



Forces for Change for North East Wales National Park Area of Search

Final report

Natural Resources Wales

Final report

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Forces for Change for North East Wales National Park Area of Search

Contents

Crynodeb Gweithredol	7
-----------------------------	----------

Executive Summary	12
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Chapter 1	17
Introduction	

Background to a new national park in Wales	17
Introduction to the designation process	18
Aims and objectives of the forces for change work stage	19
Methodology	19
Scope	20
The Statutory purposes of National Parks in Wales	21
Relationship of Forces for Change (LUC work phase 1) to Special Qualities work	23
Relationship of forces for change to LUC phase 2 work analysis of management options	24
Report structure	24

Chapter 2	26
Policy framework	

Well-being of Future Generations (Wales) Act 2015	26
Sustainable management of natural resources	27
State of Natural Resources (SoNaRR) 2020	28
The Natural Resources Policy	30
The Hobhouse Report 1947	30

Forces for Change for North East Wales National Park Area of Search	3
---	---

Contents

Chapter 3	32
Forces for change	
Chapter 4	33
Force for change: Climate change	
Chapter 5	48
Force for change: Built development and infrastructure	
Renewable energy and grid infrastructure	53
Minerals, quarrying and waste	55
Chapter 6	66
Force for change: Land management, agriculture, forestry and natural environment	
Chapter 7	82
Force for change: People, communities and management of cultural heritage	
Chapter 8	99
Force for change: Recreation, tourism and access	
Chapter 9	109
Evaluation of forces for change against the Area of Search special qualities	

Contents

An inspiring space that promotes mental, physical and spiritual health and wellbeing	110
A story of human interaction with the landscape over millennia	115
A home to internationally and locally important species and habitats	118
A distinctive, complementary and contrasting landscape	120
A landscape providing benefits beyond its borders	126

Chapter 10 **146**

Conclusion and next steps

Next steps	146
------------	-----

Appendix A **147**

Methodology

Appendix B **154**

List and summary description of areas within the Area of Search

Appendix C **160**

Comparative assessment

Climate change	161
Built development	164
Land management	168
People, communities and cultural heritage	177
Recreation, tourism and access	183

Appendix D **186**

Findings from stakeholder engagement

Contents

Event 1, 6 th December 2023	186
Events 2 and 3, Local Access Forum and Welsh Government, 15 th and 17 th January 2024	191

Appendix E **197**

Policy review information

People, communities and cultural heritage	222
---	-----

Appendix F **237**

Figures

References **247**

Table of Tables

Table C.1: Climate change forces for change	161
Table C.2: Built development	165
Table C.3: Land management forces for change	169
Table C.4: People, communities and cultural heritage	177
Table C.5: Recreation, tourism and access	183

Crynodeb Gweithredol

Yn ei Rhaglen Lywodraethu (2021-2026), mae Llywodraeth Cymru yn nodi ei bwriad i ddynodi Parc Cenedlaethol newydd yng Ngogledd-ddwyrain Cymru yn seiliedig ar Dirwedd Genedlaethol bresennol Bryniau Clwyd a Dyffryn Dyfrdwy. Hwn fyddai'r pedwerydd Parc Cenedlaethol i Gymru, a'r Parc Cenedlaethol newydd cyntaf i gael ei sefydlu yng Nghymru ers 1957. Mae CNC wedi nodi Ardal Chwilio ar gyfer Parc Cenedlaethol posibl yng Ngogledd-ddwyrain Cymru ac wedi adrodd ar y broses a'r canfyddiadau rhagarweiniol ar gyfer Harddwch Naturiol a darpariaeth hamdden yn yr Ardal Chwilio.

Cam 1 y gwaith oedd nodi'r grymoedd dros newid sy'n effeithio ar rinweddau arbennig yr Ardal Chwilio a nodwyd ar gyfer parc cenedlaethol newydd yng Nghymru. Cam 2 yw ystyried opsiynau rheoli ar gyfer gwarchod a gwella'r dirwedd. Mae cam 1 (nodi grymoedd dros newid) a cham 2 (dadansoddi opsiynau rheoli) gwaith LUC wedi ymgorffori rheolaeth gynaliadwy ar adnoddau naturiol (fel y nodir yn Adroddiad Sefyllfa Adnoddau Naturiol (SoNaRR) a Datganiadau Ardal CNC) a ffactorau economaidd, cymdeithasol, amgylcheddol a diwylliannol llesiant (Deddf Llesiant Cenedlaethau'r Dyfodol), ochr yn ochr â phwrpas a dyletswydd Parciau Cenedlaethol.

Defnyddiwyd nodau ac egwyddorion Rheoli Adnoddau Naturiol yn Gynaliadwy yn nadansoddiad cam 2 yr opsiynau rheoli, i gefnogi gwydnwch ecosystemau a sut y gellir cyflawni eu manteision.

Grymoedd dros Newid

Diffinnir grym dros newid fel dylanwad sydd naill ai'n uniongyrchol neu'n anuniongyrchol arwain at newid yn yr Ardal Chwilio. Mae yna lawer o sbardunau ar gyfer y grymoedd dros newid. Mae'r rhain yn cynnwys deddfwriaeth a pholisi, y farchnad a'r economi, a dylanwadau cymdeithasol a hinsoddol. Mae grymoedd dros newid yn amrywio yn eu lleoliad, amserlen ac

Crynodeb Gweithredol

effaith ar rinwedd arbennig benodol. Gall dynodiad Parc Cenedlaethol hefyd ddylanwadu ar raddfa a math y grym dros newid a brofir yn yr ardal.

Nodwyd grymoedd dros newid o amrywiaeth o ffynonellau, gan gynnwys: dogfennau polisi a chanllawiau cenedlaethol; grymoedd presennol dros newid ar gyfer Tirwedd Genedlaethol Bryniau Clwyd a Dyffryn Dyfrdwy; a'r rhai a nodwyd ar gyfer tirweddau gwarchodedig eraill, adroddiadau tystiolaeth a gwybodaeth sydd wedi'i mapio.

Nodwyd pum prif gategori o rymoedd dros newid yn yr Ardal Chwilio i helpu i fframio'r dadansoddiad:

- **Newid hinsawdd:** Grym trosfwaol dros newid a all effeithio ar y pedwar categori arall o rymoedd dros newid. Mae hyn yn cynnwys lliniaru newid hinsawdd, fel ynni adnewyddadwy ac effeithlonrwydd ynni, a champau addasu i gynyddu gwydnwch.
- **Datblygiadau adeiledig a seilwaith:** Grym dros newid sy'n cwmpasu ystod o ddatblygiadau adeiledig gan gynnwys tai newydd, busnes, diwydiant, manwerthu, trafniadaeth, ynni adnewyddadwy a mwynau, chwarela a gwastraff seilwaith y grid.
- **Rheoli tir, amaethyddiaeth, coedwigaeth a'r amgylchedd naturiol:** Mae rheoli tir a'r amgylchedd naturiol yn sail i dreftadaeth naturiol yr Ardal Chwilio. Mae'r grymoedd cysylltiedig dros newid yn cynnwys hyfywedd rheoli tir a'r angen i arallgyfeirio incwm, newid amaethyddol a ddylanwedir gan gefnogaeth amaethyddol, coedwigaeth a choetir sydd wedi'i gynllunio a'i reoli i gefnogi Coedwig Genedlaethol i Gymru, a newid hinsawdd yn dod â heriau ychwanegol o ran rheoli tir.
- **Pobl, cymunedau a threftadaeth ddiwylliannol:** Mae'r grym hwn ar gyfer newid yn cynnwys effeithiau newid hinsawdd, rheoli tir, ac ymwelwyr, newid yn y boblogaeth drwy fudo a strwythur oedran. Mae'n archwilio effeithiau'r rhain ar adnoddau treftadaeth ddiwylliannol, ymglymiad cymunedol a chyfranogiad mewn digwyddiadau a thraddodiadau lleol, gwybodaeth a defnydd o'r Gymraeg, newidiadau mewn cyflogaeth yn arwain at golli gwybodaeth a sgiliau, ac argaeledd tai lleol.
- **Hamdden, twristiaeth a mynediad:** Mae amrywiaeth o ffactorau'n dylanwadu ar faterion sy'n ymwneud â hamdden, twristiaeth a mynediad, a daw amrywiaeth o effeithiau yn eu sgil. Un mater allweddol sy'n gysylltiedig â'r grym hwn dros newid yw lefelau uwch o hamdden a thwristiaeth a'r

effeithiau ar gymunedau, rheolwyr tir, adnoddau hamdden presennol, traffig a bywyd gwyllt. Mae'r grymoedd cysylltiedig dros newid yn cynnwys yr angen am lety a chyfleusterau newydd i dwristiaid a mynychter trafndiaeth gyhoeddus ac opsiynau teithio llesol.

