, Moel y Gaer Llantysilio and Caer Drewyn as part</li> </ul>
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	<p>with Owain Glyndwr give the town of Corwen a strong historical root. Pen y Gaer Hillfort is located near Garth adjacent to Trefor Hall woods.</p> <p>Completed in 1310, Chirk is the last Welsh castle from the reign of Edward I that is still lived in. Features from its 700 years include the medieval tower and dungeon, 17<sup>th</sup> century Long Gallery, grand 18<sup>th</sup> century state apartments, servants' hall and historic laundry.</p> <p>Motte and Bailey castle sites are found at Tomen y Rhodwydd near Llandegla, Tomen y Faerdre near Llanarmon-yn-Ial and Glyndwr's Mount near Llidiart y Parc.</p> <p>The site of Gop Cairn at Trelawnyd, not technically a defensive structure but hinting at nearby settlement, is thought to date to the Neolithic period from about 3000BC. It is a vast mound, constructed on the top of a hill, perhaps marking burials in a nearby cave.</p>		<p>of the Heather and Hillforts scheme. Erosion repair work has taken place at Tomen y Rhodwydd and extensive stabilisation work was carried out at Owain Glyndwr's Motte.</p> <ul style="list-style-type: none"> <li>• Management plans were drawn up for the six monuments within the Heather and Hillforts project area.</li> <li>• Prior to work taking place in Heather and Hillforts, condition surveys were carried out on the 6 hillforts, this work was repeated in 2012 and an improvement in condition was demonstrated at each of the sites. Continual monitoring will be needed to maintain this.</li> </ul> <p><b>Understanding:</b> The Heather and Hillforts project, from 2008 to 2012, greatly increased our understanding of 6 hillforts in the AONB. A programme of archaeological digs (at Moel y gaer Bodfari, Penycloddiau, Moel y Gaer Llanbedr) and community archaeology events have developed a greater understanding within the local community. The Clwydian Range Archaeology Group (CRAG) was established during Heather and Hillforts, and now runs successfully as an independent voluntary group who have made important discoveries on land adjacent to Moel Arthur Hillfort.</p> <p>Recent archaeological work has also been</p>
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			undertaken on Moel y Gaer Bodfari by Oxford University and Penycloddiau by Liverpool University. Bangor University have been excavating at Fron Newydd adjacent to Caer Drewyn as well as at the small defended settlement of Moel Fodig, just outside the AONB.
<b>Historic Environment</b>	<p><b>Small Historic Features</b></p> <p>These are features that are unique to the AONB. They are unlikely to be listed and conserved but they are part of the fabric of the landscape. Examples: Red telephone boxes, water troughs, milestones, stone stiles and gate posts, old wells, old road signs, named rocks, milk stands and World War I and II relics.</p>	<ul style="list-style-type: none"> <li>• These features tend to 'disappear' and part of this is because there is not a comprehensive list held anywhere. They also disappear through being modernised or through road improvement schemes.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• 23 K6 Red Phone Boxes.</li> <li>• 15 Trig Points.</li> <li>• Total number of features unknown.</li> <li>• % loss of features identified unknown.</li> </ul> <p>The new Heritage Bill is likely to contain a section on proposals to produce robust 'local lists' of these types of features.</p>
<b>Historic Environment</b>	<p><b>Boundaries</b></p> <p>The main types are native hedgerows on slopes and dry stone walls in the limestone and upland shale areas. The other types are hedgerows on a stone retaining wall (Clawdd Wall). These linear features are valuable wildlife habitats, which act particularly well as wildlife corridors between habitats.</p>	<ul style="list-style-type: none"> <li>• Loss of hedges and walls due to agricultural improvement.</li> <li>• Loss due to lack of maintenance.</li> <li>• Loss of skill to maintain in a traditional way.</li> <li>• Expense of maintenance.</li> <li>• Modern maintenance not suitable.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• Length of traditional boundaries in the AONB unknown.</li> <li>• 12 km of hedgerow have been restored through the AONB countryside grant scheme between 2007 and 2014.</li> <li>• 0.5 km of dry stone wall have been rebuilt through the AONB countryside grant scheme between 2007 and 2014.</li> </ul>