Grymoedd dros Newid a Rhinweddau Arbennig yr Ardal Chwilio

Cafodd y dadansoddiad o'r grymoedd dros newid ei fframio o amgylch y chwe Rhinwedd Arbennig a nodwyd yn flaenorol yn yr Ardal Chwilio, a nodir isod:

- **Lle ysbrydoledig sy'n hybu iechyd a lles meddyliol, corfforol ac ysbrydol** – mae hyn yn adlewyrchu'r profiad o'r dirwedd a'r cyfleoedd mynediad a hamdden y mae'n eu cynnig. Mae'r prif fathau o rymoedd dros newid sy'n berthnasol i'r rhinwedd arbennig hon yn cynnwys effeithiau uniongyrchol newid hinsawdd, ymatebion rheoli tir i newid hinsawdd, mecanweithiau polisi a chymorth, datblygiad, newidiadau mewn hygyrchedd a chynnydd yn nifer yr ymwelwyr. Mae'r grymoedd dros newid yn cynnwys newidiadau uniongyrchol i'r dirwedd a'i nodweddion, ac effeithiau anuniongyrchol ar brofiad gweledol a synhwyraidd pobl o'r dirwedd.
- **Lle o gymunedau cydlynol a phatrymau anheddiad penodol** – mae hyn yn adlewyrchu cymdeithasau diwylliannol, digwyddiadau ac iaith yr ardal, ddoe a heddiw. Gall newid hinsawdd effeithio'n uniongyrchol ar rai cymunedau, a rhoi pwysau ar gymunedau ac asedau bregus. Gall newidiadau mewn cyfansoddiad cymunedol sy'n adlewyrchu argaeledd tai a chyflogaeth effeithio ar wybodaeth gymunedol a bywiogrwydd diwylliant Cymru, broydd, traddodiadau, iaith a lle. Ymhlith y prif ffactorau sy'n sbarduno grymoedd dros newid mae datblygiad newydd a gwelliannau trafndiaeth sy'n cynyddu cysylltedd yr Ardal Chwilio gan arwain at gynnydd yn nifer yr ymwelwyr. Fodd bynnag, gall y grymoedd hyn dros newid hefyd ddod â chyfleoedd, fel cyfleoedd economaidd a chefnogaeth i hyfywedd gwasanaethau.
- **Stori am ryngweithio dynol â'r dirwedd dros filenia** – mae hyn yn adlewyrchu nodweddion hanesyddol y dirwedd, gan gynnwys nodweddion a chysylltiadau ffisegol. Mae newid hinsawdd yn sbardun allweddol dros newid ar gyfer nodweddion tirwedd hanesyddol. Yn ogystal, gall newidiadau rheoli tir mewn ymateb i bolisi ac ymaddasu i newid hinsawdd

Crynodeb Gweithredol

gael effaith bellach ar y nodweddion hyn. Gall newidiadau yn y boblogaeth effeithio ar wybodaeth ac ymwybyddiaeth o dreftadaeth ddiwylliannol a gall cynnydd yn nifer yr ymwelwyr a datblygiad roi pwysau ar yr amgylchedd hanesyddol.

- **Cartref i rywogaethau a chynefinoedd o bwys rhyngwladol a lleol** – mae hyn yn adlewyrchu'r amrywiaeth o rywogaethau a chynefinoedd mewn ardaloedd gwarchoddedig ac yn y dirwedd ehangach. Mae newid hinsawdd yn sbardun pwysig o ran y rhinwedd arbennig hon, gan achosi effeithiau uniongyrchol i rywogaethau a chynefinoedd. Gall datblygiad newydd hefyd gyfrannu at golli a darnio cynefinoedd. Bydd lefelau uwch o hygrychedd yn yr ardal yn arwain at fwy o effeithiau hamdden a thwristiaeth, ond mae hefyd yn cynnig cyfleoedd ar gyfer twristiaeth bywyd gwyllt. Bydd newidiadau rheoli tir drwy'r cynllun ffermio cynaliadwy yn creu cyfleoedd newydd i reoli cynefinoedd yn well, ochr yn ochr â chynhyrchiant a chyflogaeth. Gall coedwigo ddod â chyfleoedd a heriau newydd i gynefinoedd presennol.
- **Tirlun unigryw, ategol a chyferbyniol** – mae hyn yn adlewyrchu nodweddion tirwedd allweddol a rhinweddau profiadol yr ardal. Bydd newid hinsawdd yn effeithio ar rinweddau tirwedd trwy effeithiau uniongyrchol a champau addasu. Bydd datblygiadau adeiledig newydd hefyd yn dod â newid, ac yn effeithio ar lonyddwch, gan gynnwys trwy effeithiau cronus newidiadau bach. Bydd newidiadau i nodweddion hanesyddol y dirwedd yn newid cymeriad y dirwedd, yn ogystal â newidiadau rheoli tir wedi'u dylanwadu gan bolisi a thaliadau cymorth amaethyddol. Bydd cynnydd mewn gorchudd coetir hefyd yn dod â newid, ochr yn ochr ag amrywiaeth o fanteision ehangach i wasanaethau ecosystem.
- **Tirwedd sy'n cyflawni buddion y tu hwnt i'w ffiniau** – mae hyn yn adlewyrchu'r gwasanaethau ecosystem sy'n cael eu cyflawni gan yr ardal. Mae dylanwadau trawsffiniol ar ddarparu gwasanaethau ecosystem yn cynnwys dylanwadau cadarnhaol y cynllun ffermio cynaliadwy newydd, gorchudd coetir a choedwig uwch, a'r gwasanaethau diwylliannol cynyddol a ddaw yn sgil y rhain. I'r gwrthwyneb, gall cynnydd mewn hamdden a thwristiaeth arwain at fwy o bwysau ar wasanaethau ecosystem. Gall newid hinsawdd, datblygiad a newidiadau rheoli tir i gyd effeithio ar ddarparu gwasanaethau ategol, rheoleiddiol, cyflenwol a diwylliannol.

Casgliad

Mae'r adolygiad o rymoedd dros newid wedi tynnu sylw at gymhlethdod y grymoedd dros newid y mae rhinweddau arbennig yr ardal yn eu hwynebu, a hefyd y rhyng-gysylltiadau rhwng y rhain. Gall camau i fynd i'r afael ag un grym dros newid arwain at lu o sgil-ffeithiau eraill ar draws y rhinweddau arbennig eraill. Mae dadansoddiad cymharol o fecanweithiau rheoli mewn tirweddau gwarchodedig eraill yn y DU yn cynnig adnodd allweddol ar gyfer deall sut y gellid rheoli'r ardal chwilio yn y dyfodol. Archwilir hyn drwy gam 2 y prosiect.

Executive Summary

In its Programme for Government (2021-2026), Welsh Government sets out its intention to designate a new National Park in North-East Wales based on the existing Clwydian Range and Dee Valley National Landscape. This would be a fourth National Park for Wales, and the first new National Park to be established in Wales since 1957. NRW has identified an Area of Search (AoS) for a potential National Park in North East Wales and has reported on the process and preliminary findings for Natural Beauty and recreation provision within the Area of Search.

Phase 1 of the work was to identify the forces for change affecting the Area of Search's special qualities identified for a new national park in Wales. Phase 2 is the consideration of management options for the conservation and enhancement of the landscape. Both phase 1 (identification of forces for change) and phase 2 (analysis of management options) of LUCs work have incorporated sustainable management of natural resources (as set out in NRW's SoNaRR and Area Statements) and the economic, social, environmental and cultural factors of well-being (the Wellbeing of Future Generations Act), alongside the purpose and duty of National Parks.

The Sustainable Management of Natural Resources aims and principles were applied in the phase 2 analysis of the management options, to support the resilience of ecosystems and how their benefits can be affected.

Forces for Change

A force for change is defined as an influence which either directly or indirectly leads to change in the Area of Search. There are many drivers for the forces for change. These include legislation and policy, market and economy, social and climate influences. Forces for change vary in their location, timescale and impact on a particular special quality. National Park designation may also in itself influence the scale and type of force for change experienced in the area.

Executive Summary

Forces for change were identified from a variety of sources including: national policy and guidance documents; existing forces for change for the Clwydian Range and Dee Valley National Landscape; and those identified for other protected landscapes, evidence reports and mapped information.

Five main categories of forces for change in the AoS were identified to help frame the analysis:

- **Climate change:** An overarching force for change which can impact the other four categories of force for change. This includes climate change mitigation, such as renewables and energy efficiency, and adaptation actions to increase resilience.
- **Built development and infrastructure:** A force for change which encompasses a range of built development including new housing, business, industry, retail, transport, renewable energy and grid infrastructure minerals, quarrying and waste.
- **Land management, agriculture, forestry and natural environment:** Land management and the natural environment underpin the natural heritage of the AoS. Related forces for change include viability of land management and the need for income diversification, agricultural change influenced by agricultural support, forestry and woodland planned and managed to support a National Forest for Wales, and climate change bringing additional challenges to land management.
- **People, communities and cultural heritage:** This force for change includes impacts of climate change, land management, and visitors, population change from migration and age structure. It explores the impacts of these on cultural heritage resources, community involvement and participation in local events and traditions, the knowledge and use of the Welsh language, changes in employment resulting in loss of knowledge and skills, and the availability of local housing.
- **Recreation, tourism and access:** Recreation, tourism and access related issues are influenced by a variety of factors and bring a range of impacts. A key issue related to this force for change is increased levels of recreation and tourism and its impacts on communities, land managers, existing recreational resources, traffic and wildlife. Related forces for change

Executive Summary

include the need for new tourist accommodation and facilities and prevalence of public transport and active travel options.

Forces for Change and the Special Qualities of the AoS

The analysis of the forces for change was framed around the previously identified six Special Qualities of the Area of Search which are set out below:

- **An inspiring space that promotes mental, physical and spiritual health and wellbeing** – this reflects the experience of the landscape and the access and recreation opportunities it provides. Key types of force for change relevant to this special quality include the direct impacts of climate change, land management responses to climate change, policy and support mechanisms, development, changes in accessibility and increases in visitor numbers. Forces for change include direct changes to the landscape and features within it, and indirect effects upon peoples' visual and sensory experience of the landscape.
- **A place with cohesive communities and distinctive settlement patterns** – this reflects the cultural associations, events and language of the area, both past and present. Climate change may directly impact on some communities, and place pressure on vulnerable communities and assets. Changes in community composition reflecting housing availability and employment can impact on the community knowledge and the vibrancy of Welsh culture, 'bro', traditions, language and place. Key drivers of forces for change include new development, and transport improvements increasing connectivity of the AoS and leading to increased visitor numbers. However, these forces for change may also present opportunities such as economic opportunities and support for the viability of services.
- **A story of human interaction with the landscape over millennia** – this reflects the historic features of the landscape, including physical features and associations. Climate change is a key driver for change for historic landscape features. In addition, land management changes in response to

Executive Summary

policy and climate adaptation can further impact on these features. Changes in population can affect knowledge and awareness of cultural heritage and increases in visitor numbers and development can create pressures on the historic environment.

- **A home to internationally and locally important species and habitats** – this reflects the diversity of species and habitats both in protected areas and in the wider landscape. Climate change is a significant driver on this special quality, bringing direct impacts on species and habitats. New development can also contribute to habitat loss and fragmentation. Increased accessibility of the area will lead to greater recreation and tourism impacts, but also provides opportunities for wildlife tourism. Changes to land management through the sustainable farming scheme will create new opportunities for improved habitat management, alongside production and employment. Afforestation may create both new opportunities and challenges to existing habitats.
- **A distinctive, complementary and contrasting landscape** – this reflects the key landscape features and experiential qualities of the area. Climate change will impact on landscape qualities through direct impacts and adaptation actions. New built development will also bring change, and impact on tranquillity, including through cumulative effects of small-scale change. Changes to the historic landscape features will alter the landscape character, as will changes in land management influenced by policy and agricultural support payments. Increases in woodland cover will also bring about change, alongside a range of wider benefits for ecosystem services.
- **A landscape providing benefits beyond its borders** – this reflects the ecosystem services provided by the area. Cross cutting influences on the delivery of ecosystem services include the positive influences of the new sustainable farming scheme, increased woodland and forest cover, and the increased cultural services provided by these. Conversely increases in recreation and tourism can result in greater pressures on the delivery of ecosystem services. Climate change, development and land management changes may all impact on the delivery of supporting, regulating, provisioning and cultural services.

Conclusion

The review of forces for change has highlighted the complexity of the forces for change being faced by the area's special qualities, and also the interlinkages between these. Actions to address one force for change can result in a multitude of other 'ripple effects' across the other special qualities. A comparative analysis of management mechanisms in other protected landscapes within the UK, provides a key resource for understanding how the future management of the area of search could be taken forward. This is explored through phase 2 of the project.

Chapter 1

Introduction

1.1 LUC was commissioned by Natural Resources Wales (NRW) in September 2023 to undertake work to identify the forces for change affecting the Area of Search (AoS) identified for a new national park in Wales (see Figure 1). The following paragraphs provide background on the designation of a new national park, and how the forces for change work contributes to the other work stages which are part of this process.

Background to a new national park in Wales

1.2 In its Programme for Government (2021-2026), Welsh Government sets out its intention to designate a new National Park in North-East Wales based on the existing Clwydian Range and Dee Valley National Landscape. This would be a fourth National Park for Wales, and the first new such park to be established in Wales since 1957. NRW has identified an Area of Search for a potential National Park in North East Wales and has reported on the process and preliminary findings for Natural Beauty and recreation provision within the Area of Search.

1.3 NRW is responsible for:

- Establishing the evidence-base in order to assess landscapes against the statutory designation criteria for National Park designation;
- Using this assessment to identify detailed boundaries and inform decision-making;
- Preparing a Designation Order, which lies with the Welsh Minister to confirm, amend or refuse.

Introduction to the designation process

1.4 NRW has identified the Area of Search for a potential new National Park in north east Wales and is the first step of Stage 2 of the designation process, which comprises:

- Stage 1 – Pre-commencement
- Stage 2 - Evidence gathering and engagement
- Stage 3 - Statutory process.

1.5 The Area of Search determines the geographical extent within which to focus engagement and consultation, and detailed assessments to develop evidence necessary to confirm whether the area meets the National Park designation criteria and that it is desirable to designate. If designation is shown to be appropriate, the project would then progress to Stage 3.

1.6 The designation process of Stage 2 evidence gathering comprises a series of detailed assessments:

- The special qualities of the area (completed).
- The forces for change affecting the special qualities and character of the area; (this report) – undertaken by LUC (phase 1).
- The consideration of management options for the conservation and enhancement of the landscape; (future work) – undertaken by LUC (phase 2).
- A detailed assessment of areas to explain how they meet Natural Beauty and recreation criteria; (future work).
- A proposed boundary (future work).

Aims and objectives of the forces for change work stage

1.7 The aims and objectives of this stage of the work are as follows:

- The identification of the forces for change (FFC) affecting the area's special qualities.

1.8 Both phase 1 (identification of forces for change) and phase 2 (analysis of management options) of LUC's work are required to identify how sustainable management of natural resources (as set out in NRW's SoNaRR and Area Statements) is being applied and additional opportunities.

1.9 The forces for change work has taken account of the Sustainable Management of Natural Resources aims and principles and considers how the resilience of ecosystems and their benefits can be affected. Phase 2 of the work, the analysis of management options, will further reflect the aims and principles by identifying management mechanisms to address these.

Methodology

1.10 A more detailed description of the methodology is provided in Appendix A, and the method is summarised in the following paragraphs.

1.11 A force for change is defined as something which either directly or indirectly leads to change in the area under consideration, in this case the Area of Search. There are many drivers for the forces for change. These include legislation and policy, market and economy, social and climate drivers. Forces for change vary in their location, timescale and impact on a particular special quality.

1.12 Forces for change were identified from a variety of sources including national policy and guidance documents, existing forces for change for the Clwydian Range and Dee Valley National Landscape, and those identified for other protected landscapes, evidence reports and mapped information.

1.13 Stakeholder meetings also informed the identification of forces for change and included meetings with stakeholder representatives from the AoS, the Powys Local Access Forum, and Welsh Government policy leads.

Scope

1.14 The Area of Search (AoS) is shown in Figure 1, Appendix F.

- The Area of Search has been drawn to define an “extensive tract of land” within which Natural Beauty of potentially national importance lies;
- It is the area within which a range of detailed assessments and evidence is to be gathered to support a potential National Park designation;
- It has been drawn around landscapes that meet the natural beauty criteria, complement the current National Landscape and collectively contribute to creating a National Park with a north east Wales sense of identity, cohesion and unity.

1.15 The AoS extends from the coastal edge at Gronant and Talacre Dunes through the upland ridge of the Clwydian Range which contains range of landscape features, and is strongly rural, tranquil and with a sense of history and in places, wildness. The valleys and vales provide important visual unity with the surrounding uplands. From the elevated ridge there are extensive views across the Irish Sea and Dee Estuary where major offshore windfarms influence seascape views. To the east and west of the upland ridge, the pressures for landscape change include settlement expansion and commercial and industrial development including wind farms.

1.16 The northern part of the AoS includes the more populated coastal settlements including Rhyl and Prestatyn, and the arterial route of the A55. To the east of the AoS are the more populated and industrial areas of including Connah's Quay, Deeside, Shotton and Buckley. Immediately adjoining the AoS to the east are Mold, Wrexham and surrounding towns. To the west of the AoS the main settlements are Denbigh and Ruthin.

1.17 The southern part of the AoS has lower population density in the adjoining areas, however the settlements of Oswestry and Welshpool lie further to the east. The southern area of the Area of Search (AoS) has a stronger upland character, and greater tranquillity, with the upland moorland plateau of the Berwyn, Ceiriog Valley, Llansilin Valley and Hills, the Tanat Valley, Llanfyllin Valley and Hills, Vyrnwy and Banwy Valleys, and area around Llyn Vyrnwy, adjoining Eryri National Park.

The Statutory purposes of National Parks in Wales

1.18 National Parks in Wales currently have two purposes, as set out in the Environment Act 1995:

- To conserve and enhance the natural beauty, wildlife and cultural heritage of the National Parks; and.
- To promote opportunities for the understanding and enjoyment of the special qualities (of the Park) by the public.

1.19 The 1947 Hobhouse report [[See reference 1](#)] was the basis for the National Parks and Access to the Countryside Act 1949. It proposed 12 National Parks in England and Wales, and these areas have all been designated, albeit with different boundaries. The committee also recommended the designation of 52 Conservation Areas, most of which are now protected as National Landscapes.

1.20 The 2015 Marsden report [See reference 2] recommended that National Park Authorities have a duty to foster the economic and social well-being of local communities in ways which are compatible with National Park purposes. This was further included in the Future Landscapes [See reference 3] report, which proposes that new legislation is needed to take this forward. This report also highlighted the need for legislative changes to recognise the special qualities of National Parks and National Landscapes as part of a more formal role in the sustainable management of natural resources. This presents a key opportunity for the new National Parks to take on a different role to the existing National Parks.