	<p>An unusual feature unique to Corwen within the AONB is boundaries using upright slate slabs – an example of this can be seen at Gro Isa just north of Corwen next to the River Dee.</p>		<p>Need survey of boundaries with those that have greatest impact on the landscape prioritised for action.</p> <p>% of boundaries in good condition unknown.</p>
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## Access and Leisure

RESOURCE/ SPECIAL FEATURE	DESCRIPTION	ISSUES	STATE
<p><b>Access and Leisure</b></p>	<p><b>Iconic Visitor and Cultural Attractions</b></p> <p>The Vale of Llangollen and Dee Valley forms a striking gateway to North Wales as the topography changes rapidly from flat Shropshire Plain to a steep sided Welsh Valley, with accompanying changes in building styles and materials, culture and way of life. The area has a special role as a gateway to and cultural window on Welsh life and marks the English-Welsh borderlands.</p> <p>Further north, the Clwydian Range is the first chain of hills inside the Welsh border. With strong cultural links to Liverpool and the North West of England, the area is heavily visited.</p> <p><b>‘Honey-pot’ sites</b></p> <p>The Pontcysyllte Aqueduct and</p>	<ul style="list-style-type: none"> <li>• No coherent identity for the area, there are three distinct tourism units – the Clwydian Range, the Dee Valley and the World Heritage Site.</li> <li>• There is no coordination of visitor management.</li> <li>• Interpretation and awareness of the culture and history of the area is low.</li> <li>• People pass through the area travelling to west Wales. Need to raise awareness of the area and encourage people to stop in the AONB.</li> <li>• Lack of high quality facilities – public transport, car parking, cafes, toilets, information.</li> <li>• Localised degraded environment due to congestion, litter and vandalism.</li> </ul>	<p><b>Provision:</b></p> <ul style="list-style-type: none"> <li>• 36 Caravan Parks / Camp Sites in the AONB.</li> <li>• Number of tourism businesses – unknown</li> <li>• Number of AONB threshold signs - ?</li> <li>• Number of Car Parks in the AONB – unknown.</li> <li>• Number of Public Toilets in the AONB – 8</li> <li>• 4 Country Parks in the AONB – <ul style="list-style-type: none"> <li>○ Loggerheads</li> <li>○ Moel Famau</li> <li>○ Ty Mawr</li> <li>○ Minera Lead Mines</li> </ul> </li> </ul> <p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• 4 Country Parks covering 1,007.05 ha (2.59% of AONB). <ul style="list-style-type: none"> <li>○ 1 Country Park currently closed.</li> </ul> </li> <li>• There are 20 sites (including Country Parks) in the AONB managed by AONB / Local Authorities. These</li> </ul>

	<p>Canal is a feat of civil engineering of the Industrial Revolution, completed in the early years of the 19<sup>th</sup> century. The property is inscribed as a World Heritage Site and is recognised as an innovation ensemble that inspired many projects all over the world.</p> <p>Loggerheads Country Park provides an important link to the wider Clwydian Range and is seen as a base from which to explore.</p> <p>Moel Famau is a significant tract of heather moorland in the Clwydian Range. The Jubilee Tower is on the summit.</p> <p>Ty Mawr Country Park and farm lies on the banks of the River Dee beneath the arches of the Cefn Viaduct.</p> <p>Minera Lead Mines Country Park is a starting point for the Clywedog Trail and accessing the beautiful countryside of Minera Mountain.</p> <p>Offa's Dyke National Trail and the Panorama Drive, which run along the foot of Eglwyseg Rocks, offer stunning high level views.</p>	<ul style="list-style-type: none"> <li>Existing and new development where there has been a lack of attention to design, character, materials and integration within key views and at key locations which contribute to visitor experience.</li> <li>Access for the less able is challenging.</li> <li>Lack of / closure of visitor facilities.</li> <li>Traffic management, congestion and car parking.</li> <li>Poor public transport links and infrastructure.</li> <li>Busy road crossings.</li> <li>Some industrial remains are in poor condition.</li> <li>Visitor pressure in key conservation areas.</li> </ul>	<p>cover 1075.78 ha (2.76% of the AONB)</p> <ul style="list-style-type: none"> <li>Natural Resources Wales estate (formerly Forestry Commission) covers 1299.37 ha (3.34% of the AONB).</li> </ul> <p><b>Condition:</b></p> <ul style="list-style-type: none"> <li>Minera Lead mines currently closed to the public.</li> </ul>
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	The Horseshoe Pass is a popular tourist viewpoint and scenic drive.		