1.21 The 2022 Biodiversity Deep Dive [See reference 4] includes a number of recommendations for collective actions to support meaningful delivery of the Convention on Biological Diversity '30 by 30' goal. The 30 by 30 goal is the worldwide initiative for governments to designate 30% of Earth's land and ocean area as protected areas by 2030. Within this is the recommendation to unlock the potential of designated landscapes (National Parks and National Landscapes) to deliver more for nature and contribute to the achievement of 30 by 30. This includes action in the immediate term to support National Parks and National Landscapes to develop prioritised action plans for nature restoration embedding these in strategic planning. In the longer term this includes:

- Realign Designated Landscapes priorities to enhance and accelerate nature by updated policy, resources and guidance to build capacity and expertise and to target activity.
- Develop the evidence and mapping tools to enable designated landscapes to baseline, target and monitor areas of high nature value that could be secured as their contribution to 30 by 30.
- Ensure Designated Landscapes bodies are funded adequately, sustainably and flexibly to deliver nature recovery at a transformational landscape scale.
- Ensure that the potential designation of a new National Park in northeast Wales affords opportunities for climate change mitigation and nature recovery as key delivery priorities for the new Park.

- Consider the need for legislation in the next Senedd to reform the statutory purposes, duties and governance arrangements for designated landscape bodies to equip them better to drive nature's recovery.

Relationship of Forces for Change (LUC work phase 1) to Special Qualities work

1.22 The Special Qualities work (Craggatak, 2023) set out to identify the special qualities of the Area of Search based on desk studies and interactive workshops. This identified six Special Qualities of the Area of Search which are set out below:

- **An inspiring space that promotes mental, physical and spiritual health and wellbeing** – this reflects the experience of the landscape and the access and recreation opportunities it provides.
- **A place with cohesive communities and distinctive settlement patterns** – this reflects the cultural associations, events and language of the area both past and present.
- **A story of human interaction with the landscape over millennia** – this reflects the historic features of the landscape, including physical features and associations.
- **A home to internationally and locally important species and habitats** – this reflects the diversity of species and habitats both in protected areas and in the wider landscape.
- **A distinctive, complementary and contrasting landscape** – this reflects the key landscape features and experiential qualities of the area.
- **A landscape providing benefits beyond its borders** – this reflects the ecosystem services provided by the area.

1.23 The Special Qualities of the Area of Search has formed the basis for the evaluation of forces for change.

Relationship of forces for change to LUC phase 2 work analysis of management options

1.24 This report provides the identification of the forces for change which will be used as the basis for the evaluation of future management options through Phase 2 of the work.

Report structure

1.25 The remainder of the report is structured as follows:

- Policy framework
- Methodology for identifying forces for change
- Forces for change identified for the AoS, including comparative assessment
- Evaluation of forces for change against special qualities
- Conclusion and next steps.

1.26 The report is supported by the following appendices:

- Appendix A: Methodology
- Appendix B: List and description of areas within the AoS
- Appendix C: Comparative analysis of forces for change identified for the Clwydian Range and Dee Valley National Landscape against a selection of other protected landscapes

Chapter 1 Introduction

- Appendix D: Details of stakeholder engagement findings
- Appendix E: Policy review information
- Appendix F: Figures.

Chapter 2

Policy framework

2.1 This chapter describes the key policy documents relevant to the approach to identifying the forces for change and the evaluation of these against the special qualities of the area of search. The legislation and policy context reflects the emphasis on the long-term sustainable management of natural resources to increase quality, robustness and resilience of ecosystems and to bring associated benefits to the communities.

Well-being of Future Generations (Wales) Act 2015

2.2 The Well-being of Future Generations Act [[See reference 5](#)] requires public bodies in Wales to think about the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change. The Act puts in place seven wellbeing goals which must all be worked towards:

- A prosperous Wales
- A resilient Wales
- A more equal Wales
- A healthier Wales
- A Wales of cohesive communities
- A Wales of vibrant culture and thriving Welsh language
- A globally responsible Wales.

2.3 The seven wellbeing goals are strongly relevant to the identification of the forces for change, as they highlight how change within the landscape may

impact on the areas ability to deliver future benefits. It also demonstrates how the area can contribute to the goals through enabling access and recreation and contributing to climate change resilience.

Sustainable management of natural resources

2.4 The Environment (Wales) Act 2016 [See reference 6] and the Well-being of Future Generations (Wales) Act 2015 [See reference 7] together create modern legislation for managing Wales' natural resources and improve the social, economic, environmental and cultural well-being of Wales. Together with the Planning (Wales) Act, this ensures that there is the right development in the right place.

2.5 Sustainable management of natural resources is defined in the Environment Act as:

“using natural resources in a way and at a rate that maintains and enhances the resilience of ecosystems and the benefits they provide. In doing so, meeting the needs of present generations of people without compromising the ability of future generations to meet their needs, and contributing to the achievement of the well-being goals in the Well-being of Future Generations Act.”

2.6 The four aims of SMNR are:

- Stocks of natural resources are safeguarded and enhanced
- Resilient ecosystems
- Healthy places for people
- A regenerative economy.

2.7 In addition there are nine principles of sustainable management of natural resources:

- Adaptive management
- Scale
- Collaboration and engagement
- Public participation
- Evidence
- Multiple benefits
- Long term
- Preventative action
- Building resilience.

2.8 SMNR has been reflected through the assessment process as the assessment of the forces for change recognises that many of the changes influence the future resilience of ecosystems and benefits they provide, impact on economic opportunities and the communities of the area.

State of Natural Resources (SoNaRR) 2020

2.9 Natural Resources Wales' State of Natural Resources Report [[See reference 8](#)] sets out the national evidence base for the sustainable management of natural resources and assesses Wales's progress towards SMNR.

2.10 SoNaRR is an evidence base for Welsh Ministers to use when preparing or revising the Natural Resources Policy, for NRW when preparing Area Statements, and for local planning authorities when refreshing local development plans. SoNaRR must also be considered in the publishing, adopting or reviewing of National Park and area of Outstanding Natural Beauty management plans by relevant authorities.

2.11 It classifies broad ecosystems of Urban; Mountain, moorland and heath; Semi-natural grassland; Freshwater; Enclosed farmland; Woodland; Coastal margins; and Marine. It also identifies cross-cutting themes of Biodiversity; Climate Change; Land use and soils; Invasive non-native species; Air quality; Water efficiency; Waste; and Energy efficiency.

2.12 SoNaRR 2020 shows that no ecosystem in Wales is currently showing all the attributes of resilience, which is impacting on the ability of ecosystems to provide benefits for well-being. It identifies the actions that are needed to achieve a regenerating system of resilient ecosystems and a sustainable regenerative economy. It also sets out how Wales' natural resources contribute to well-being. This illustrates the need for land management to contribute to supporting ecological resilience within a potential future National Park. As for SMNR, SoNaRR reflects the need for the assessment of forces for change to recognise that land management changes are necessary within the AoS in order to support sustainable future management of the area. It would not be appropriate for the assessment to categorise such changes as positive or negative, other than in relation to how they affect a particular special quality. For example, land management changes which lead to more hedgerows and woodlands would affect the experience of long views. But this does not imply that an increase in hedgerows and woodlands is negative overall, as it represents a change in the resilience and ecosystem services delivered in the area.

2.13 SoNaRR also identifies key opportunities for action related to different landscape areas, reflecting the geographic variation in some forces for change. These opportunities reflect the future land management actions which should be implemented to achieve the four aims of SoNARR. These opportunities for action are in themselves potential forces for change within the AoS.

The Natural Resources Policy

2.14 The Natural Resources Policy [See reference 9] sets out the national priorities for the sustainable management of natural resources, reflecting the ecosystem services which they provide. The national priorities are:

- Delivering nature-based solutions.
- Increasing resource efficiency and renewable energy.
- Taking a place-based approach.

2.15 This policy takes the approach of managing natural capital and ecosystem service delivery through a collaborative approach to align with SMNR. It also encourages interventions with natural resources to realise opportunities in supporting sustainable communities, innovation, and employment.

2.16 In scoping the forces for change, LUC has considered factors that impact upon the natural and human environment, communities and employment.

The Hobhouse Report 1947

2.17 The Hobhouse Report of 1947 [See reference 10] identified ‘special landscapes’ with potential for designation as protected landscapes. This included the proposed National Parks, and also ‘Conservation Areas’. The areas identified as ‘Conservation Areas’ in the Hobhouse Report are identified as *areas of outstanding beauty, often of great scientific interest, and in many cases, include important holiday areas*. At the time of the report, they were identified as not requiring the level of positive management required by National Park designation but were recognised as making an important contribution to the wider of enjoyment of the countryside. One of the reasons for the identification of these areas also relates to their relative greater accessibility to centres of population than the areas identified for National Park status.

2.18 The Hobhouse report identified the Denbigh Moors, Clwydian Range and Berwyn as proposed conservation areas. Llyn Vyrnwy was originally shown as part of the Snowdonia National Park but was excluded from the designation.

Chapter 3

Forces for change

3.1 The following chapters of the report describe the forces for change identified for the Area of Search. This includes the associated forces for change and main policy drivers (see Appendix E); the socio-economic and cultural trends; and the key natural and historical landscape characteristics and features that could be affected.

3.2 The impact of the potential National Park designation has also been evaluated. The designation could for example contribute to pressures, but also provide management options to mitigate forces for change.

3.3 Building on the methodology described in Appendix A, five main categories of forces for change in the area of search (AoS) were identified. These categories help frame the analysis which is explored in the following chapters. The categories include:

- Climate change,
- Built development and infrastructure,
- Land management and natural environment,
- People, communities and cultural heritage, and
- Recreation, tourism and access.

3.4 Illustrations of mapped data relevant to these categories are provided in Figures 2-9 in Appendix F.

Chapter 4

Force for change: Climate change

Summary

Climate change is an overarching force for change which can impact the other four categories of force for change. There are direct and indirect changes, brought about by climate change related events, policy and individual decision making. This includes climate change mitigation, such as renewables and energy efficiency, and adaptation actions to increase resilience. Climate change also frequently acts in combination with other forces for change, exacerbating existing pressures and those that will potentially change under National Park designation. Key climate risks include impacts of flooding, water supply, impacts on land management and ecosystems. Adaptation responses to these risks bring about further changes such as nature based flood risk management and increased resilience of built development. National Park designation also presents an opportunity to co-ordinate adaptation actions.