<b>Access and Leisure</b>	<p><b>The Offa's Dyke Trail and Promoted Routes</b></p> <p>The AONB has an extensive network of paths, bridleways and byways. Some have great historical significance including the Leete Path and old Drovers' Roads. The network brings specific economic benefit to the local economy.</p> <p>There are a great many publications promoting primarily walking opportunities.</p> <p><b>Open Access</b></p> <p>Access Land comprises mountain, moor, heath and down, common land and all land over 600m in height.</p> <p>Access Land is an important component of the Clwydian Range and Dee Valley, and provides access to areas, particularly hilltops, not served by the Rights of Way network. It is found throughout the AONB, but the majority is found in the south, covering the large</p>	<ul style="list-style-type: none"> <li>• On-going maintenance of promoted routes.</li> <li>• Erosion in sensitive areas.</li> <li>• Impact of access on stock and farming, particularly by dogs.</li> <li>• Limited Rights of Way for horse riders and cyclists.</li> <li>• Congestion in honey pot areas.</li> <li>• Blocked and unusable paths restrict opportunities.</li> <li>• Number of unsupported promoted routes.</li> <li>• Uncertainty with the public to where access land areas are.</li> <li>• Disturbance to nesting birds and other wildlife.</li> </ul> <p><b>Adventure activities</b></p> <ul style="list-style-type: none"> <li>• Population health issues increasing.</li> <li>• Conflict between user groups using the resources of the area, in particular the River Dee.</li> <li>• Litter, noise, damage.</li> <li>• Mountain biking pressure on</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• 772.6 km of Public Rights of Way</li> <li>• 324.4 km of Rights of Way and permissive routes promoted by AONB / Local Authority publications. (42% of the network).</li> <li>• 114 km of Promoted Cycle Routes on Public Rights of Way / permissive paths. (14.8% of the network).</li> <li>• Length of blocked / unusable paths unknown.</li> <li>• Significant car parks serving the network include Loggerheads, Moel Famau and Ty Mawr Country Parks, Car Parks in Corwen and Llangollen, and Llantysilio Green.</li> <li>• Number of Laybys suitable for parking unknown</li> <li>• 3 Railway stations serving the AONB (Prestatyn, Ruabon and Chirk)</li> <li>• 10,380.18 ha of Access Land (26.67% of AONB area), of this <ul style="list-style-type: none"> <li>○ 6441.35 ha is common land</li> <li>○ 3938.83 ha are mapped as open country.</li> </ul> </li> <li>• Number of adventure activity providers unknown.</li> <li>• Tourism spend in the AONB in 2012 - £39.4 million.</li> </ul>



	<p>extents of open moorland on the Ruabon, Llantysilio and North Berwyn mountains.</p> <p>A number of permissive access routes have been developed to guide walkers to points of interest and significance, such as Liberty Hall south of Corwen, and the summit of Moel Gyw.</p> <p><b>Adventure Activities</b></p> <p>There is growing concern that people’s lifestyles are becoming too sedentary. They seek to ‘de-stress’ through adventure experiences such as rock climbing, caving, kayaking, white water rafting, mountain bikes, horse riding etc....</p> <p>The landscape of the AONB supports adventure activity businesses, including the mountain Biking centre at Coed Llandegla.</p>	<p>bridleway network and wider countryside.</p> <ul style="list-style-type: none"> <li>• Impact of access on key conservation sites.</li> </ul>	
<p><b>Access and Leisure</b></p>	<p><b>Health and well-being – Deprivation</b></p> <p>In general, the AONB is not an area with high levels of deprivation when assessed against most deprivation indicators, including</p>	<ul style="list-style-type: none"> <li>• Maintaining and improving access to local services.</li> <li>• People living in deprived areas do not get a benefit from the AONB.</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Communities First Areas within the AONB</li> <li>• 7 Communities First Areas within 3km of AONB.</li> <li>• Percentage of LSOA’s (Lower-level</li> </ul>



	<p>income levels, educational attainment, employment, health, housing quality and physical environment. Overall, the AONB is within the least deprived 25% areas of Wales (Welsh Index of Multiple Deprivation 2005). However, one aspect in which the AONB demonstrates notably high levels of deprivation is access to services, which is a result of the sparsely populated rural character of the area. As the population is older than the average, access to local and specialist health care, and support services, all contribute to a sense of community wellbeing.</p> <p>Although still below the Welsh average, levels of limiting long term illness have increased in the AONB between 2001 and 2011.</p>		<p>Super Output Areas) in AONB within the most deprived quartile in Wales for access to services – 26.3% (10 of 38)</p> <ul style="list-style-type: none"> <li>• Percentage of people with limiting long-term illness <ul style="list-style-type: none"> <li>○ East 17.2%</li> <li>○ North 21.7%</li> <li>○ West 19.5%</li> <li>○ South 21.2 %</li> <li>○ Wales 22.7%</li> </ul> </li> </ul>
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**Culture and People – The Built Environment**

<b>RESOURCE/ SPECIAL FEATURE</b>	<b>DESCRIPTION</b>	<b>ISSUES</b>	<b>STATE</b>
<p><b>Culture and People – The Built Environment</b></p>	<p><b>Settlement</b></p> <p>The settlement pattern of the Clwydian Range is characterised by villages and hamlets on either side of the main ridge, such as Llanbedr DC, Cilcain and Nannerch, and along river valleys, including Bodfari and Llanferres. Most of these villages are compact and nucleated in form. These settlements are supplemented by scattered farmsteads and isolated dwellings which extend higher up the slopes.</p> <p>The settlement patterns in the south of the AONB are found primarily along river valleys. Smaller villages include Bryneglwys, Glyndyfrdwy, Carrog, Pentredwr and Froncysyllte. The towns of Llangollen and Corwen both straddle the River Dee. Similar to the Clwydian Range, scattered farmsteads and isolated dwellings are found higher up the slopes.</p>	<ul style="list-style-type: none"> <li>• Development in the AONB and its setting is not always in sympathy with the local landscape character and settlement pattern.</li> </ul>	<p>No. of AONB villages / settlements defined in development plans:</p> <ul style="list-style-type: none"> <li>• Denbighshire 23</li> <li>• Flintshire 6</li> <li>• Wrexham 2</li> </ul> <p>Total – 31</p>

	A number of larger settlements adjoin the AONB, including Prestatyn, Meliden, Dyserth, Gwernymynydd, Trefor, Cefn Mawr and Chirk.		