Forces for change include:

- The impacts of extreme weather events, including storms and coastal erosion
- Management of water resources for flood risk and water supply
- Nature based solutions to mitigate impacts on communities and land within and beyond the AoS
- The response of habitats and species to climate change
- The land management response to climate change

- Impacts on the historic environment.

4.1 Climate change influences the other four categories of force for change. It results in direct changes due, for example, to weather extremes and warmer temperature - leading to flooding, changes in growing seasons, species migration patterns, pests and diseases. Indirect changes occur from the policy response, individual or sector decisions to mitigate the effects of climate change.

4.2 Direct impacts from climate change can be gradual, such as changes in vegetation, or they can be extreme, such as from a flood event. Adaptation responses to climate risks may be planned, such as flood defence or unplanned in terms of behaviour change. To address climate mitigation and to meet net zero, the landscape will need to accommodate new development, infrastructure and changes in land cover. For example renewable energy development and transmission, low carbon transport, new crops, woodland planting, peat bog restoration and more extensive natural habitats.

4.3 Climate change may also act in combination with other forces for change. For example, it brings further uncertainty to a farmer's plans for next year's crops; flooding can affect both land management, property, energy and transport networks, footpath erosion, and land slips onto transport networks. Current levels of recreation are damaging honey pot sites. The higher frequency and intensity of precipitation could increase the rate of erosion of recreational sites and routes.

4.4 The Climate Change Risk Assessment (CCRA3) [\[See reference 11\]](#) sets out the most significant risks in Wales which are all relevant to the AoS:

- The impacts of climate change on the natural environment, including terrestrial, freshwater, coastal and marine species, forests and agriculture.
- Drought, wildfires.

Chapter 4 Force for change: Climate change

- An increase in the range, quantities and consequences of pests, pathogens and invasive species, negatively affecting terrestrial, freshwater and marine priority habitats species, forestry and agriculture.
- The risk of climate change impacts, especially more frequent flooding and coastal erosion, causing damage to our infrastructure services, including energy, transport, water and Information and Communication Technologies (ICT).
- The impact of extreme temperatures, high winds and lightning on the transport network.
- The impact of increasing high temperatures on people's health and wellbeing.
- Increased severity and frequency of flooding of homes, communities and businesses.
- The impact on coastal businesses due to sea level rise, coastal flooding and erosion.
- Disruption to the delivery of health and social care services due to a greater frequency of extreme weather.
- Damage to our cultural heritage assets from temperature, precipitation, groundwater and landscape changes.
- Impacts internationally that may affect the UK, such as risks to food availability, safety and security, risks to international law and governance from climate change that will affect the UK, international trade routes, public health and the multiplication of risks across systems and geographies.

4.5 The adaptation responses to these risks are also key forces for change, and are set out in the Climate Adaptation Strategy for Wales, Prosperity for all: a climate conscious Wales [See reference 12]. The most urgent risks requiring adaptation action include:

- Risks to people, communities, buildings and infrastructure from flooding
- Risks to public water supplies from drought and low flows

Chapter 4 Force for change: Climate change

- Some land management practices exacerbating flood risk
- Risks to ecosystems and agriculture businesses from changes in climatic conditions.

4.6 Adaptation responses to these risks include:

- Increased use of nature based solutions to address flood risk
- Water resource management
- Promoting good environmental agricultural practice to increase resilience of soils and water
- Support for woodland creation and an increase woodland cover by at least 2000 hectares per annum from 2020 to 2030.
- Upland restoration
- Supporting increased resilience for built development.

4.7 The Welsh Government Net Zero Strategic Plan sets out initiatives and targets to achieve net zero as an organisation and supporting the 2030 net zero ambition for the entire Welsh public sector [\[See reference 13\]](#). These are all relevant to the AoS:

- Increasing efficiencies of buildings, transport infrastructure, supply chain and smart working
- Keeping materials in use and avoiding waste
- Investing in decarbonising buildings and vehicles
- Target environmental net gain
- Behavioural changes to low carbon choices.

How National Park designation may influence the response to climate change

4.8 National Park designation provides an opportunity to coordinate joined up working to act to both mitigate and adapt to the impacts of climate change. This can include landscape scale action on woodland creation and peatland restoration, actions for flood management and managing fire risk.

4.9 Climate change is likely to be a compounding factor in relation to other forces for change, such as visitor pressure which could also increase because of National Park status. This could add to the erosion of key access routes or historic environment features, which are already under pressure from changes in precipitation intensity. However, National Park status can also provide additional opportunities for action to address these pressures. As explored in relation to ‘land management’ later in this chapter, National Park designation provides opportunities for funding and co-ordinating land management activities which support climate change adaptation.

Climate policy and associated drivers

4.10 The response to climate change mitigation and adaptation in Wales is guided by the following policy framework:

- Future Wales 2040 [\[See reference 14\]](#)
- Low carbon delivery plan [\[See reference 15\]](#)
- Natural Resources Policy [\[See reference 16\]](#)
- Natural Resources Wales Flood Risk Management Plan [\[See reference 17\]](#)
- National Strategy for Flood and Coastal Erosion Risk Management in Wales [\[See reference 18\]](#)

- Net zero carbon status by 2030: public sector route map [\[See reference 19\]](#)
- Planning Policy Wales 12 [\[See reference 20\]](#)
- Prosperity for All: A Climate Conscious Wales 2020-2025 [\[See reference 21\]](#)
- Welsh Government Net Zero strategic plan (2022) [\[See reference 22\]](#)

4.11 Based on a review of these policy documents, a number of key themes have been identified, these are grouped under the following headings:

- Habitat creation, enhancement and resilience
- Energy efficiency and decarbonisation
- Transport
- Resilience.

Habitat creation, enhancement and resilience of ecosystems

4.12 There is a range of support for actions for habitat creation and enhancement across the policy documents. This includes the integration of climate change and the ecological emergency across all actions and increasing the resilience of ecosystems to climate change. Key to this is the development of the green infrastructure resource. This supports wellbeing and carbon sequestration, whilst also recognising that increasing the carbon sequestration value of land can contribute to carbon offsetting. Habitat enhancement and carbon sequestration can also be achieved through environmental net gain from development and managing natural resources to reduce emissions. Under section 6 of the Environment (Wales) Act 2016 public authorities that exercise their functions in relation to Wales have a duty to maintain and enhance biodiversity and promote the resilience of ecosystems. The policies recognise that the need for the protection, restoration and creation of ecological habitats, and refer to the Welsh Government commitment to developing a national forest.

Energy efficiency and decarbonisation

4.13 The policy framework for energy efficiency and decarbonisation includes a reduction in carbon emissions from public sector operational activities. It also includes decarbonising the energy system through renewable energy deployment. Decarbonisation is also realised through the sustainable management of natural resources and reducing the carbon impact of goods and services.

Transport

4.14 In relation to transport, the policy framework is focused on a reduction in car use, and transition to low emissions vehicles. This is also supported through an increase in active travel.

Resilience

4.15 Finally, there is policy support for increasing resilience of place to climate change impacts (flooding, water supply, soils, carbon storage, pests and disease, habitats and species) and supporting individual and community resilience.

How climate change has been considered by other Designated Landscapes in Wales and England

4.16 A review of the management plan for the Clwydian Range and Dee Valley (CRDV) National Landscape and several other National Parks has identified several forces for change associated with Climate Change. These are summarised below, against some of the key characteristics of the AoS.

Comparative assessment of forces for change for other nationally designated areas, CRDV National Landscape, and the characteristics of the AoS

Water shortage/scarcity

CRDV National Landscape

- Seasonal changes in water availability

AoS

- Contains large water bodies such as Llyn Vyrnwy reservoir, which supplies water to Liverpool.
- Contains major rivers of the Dee, Alyn, Alwyn, Clwyd, Vyrnwy and Banwy.

Flood risk

CRDV National Landscape

- Pressure for flood defences

AoS

- The River Dee is approximately 110km long from its source in Eryri National Park to where its estuary discharges into Liverpool Bay. River flooding occurs fairly frequently in the upper sub-catchments of the River Dee, River Alwen and River Alyn.
- A number of communities outside of the AoS are identified as at risk of flooding **[See reference 23]**.

- By 2120, the five communities in North East Wales Place that are projected to experience the biggest change in danger from the risk of flooding from rivers are:
 - Bangor on Dee
 - Garden City and Deeside Ind Est
 - Rhyl
 - Ruthin
 - Sealand

Rising sea levels and coastal erosion

CRDV National Landscape

- Not applicable

AoS

- The AoS includes an area of coastal edge, at Gronant Dunes, where issues of increased storminess and sea level rise will be most pronounced.
- A number of communities surrounding the AoS are identified as at risk of flooding **[See reference 24]**.
- By 2120, the five communities in North East Wales Place that are projected to experience the biggest change in danger from the risk of flooding from the sea are:
 - Connah's Quay and Shotton
 - Lache
 - Prestatyn
 - Queensferry, Sandycroft and Manor Lane
 - Rhyl

- Although not all of the flood risk communities are within the AoS, the increased flood risk within these communities may displace development pressure to the surrounding areas.