<b>Culture and People – The Built Environment</b>	<p><b>Conservation Areas</b></p> <p>Conservation Areas are designated by local planning authorities to protect areas of special architectural or historic interest where it is desirable to preserve or enhance their character or appearance. They are one indicator of the quality of the built environment. Designations should be underpinned by up to date Character Appraisals, and planning authorities should prepare Management / Enhancement Plans. Designation also brings some additional controls on development, but these can be increased via Article 4 Directions if permitted development is harming the special character of the area.</p>	<ul style="list-style-type: none"> <li>• Incomplete / out of date Conservation Area Character Appraisals.</li> <li>• Lack of Management / Enhancement Plans for Conservation Areas.</li> <li>• No arrangements for monitoring the condition of Conservation Areas.</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• There are 17 conservation areas in the AONB, covering 88.85 ha (0.23% of AONB) <ul style="list-style-type: none"> <li>○ Denbighshire 9</li> <li>○ Flintshire 6</li> <li>○ Wrexham 2</li> </ul> </li> <li>• % of AONB villages / settlements recognised in development plans which are Conservation Areas – 41.9% (13 of 31)</li> <li>• % of Conservation Areas with an up to date Character Appraisal unknown</li> <li>• % of Conservation Areas with a Management / Enhancement Plan unknown</li> <li>• No. of Article 4 Directions unknown</li> </ul>
<b>Culture and People – The Built Environment</b>	<p><b>Listed Buildings</b></p> <p>Buildings of special architectural or historical interest are Listed by Cadw. There are strict controls over</p>	<ul style="list-style-type: none"> <li>• Concerns over the number of listed buildings at risk.</li> <li>• There is a need to update</li> </ul>	<p><b>Extent:</b></p> <ul style="list-style-type: none"> <li>• There are 645 Listed Buildings in the AONB</li> </ul>

	development of Listed Buildings and their setting to ensure their special character is conserved or enhanced. The number and grade of Listed Buildings in an area is another indicator of the quality of the local built environment. Local authorities are advised to undertake 5 yearly surveys of the condition of Listed Buildings in their area to identify buildings at risk.	and maintain the Buildings at Risk list for each Local Authority. <ul style="list-style-type: none"> <li>The Jubilee Tower at Moel Famau is one of the most prominent and distinctive Listed Buildings in the AONB, but is in need of restoration / conservation to secure its long term future.</li> </ul>	<ul style="list-style-type: none"> <li>56 are considered to be 'at risk'.</li> <li>Significant Listed Buildings include Chirk Castle, Llangollen Bridge and the Jubilee Tower.</li> </ul>
<b>Culture and People – The Built Environment</b>	<p><b>Development Control</b></p> <p>The control of development in the AONB is an important means by which the character and appearance of the area can be maintained or improved. Development proposals outside the area can also have an impact on important views in or out of the AONB.</p> <p>The three local planning authorities (LPA's) consult the Joint Committee on planning applications which might impact on the AONB.</p>	<ul style="list-style-type: none"> <li>Need to maintain Joint Committee activity in respect of responding to development proposals.</li> <li>Maintain and develop the Joint Committee's credibility and influence as a planning consultee.</li> <li>Three LPA's; need to ensure consistent approach across administrative boundaries.</li> <li>Urbanisation of villages and poor urban design.</li> <li>Need for a more proactive response to unauthorised development in the AONB.</li> </ul>	<ul style="list-style-type: none"> <li>No. of planning applications referred to the JAC <ul style="list-style-type: none"> <li>2011/12 – 199</li> <li>2012/13 – 212</li> <li>2013/14 – 221</li> </ul> </li> <li>% of JAC comments adopted by LPA's <ul style="list-style-type: none"> <li>2011/12 – 68%</li> <li>2012/13 – 72%</li> <li>2013/14 – 74%</li> </ul> </li> <li>No. of possible unauthorised development cases referred to LPA's <ul style="list-style-type: none"> <li>2011/12 – 13</li> <li>2012/13 – 21</li> <li>2013/14 – 10</li> </ul> </li> </ul>
<b>Culture and People – The Built</b>	<p><b>Planning Policy and Guidance</b></p> <p>.Within a plan led system for the</p>	<ul style="list-style-type: none"> <li>Clear and robust policies</li> </ul>	Local Development Plans:

<p><b>Environment</b></p>	<p>control of development, relevant and up to date planning policy and guidance is an essential component of protecting and conserving the character and appearance of the AONB.</p> <p>The local planning authorities publish Local Development Plans (LDPs). Adopted Supplementary Planning Guidance (SPG) notes complement development plans. The Joint Committee has prepared non-statutory Development Guidelines for the AONB. National planning policy is set by the Welsh Government, and the Joint Committee is usually consulted on proposed changes to national policy.</p>	<p>required to conserve and enhance the AONB.</p> <ul style="list-style-type: none"> <li>• Need for Joint Committee to engage with LDP process; WG guidance no longer requires LDP's to include national AONB policies.</li> <li>• Three LPA's; need to ensure consistent approach to AONB policy and guidance across administrative boundaries.</li> <li>• No specific SPG for the AONB to conserve and enhance local distinctiveness. Non-statutory Development Guidelines cannot be adopted by the LPA's.</li> <li>• Need to maintain AONB profile and Joint Committee activity in respect of responding to planning and other policy consultations.</li> </ul>	<ul style="list-style-type: none"> <li>• Denbighshire LDP 2006 – 2021 (adopted 2013)</li> <li>• Flintshire LDP 2015 – 2030 (In preparation: adoption planned in 2018)</li> <li>• Wrexham LDP 2 2013 – 2028 (In preparation: adoption planned in 2018)</li> </ul> <p>Unitary Development Plans (now superseded by Local Development Plan system):</p> <ul style="list-style-type: none"> <li>• Flintshire UDP 2000 – 2015 ( adopted 2011)</li> <li>• Wrexham UDP 1996 – 2011 (adopted 2005)</li> </ul>
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## Culture and People – Sustainable Communities

RESOURCE/ SPECIAL FEATURE	DESCRIPTION	ISSUES	STATE
<b>Culture and People – Sustainable Communities</b>	<p><b>Sense of place</b></p> <p>Community, belonging, attachment and a sense of place. Associated with this is the Welsh language, strong community values and a sense of local pride which are all a part of the natural beauty of an area. There is an understanding that ‘the land makes us what we are’.</p>	<ul style="list-style-type: none"> <li>• Lack of awareness of the AONB and its purposes within parts of the local communities.</li> <li>• Unfocused community and voluntary actions that contribute to local distinctiveness.</li> </ul>	
<b>Culture and People – Sustainable Communities</b>	<p><b>Population</b></p> <p>The AONB is sparsely populated but there is some variation across the area, the Dee Valley is the most populous mainly due to the larger towns of Llangollen and Corwen. However, there are a number of larger and more populous settlements in close proximity to the Clwydian Range such as Mold, Ruthin, Prestatyn, Chirk and the Wrexham urban fringe.</p> <p>The age profile of the AONB shows an older population than Wales,</p>	<ul style="list-style-type: none"> <li>• As life expectancy increases, there will be increasing numbers of older people in society. A sharp rise in the number of over 80s will see a generation keen to relax but potentially reluctant (or unable) to travel far.</li> <li>• Over the past fifteen years, a sustained rise in the birth rate has caused a mini baby boom.</li> <li>• Grandparents will be</li> </ul>	<ul style="list-style-type: none"> <li>• Resident Population (2011) -18,690 <ul style="list-style-type: none"> <li>○ 8,000 of these within the Dee Valley</li> </ul> </li> <li>• Population Density (2011) <ul style="list-style-type: none"> <li>○ North – 0.7 (persons per km sq)</li> <li>○ West – 0.4</li> <li>○ East – 0.4</li> <li>○ South - 0.4</li> <li>○ Wales 1.5</li> </ul> </li> <li>• Families with dependent children <ul style="list-style-type: none"> <li>○ North – 378</li> <li>○ West – 839</li> <li>○ East – 426</li> </ul> </li> </ul>

	<p>Denbighshire and Flintshire.</p> <p>The number of families with dependent children has risen between 2001 and 2011, particularly in the western area of the AONB.</p>	<p>'younger' than ever before; and retiring baby boomers will priorities their leisure time.</p> <ul style="list-style-type: none"> <li>• Pressures and opportunities arising from the close proximity of the AONB to a much larger population.</li> </ul>	<ul style="list-style-type: none"> <li>○ South - 301</li> </ul>
<p><b>Culture and People – Sustainable Communities</b></p>	<p><b>Housing</b></p> <p>The AONB is an attractive area in which to live. It is also within easy commuting range of large employment centres such as Deeside, Chester, Wrexham and beyond. This influences the local housing market by pushing up house prices, often beyond what many local people can afford. The number of social / rented council and housing association properties in the AONB is limited. The problems of availability and affordability for local people are compounded by a higher percentage than the Welsh average of second / holiday homes in parts of the AONB.</p>	<ul style="list-style-type: none"> <li>• Increasing the number and range of affordable homes in the AONB to meet local needs.</li> <li>• High levels of demand for council / housing association accommodation in some areas.</li> <li>• Need for robust planning policies to ensure that new housing development addresses affordability and local need issues.</li> </ul>	<ul style="list-style-type: none"> <li>• 368 Council Houses in Denbighshire and Flintshire areas of AONB. (Wrexham CBC Council House numbers unknown).</li> <li>• No. of dwellings unknown</li> <li>• Council / Housing Assoc Waiting Lists unknown</li> <li>• Second homes in the AONB unknown</li> </ul>
<p><b>Culture and People – Sustainable Communities</b></p>	<p><b>Employment</b></p> <p>A high proportion of AONB residents are economically active</p>	<ul style="list-style-type: none"> <li>• Lack of economic self-containment resulting in</li> </ul>	<ul style="list-style-type: none"> <li>• No. of working residents unknown</li> <li>• No. of jobs in the AONB unknown</li> </ul>



	<p>when compared to the Welsh average but most commute out of the area to nearby towns and other centres of employment. The area does not therefore exhibit high levels of economic self-containment, which can impact on community cohesion. The public sector is the largest source of employment, but agriculture and forestry continues to be an important employer when compared to the Welsh average.</p>	<p>fewer people ‘embedded’ in their local area and reduced sense of community.</p> <ul style="list-style-type: none"> <li>• Fewer local jobs than the working population.</li> <li>• Reduction in the number of active agricultural holdings and the overall increase in the average holding size.</li> <li>• Resources to deliver AONB Sustainable Tourism Strategy and Action Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• % of population economically active (2011) <ul style="list-style-type: none"> <li>○ East 70%</li> <li>○ North 67%</li> <li>○ West 67%</li> <li>○ South 68%</li> <li>○ Wales 66%</li> </ul> </li> <li>• % of residents living and working in the AONB unknown</li> <li>• % of residents employed in agriculture or forestry (2011) <ul style="list-style-type: none"> <li>○ East 5.4%</li> <li>○ North 5.6%</li> <li>○ West 9.3%</li> <li>○ South 4%</li> </ul> </li> <li>• No. of active agricultural holdings unknown.</li> <li>• Average size of agricultural holding unknown.</li> <li>• No. of tourism related businesses supporting the AONB unknown</li> <li>• % of population retired (2011) <ul style="list-style-type: none"> <li>○ East 20%</li> <li>○ North 20%</li> <li>○ West 21%</li> <li>○ South 18%</li> </ul> </li> <li>• Levels of long term unemployment (2011) <ul style="list-style-type: none"> <li>○ East 0.9%</li> <li>○ North 1.6%</li> <li>○ West 1.2%</li> <li>○ South 1.7%</li> <li>○ Wales 2.4%</li> </ul> </li> </ul>
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<p><b>Culture and People – Sustainable Communities</b></p>	<p><b>Facilities and Services</b></p> <p>Access to local facilities and services such as schools, shops, post offices, community meeting places and public transport all contribute to a sense of community wellbeing. Access to such services in the AONB can be limited. Rural services are in decline and continue to be under threat given the economic outlook and the viability of providing such facilities in isolated and sparsely population areas.</p>	<ul style="list-style-type: none"> <li>• Maintaining key existing rural facilities and services that meet the needs of local people, and preventing the further loss of such facilities.</li> <li>• Review of education provision and the number of rural schools.</li> <li>• Developing access to new facilities and services such as high speed broadband and mobile phone coverage.</li> <li>• Ensuring effective public transport network links to service centres.</li> </ul>	<ul style="list-style-type: none"> <li>• 40 places of worship in the AONB.</li> <li>• Facilities in Denbighshire area of AONB. <ul style="list-style-type: none"> <li>○ 57 Pubs / hotels / bars.</li> <li>○ 118 shops.</li> </ul> </li> <li>• No. of primary schools in AONB – 14</li> <li>• Nos. on school roll unknown</li> <li>• No. of settlements with a public house – 21 (68%)</li> <li>• No. of settlements with a community hall – 17 (55%)</li> <li>• No. of settlements with a shop / PO – 13 (42%)</li> <li>• No. of settlements with a regular daily bus service – 19 (61%)</li> <li>• Broadband ‘notspots’ – Unknown</li> <li>• No. of mobile blackspots – unknown.</li> </ul>
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