Extreme weather events, including storms

CRDV National Landscape

- Not applicable

AoS

- The flood risks noted above is also related to extreme weather events.
- Runoff causes soil erosion with a loss of topsoil which effects agriculture. Saturated soils can lead to subsidence and slips, blocking transport networks. Saturated soils and storms can lead to loss of trees and woodland.

Natural flood management

CRDV National Landscape

- Not applicable

AoS

- 7% (9,690 ha) of the AoS is peat bog, a higher proportion than for Wales as a whole [\[See reference 25\]](#), and these are often located in upland areas including parts of the Clwydian Range, Dee Valley and the Berwyn. Peat aids in mitigating flood risk by storing water so that it doesn't pass through the system and slowing the flow of water, including overland flow from the roughness of the surface of the landscape.

Impacts on habitats and species, including loss, change and invasive non native and native species (e.g. gorse and bracken)

CRDV National Landscape

- Increased fire risk.
- The impact of both adaptation and mitigation measures

AoS

- The area includes a diversity of protected areas and over one fifth of the AoS (20.74%, or 28,329 ha) is covered by NNRs, Ramsar sites, SPAs, SACs and SSSIs.
- Approximately 10% (14,306 ha) of the area is moor and heathland such as the expansive Llandegla and Ruabon Moors, Llantysilio and North Berwyn. Includes a number of designated grassland habitats. Natural grassland accounts for 14% (18,793 ha) of the AoS. Areas of limestone grasslands include Graig Fawr, Loggerheads and Bryn Alyn and Llanarmon yn Iâl. In the National Landscape calcareous grassland primarily occurs in the north from Prestatyn to Cwm, centrally along the Alyn Valley, and in the south around the Eglwyseg rocks.
- Wildfires is a further risk and 290 hectares of heathland on Llantysilio mountain burned for 40 days in 2018.
- Key features and common themes of the AoS (Craggatak Consulting, 2023) included its varied and distinctive habitats, and identified key species including black grouse, curlew, golden plover, hen harrier, lapwing, little tern, merlin, red kite, ring ouzel, yellowhammer, butterflies and salmon. In addition, the Special Qualities report highlighted that the area could contain 96% of the remaining black grouse in Cymru.

Increased prevalence of pests and diseases

CRDV National Landscape

- Not applicable

AoS

- Phytophthora ramorum kills larch trees, but also affects oak, birch, cherry, ash, sycamore, sweet chestnut and beech. Many larch plantations have now been cleared, but larch remains in some private woods.
- Chalara ash die back is expected to kill up to 80% of ash trees across the UK [See reference 26]
- Ash trees and woodland are a characteristic of many areas, being particularly associated with limestone country including Prestatyn Hillside and the northern Clwydian Range; Pwll Glas; Bryn Alyn and Alyn valley; Minera; and Eglwyseg escarpment.

Changes to agricultural productivity

CRDV National Landscape

- Not applicable

AoS

- Flood risk may contribute to compaction, waterlogging and erosion of soil. Wetter autumns and winters will threaten agricultural production by adversely affecting the timing of land-management operations. Climate change will affect the range and quality of the ecosystem services that agriculture and provides and relies on. These include climate control, flood

regulation, biodiversity, pollination and nutrient cycling [\[See reference 27\]](#).

Changes in woodland and tree species

CRDV National Landscape

- Not applicable

AoS

- Approximately 15% (20,594 ha) of the area is covered by woodland [\[See reference 28\]](#) and 18% (3,806 ha) of this is ancient woodland. Approximately 65% of woodland in the AoS is coniferous forest, 23% is broad-leaved and 12% is mixed. Craggatak Consulting (2023) [\[See reference 29\]](#) identified a key feature of the AoS includes its veteran and ancient oaks.
- Areas of broadleaved woodland and veteran trees include Bishops Wood, Cwm and Wheeler Valley, the ash dominated Alyn Valley woods and the small copses of the upper Alyn and upland oak woods of the Dee Valley.
- Species change (naturally and by choice of species for forestry and nature recovery) will occur to adapt to global warming.

Direct and indirect impacts on the historic environment

CRDV National Landscape

- The impact of both adaptation and mitigation measures

AoS

- Across the AoS there are over 1800 listed buildings, 246 Scheduled Monuments, 39 Registered Parks and Gardens and 48 Conservation Areas.
- For example, historic defensive features include the dramatic chain of Iron Age Hillforts of the Clwydian Range, Castell Dinas Bran and Chirk Castle and medieval Motte and Baileys at Tomen y Rhodwydd, Tomen y Fadre and Glyndŵr's Mount, Carrog. There is also the Pontcysyllte Aqueduct and Canal World Heritage Site and industrial features such as the Alyn Valley's Leete and tramways from Moel Fferna and Llantysilio and lead works at Minera.
- Llanerch Bridge (Grade II listed) south west of Tremeirchion was washed away by flood water in 2021.

Stakeholder engagement findings

4.17 The stakeholder engagement highlighted the impact of climate change combined with recreation pressure, in particular the issues associated with saturated soils. In addition, the engagement identified the impact of recreational pressure on historic features as being further exacerbated by climate change.

Chapter 5

Force for change: Built development and infrastructure

Summary

Built development and infrastructure encompasses a range of built development including new housing, business industry, retail, and transport, renewable energy and grid infrastructure and minerals, quarrying and waste. Impacts on the AoS can include development both within the area, and the influence of large-scale development in areas beyond. Key policy influences include the future improved public transport access in the surrounding area, increasing accessibility to the AoS. This is alongside the support for modal shift and sustainable transport. There is also strong support for placemaking and the viability of communities. Although housing development within the AoS is likely to be small scale, housing growth in surrounding areas could further impact on visitor numbers to the AoS. National Park designation is likely to influence development pressures within the AoS, however these can be managed through National Park powers. Designation also presents opportunities for further supporting economic development through National Park branding. Renewable energy deployment and grid infrastructure are a key consideration for a future National Park, as the area includes significant potential.

Forces for change include:

- The impact of new built development on the area's special qualities, including cumulative effects
- Existing challenges of affordable housing and local sites for employment

- Regional growth in surrounding areas
- Renewable energy development and associated grid infrastructure
- Potential expansion of mineral extraction
- Future improvements to public transport, active travel and transport connectivity
- New visitor infrastructure.

5.1 This section describes and evaluates the forces for change which relate to built development and infrastructure. It is structured by the following main categories of force for change:

- New housing, business industry, retail, and transport
- Renewable energy and grid infrastructure
- Minerals, quarrying and waste.

5.2 Built development and infrastructure encompasses a range of development types. As a force for change this can range from large scale individual developments to the cumulative effect of incremental small-scale developments, or changes to existing buildings. These forces for change may be within the AoS or beyond the boundary. Larger scale developments beyond the settlement boundary will also have a greater impact over a longer distance, where they are visible from the upland parts of the AoS. The geographical spread of these impacts is influenced by the topographical character and road network of the AoS and the surrounding area. Future growth of the existing settlements is planned through the local development plans. The influence of the existing National Landscape designation will also have impacted on current patterns and types of development, for example in relation to tourism infrastructure or accommodation provision.

Built development and infrastructure policy and associated drivers

5.3 As a force for change, built development is influenced by the following policy framework:

- Future Wales – the National Plan 2040 [\[See reference 30\]](#)
- Planning Policy Wales 12 [\[See reference 31\]](#)
- Wales Infrastructure Investment Strategy [\[See reference 32\]](#)
- Wales Transport Strategy 2021 [\[See reference 33\]](#)
- Well Being Plans and their underpinning Well Being Assessments (See Appendix A)
- National Transport Delivery Plan 2022 to 2027 [\[See reference 34\]](#)
- Regional Transport Plan 2050 [\[See reference 35\]](#)

5.4 Based on a review of these policy documents, a number of key themes have been identified, these are grouped under the following three headings. Due to the scale and significance, renewable energy and grid infrastructure is dealt with separately in subsequent paragraphs.

- Housing
- Placemaking
- Transport.

5.5 The policy documents also reflect on the requirement for infrastructure to support decarbonisation such as transport related infrastructure (explored below). There are also actions required to manage the impact of climate change on infrastructure, including increased resilience. Alongside this is the development of increased green and blue infrastructure provision and access, safeguarding natural resources and the ecosystem services they provide.

Housing

5.6 The key growth areas for housing lie just outside of the AoS associated with the major settlements of Wrexham, Deeside and the North Wales Coast. Within the AoS new housing is typically allocated within small scale green field development on the edges of existing villages and towns. The number of houses and location seeks to address local poverty and housing demands and the need for affordable housing. These growth areas adjacent to the AoS will see an increase in population who may wish to access the AoS. This can bring visitor pressure to the communities and landscape within the AS, but access to a new National Park supports a range of wellbeing benefits.

Placemaking

5.7 Within the context of infrastructure is placemaking and the support for improving town centres and providing accessible public services, and improving economic opportunities. This will support the viability of communities within and around the AoS. Linked to placemaking is ensuring active, social, distinctive places.

Transport

5.8 The proposed development of the North Wales Metro includes the drive for greater availability of a range of transport options and connectivity between these. The proposed development will also lead to improved public transport access along the north Wales coast. It has the potential to improve access to the northern parts of the AoS, for communities and visitors from Wales and across the border in England. There is also support for strengthening connectivity and cross border transport links, which further increases the accessibility of the AoS.

5.9 There are a number of key policy drivers to support modal shift and low emissions vehicles. This includes the provision of infrastructure to support the

access and use of both public transport and low emissions vehicles, including EV charging and hydrogen fuelled vehicles. Increased integration of different types of transport will facilitate more people to use sustainable transport, but this will also require the associated infrastructure such as waiting areas, or bike sharing facilities. Associated with this is the need to increase the resilience of the transport infrastructure to climate change related risks including from flooding.

5.10 The policy also supports increasing access to green and blue spaces, and the new National Park will play a key role as a greenspace destination. Linked to this is the need to ensure that new developments are walking and cycling friendly.

5.11 Actions to reduce the need to travel include the support for remote working, which will lead to increased demand for rural housing.

How National Park designation may influence built development and infrastructure

5.12 National Park designation may influence the effect of these policy drivers in a number of ways. Depending on the planning functions of a new national park, this could include the preparation of a local development plan and supplementary planning guidance which will inform new development in the national park. This would provide a clear framework for managing planning issues within the area, responding to local issues and pressures.

5.13 National Park designation may also bring about changes in development pressures including patterns and types of development both within and around the AoS. There is likely to be increased demand for visitor associated development in terms of visitor infrastructure such as accommodation and also development to support visitor access and enjoyment (see also Recreation, tourism, and access section). Furthermore, National Park designation may increase demand for housing both within and around the AoS, and may lead to

some larger scale development being focused on the areas surrounding the AoS. This would depend on the approach to planning policy within the new National Park. It may also present more opportunities for economic development, building on the National Park brand.

5.14 Although National Park designation may increase transport pressure on the area, it will also provide an opportunity to provide a mechanism to coordinate the provision of integrated sustainable transport services. Changes to planning powers within a National Park may further influence the location of development, particularly in the areas close to the park boundary.

Renewable energy and grid infrastructure

5.15 Renewable energy and grid infrastructure is a key part of the delivery Wales' climate change mitigation targets. However, many aspects of this development can be large scale and may impact on the special qualities of the AoS over a large distance. Smaller scale and domestic development have the potential to integrate well within the landscape, settlements and the historic environment.

Renewable energy and grid infrastructure policy and associated drivers

5.16 As a force for change, renewable energy and grid infrastructure is influenced by the following policy framework:

- Future bill to be introduced for Welsh Infrastructure Consent **[See reference 36]**
- Future Wales – the National Plan 2040 **[See reference 37]**
- Net Zero Wales **[See reference 38]**

- Planning Policy Wales [See reference 39]
- Wales Infrastructure Investment Strategy [See reference 40]

5.17 Based on a review of these policy documents, the following key themes have been identified:

- Support for increased renewable energy development and generation, including large scale wind energy development. Wales has a target to generate 70% of its electricity consumption from renewable energy by 2030. In addition, three of the Future Wales pre-assessed areas for wind are to the west and south of the AoS.
- Grid infrastructure development both at onshore locations to support onshore and offshore development, and port development.
- Development of a range of renewable energy sources at all scales
- Improved energy efficiency
- Simplification of the consenting process for decarbonisation, sustainable travel and renewable energy innovation.

How National Park designation may influence renewable energy and grid infrastructure

5.18 The impact of National Park designation may influence the location and type of renewable energy development and grid infrastructure coming forward as a result of the planning framework for National Parks. PPW 12 notes that major developments should not take place in National Parks except in exceptional circumstances. Development in the setting of the designated area must also be considered. This could influence the siting, number and scale of developments that are planned for in areas visible from the AoS, or influence grid infrastructure siting and options of above ground or undergrounding. A new National Park will be operating within the current policy framework of meeting ambitious targets to facilitate the transition to net zero.

Minerals, quarrying and waste

5.19 This section describes and evaluates the forces for change which relate to minerals, quarrying and waste.

Minerals, quarrying and waste policy and associated drivers

5.20 As a force for change, minerals, quarrying and waste is influenced by the following policy framework. This includes:

- Future Wales – the National Plan 2040 [\[See reference 41\]](#)
- Natural Resources Policy [\[See reference 42\]](#)
- Planning Policy Wales [\[See reference 43\]](#)
- Wales Infrastructure Investment Strategy [\[See reference 44\]](#)

5.21 The policy review identified the following key themes:

- Waste reduction, circular economy and increased material re-use and recycling (requiring appropriate facilities and infrastructure for reprocessing and recycling).
- Sustainable extraction of minerals, and the recycling of aggregates, including at former quarry sites.
- Waste management, processing and recycling can take place within active and disused quarries, industrial estates and to a lesser degree within farm sites, with varying implications on the rural character of the AoS. In relation to minerals extraction, there is a requirement to provide domestic minerals supply and different mineral and aggregate resources are location specific in their occurrence.

How National Park designation may influence minerals, quarrying and waste

5.22 There are several active and disused quarries within the AoS. Some of the active quarries will have permission for long term extraction within the confines of the existing quarry and some may have permission to extend beyond their current limits. All permissions require landscape and visual integration, protected species and habitats and heritage to be addressed in the approved proposals and a restoration scheme to be implemented at the end of the approved period. Techniques for integrating quarrying within a future National Park are therefore possible, but major changes to natural landforms and the visibility of quarried faces remain difficult to integrate.

5.23 Planning Policy Wales 12 notes that there is a presumption against minerals development in National Parks, except in exceptional circumstances. The implications on mineral extraction within the AoS has yet to be fully analysed. Landscape integration is factored into mineral planning schemes. The designation of a new National Park could affect future plans for quarry extensions and the recommissioning of disused quarries if significant impacts on tranquillity would be experienced.

Stakeholder engagement findings:

5.24 The stakeholder engagement highlighted the significance of energy related developments to support the transition to net zero. This includes both renewable energy development and transmission infrastructure. The need for transport network improvements were also noted, alongside challenges with parking and infrastructure around the area and development of visitor infrastructure.

5.25 The stakeholders also identified the need for a new National Park to support renewables both within and adjacent in order to support progress towards net zero.

5.26 The stakeholders identified the potential impact on renewable energy deployment potential from National Park designation could be significant and become concentrated in other areas. They also noted that this would also be an issue with grid infrastructure being directed to concentrated areas, with other regions can end up hosting a disproportionate burden. It was suggested that development which contributes towards net zero could be afforded 'special infrastructure status' to facilitate renewable energy development, particularly in relation to sites for repowering and energy storage.

5.27 It was also noted that transmission infrastructure is a key potential force for change, and critical in achieving net zero. In particular the Welsh Government stakeholder discussion highlighted the potential impact of any alternative approaches to renewable energy infrastructure within a new national park on interpretation of existing planning arrangements.

5.28 Stakeholders highlighted the significant mineral extraction industry at Halkyn, Hendre and other sites. They identified limits on mineral extraction at these sites could affect a significant proportion [sic] of North Wales aggregate supply and mineral policy.

How built development and infrastructure has been considered by other Designated Landscapes in Wales and England

5.29 A review of the management plan for the Clwydian Range and Dee Valley (CRDV) National Landscape and several other National Parks has identified a number of forces for change associated with built development and infrastructure, including renewable energy and grid infrastructure and minerals, quarrying and waste. These are summarised below, against some of the key characteristics of the AoS.

Comparative assessment of forces for change for other nationally designated areas, CRDV National Landscape, and the characteristics of the AoS

Built development – housing and employment, location, cumulative effects

CRDV National Landscape

- Light from settlements, transport, development and recreation
- Cumulative impact of wind farm development
- Increased awareness raising through signs
- Development is not always in keeping with the local character and settlement patterns.

AoS

- **Population:** projections for the four local authorities show relatively minor population change over the next 20 years 2023-2043.
 - increases for Denbighshire, Flintshire, and Powys.
 - overall slight decrease for Wrexham.
- Llangollen, Llanfyllin and the villages of the Ceiriog valley have all grown within the constraints of narrow steep sided valleys. Future patterns of growth will require careful planning
- **Housing development:**
 - Wales' Estimates of Housing Need indicates that there is demand for an average of 7,400 additional housing units a year, of which just under half (48%) would need to be affordable housing in the next 5 years [\[See reference 45\]](#).

- **Denbighshire:** it is anticipated that housing growth will continue, alongside the increasing population.
- **Powys [See reference 46]:** The distribution of additional dwellings across the settlement hierarchy is generally in line with the adopted LDP strategy. However, the percentage of completions taking place in Towns has decreased since the previous monitoring period and the percentage of completions in the Small Villages and Open Countryside has increased. Dwellings in Small Villages, Rural Settlements and the Open Countryside have been granted permission and built to meet the needs of rural communities, this includes for affordable housing and rural enterprise dwellings.
- **Wrexham [See reference 47]:** As of 2015, there is a shortage of affordable housing, generally across the entire County Borough and more supported and general housing is needed for older persons.
- **National and regional growth areas:** The AoS will be effected by the nearby national and regional growth areas. In particular, the Wrexham and Deeside National Growth Area, which will be focus for strategic economic and housing growth; essential services and facilities; advanced manufacturing and transport infrastructure, intersects with the northern section of the AoS.
- Craggatak Consulting, (2023) also identified that key features and common themes of the AoS include its:
 - Dark skies
 - Iconic views
 - Isolated, peaceful, quiet and tranquil nature
 - Remoteness and wilderness
 - Dramatic and contrasting rising land
 - Intricate nature of the landscape in the Dee valley
 - Valleys and headwaters
 - Common land that is managed by grazing and active grazing associations

Built development associated with land management and agriculture

CRDV National Landscape

- Intrusion from built development

AoS

- Not applicable

Communications

CRDV National Landscape

- Intrusion from transmitters, masts

AoS

- The scale and number of transmitters required for 5G roll out is currently unknown

Energy development and supporting infrastructure

CRDV National Landscape

- Intrusion from built development particularly power lines and wind turbines
- The move to support zero carbon development

- The largest power lines cross the area at its narrowest point near Rhualt and travel through the area down the Morwynion Valley. Given the topography of the National Landscape 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 Coed Mawr and Barber's Hill.

AoS

- There are several operational renewable energy developments within the AoS - for anaerobic digestion, landfill gas, biomass, small hydroelectric plant and a small wind turbine associated with a dairy farm.
- Future large scale wind energy development proposals will come forward in the three Future Wales Pre Assessed Areas for Wind, to the west and south of the AoS.
- Wrexham LDP and Powys LDP includes local search areas of solar farms. A number of sites are shown located below the plateau north and south of the Ceiriog Valley.
- Renewable energy generation **[See reference 48]:**
 - Powys local authority generated the most from renewable technologies in 2021 in Wales, with an estimated 1,019 GWh (13% of total Welsh renewable energy generation).
 - Offshore wind had a total capacity of 726 MW in 2021, accounting for approximately 29% of renewable electricity generation. All three offshore wind sites currently in operation around Wales are situated off the north coast.
 - Flintshire had the third greatest renewable generation at 11% of the total.
 - Denbighshire generated 6%
 - Wrexham generated 2%
- Onshore renewable electricity capacity **[See reference 49]:**

- North Wales (offshore and onshore) accounts for 23% of total Welsh electricity capacity, with 639 MW installed. Mid Wales which, with a capacity of 419 MW, represents 15% of renewable electricity capacity.
- Powys has the third greatest share of electricity capacity of local authorities in Wales. Onshore wind makes up the majority of this capacity, at 83%, followed by solar PV.
- Onshore wind makes up the majority of renewable electricity capacity in Denbighshire.
- In Flintshire and Wrexham, Solar PV makes up the majority of renewable electricity capacity.
- Renewable heat capacity **[See reference 50]:**
 - Powys has the largest renewable heat capacity out of Welsh local authority areas. The majority of this is from biomass, followed by heat pumps.
 - Biomass is the greatest source of renewable heat capacity in all of the relevant local authority areas, apart from Flintshire.
 - Flintshire has the second largest renewable heat capacity out of Welsh local authority areas. The majority of this is from biomass CHP, followed by biomass and heat pumps.

Military activity

CRDV National Landscape

- Not applicable

AoS

- Not applicable

Minerals including restoration and unconventional oil and gas extraction

CRDV National Landscape

- Restoration and aftercare of quarries, potential development of dormant sites

AoS

- Based on land cover mapping, 0.32% (439 ha) of the AoS is mineral extraction sites and 0.03% (42.5 ha) is dump sites.
- The following lists mining/quarrying activities within each local authority. Correlation with the AoS hasn't been analysed at this stage:
 - Denbighshire: A lateral extension for Denbigh Quarry is currently under consideration which could yield a further 4.4 million tonnes **[See reference 51]**.
 - Flintshire: Extensive quarrying activity across Flintshire, notably for limestone extraction. There are seven active quarries within Flintshire **[See reference 52]**.
 - Powys: There are at present 13 sites within Powys with active permissions for the extraction of hard rock mineral resources, supplying 2.94 million tonnes of crushed rock aggregates to the South Wales supply each year. Three sandstone extraction sites have permissions which come to an end within the LDP period, the remaining 10 sites having permissions which extend to 2042 and beyond **[See reference 53]**.
 - Wrexham **[See reference 54]**: Clay extraction is a traditional local industry. Hafod Claypit is the only remaining permitted clay pit in Wrexham. Production of clay from Wales has declined significantly over the last few years, with no pressure for additional extraction in the County Borough.

- Wrexham is the location of a major sand and gravel quarry, Borrass quarry.
- Slate deposits occur in the south west of the County Borough and extend into Denbighshire, where the material is still worked. There are a number of historic slate quarries in Wrexham.
- There are extensive deposits of quartzitic sandstone (locally known as millstone grit) with potential for silica sand and silica rock around the Esclusham Mountain/Ruabon Mountain area. This is still worked near Eryrys, in Denbighshire. There is little information on where the silica rock occurs, however, its use is currently limited to the extraction of degraded silica rock at a site in Denbighshire.

Transport development

CRDV National Landscape

- Impacts on rural character from transport development
- Increased levels of traffic with potential impacts on tranquillity.

AoS

- Transport, connectivity and access:
 - The Welsh transport plan aims to reduce travel and encourage people to make the change to more sustainable transport.
 - The Welsh Government supports the development of the North Wales Metro and aims to work with Transport for Wales, local authorities and other partners to enable its delivery and maximise associated opportunities. The plans for the North Wales Metro intersect with the northern section of the AoS.
 - The plan, A Railway for Wales: Meeting the Needs of Future Generations, also outlines strategic corridor developments in and around the AoS, including in the northern section of the AoS, and just

South of the AoS. This includes £194m major station improvement programme across the entire network, 61% more Sunday services across the network and 29% more weekday services across the network and for North Wales, more services to enable a mix of express and stopping services across North Wales and to/from Holyhead, Bangor, Llandudno to Liverpool, Manchester, Chester, Crewe, etc. South of the AoS, connectivity improvements are planned, with more capacity and shorter journey from the West Midlands through Shrewsbury & Mid- Wales to Aberystwyth.

- Remote working: there has been a recent acceleration of growth in “remote” economic activity in Wales, particularly working remotely, but also in retail and commerce more generally.

Visitor accommodation

CRDV National Landscape

- (see recreation, tourism and access)

AoS

- Not applicable

Chapter 6

Force for change: Land management, agriculture, forestry and natural environment

Summary

Land management and the natural environment underpin the natural heritage of the AoS. There is strong policy support for management for nature recovery and sustainable land management to support biodiversity and climate change mitigation and adaptation. In addition, there is strong support for the sustainable land management to support rural communities and businesses.

National Park designation presents several opportunities to influence land management, through the potential co-ordination of actions and increased access to funding, and through the delivery of landscape scale projects. Increased visitor number may present opportunities in terms of farm diversification however, they can also bring about impacts on the operation of land management activities.

Forces for change include:

- Viability of land management and the need for income diversification
- Agricultural change influenced by agricultural support – framed to deliver food and wider benefits for nature and climate mitigation

- Forestry and woodland planned and managed to support a National Forest for Wales for timber and wider benefits for nature and climate mitigation
- Climate change bringing additional challenges to land management in terms of flooding, soil erosion, pests and disease, less predictable weather and seasons.

6.1 Land management, agriculture and forestry encompasses the range of land management activities, including productive agriculture and forestry, moorland management, and management for nature conservation. The main types of productive agricultural land within the AoS include - permanent grassland, followed by arable land and then rough grazing.

Land management policy and associated drivers

6.2 As a force for change, land management is influenced by the following policy framework. This includes:

- Agriculture (Wales) Act 2023 [\[See reference 55\]](#)
- Agriculture in Wales 2019 [\[See reference 56\]](#)
- Sustainable Farming and our Land [\[See reference 57\]](#)
- Brexit and our land: Securing the future of Welsh farming [\[See reference 58\]](#)
- Future Wales – the National Plan 2040 [\[See reference 59\]](#)
- LANDMAP [\[See reference 60\]](#)
- Management plans for SACs, SPAs and NNRs
- Natural Resources Policy [\[See reference 61\]](#)
- Nature Recovery Action Plan [\[See reference 62\]](#)

- Prosperity for All: A Climate Conscious Wales [See reference 63]
- Sustainable Farming Scheme Outline Proposals for 2025 [See reference 64]

Identified policy themes

6.3 Based on a review of these policy documents, a number of key themes have been identified, these are grouped under the following headings.

- Management for nature recovery and sustainable land management
 - Management for nature recovery through an ecosystem approach.
 - Proposed new sustainable farming scheme including sustainable food production, climate change mitigation and adaptation, enhanced ecosystem resilience and increased public access and enjoyment.
 - Sustainable land management to support healthy ecosystems.
- Sustainable land management to support rural communities and businesses
 - Support to keep land managers on the land through maintaining the economic viability of land management activities.
 - Resilience of businesses, supply chains and sustainable use of resources to support the viability of land management activities.

Management for nature recovery and sustainable land management

6.4 There is a strong emphasis on future sustainable land management which supports the resilience of ecosystems and the benefits they provide. This extends throughout all of the policy documents. This includes actions to enhance the quality of ecosystems such as hedgerows and trees, sustainable food production, increased climate adaptation and mitigation, and public access and engagement.

Sustainable land management to support rural communities and businesses

6.5 The policy framework supports the role of farmers and land managers in sustainable food production. This is achieved by improved management of the land and reducing emissions, reducing waste and pollution, increasing carbon sequestration and increasing benefits to people and places. Connected to this is policy support to ensure resilience in supply chains in agriculture and food, and the opportunities of new and emerging markets.

How National Park designation may influence land management

6.6 National Park designation presents opportunities to influence land management, through the potential co-ordination of actions and increased access to funding. This includes strategic management of the whole area through the development of a National Park management plan, and co-ordination of landscape scale nature restoration projects which support habitat connectivity. Other actions which may benefit from partnership working include action to address invasive species and sustainable farming practices. Furthermore, a National Park can provide a framework to undertake research to inform the development of nature restoration projects, explore and attract new kinds of investment, including private green finance and develop case studies and share knowledge.

6.7 However, National Park designation may also increase pressures on land managers in terms of increased visitor numbers and impacts on land management activities such as congestion and disturbance. Conversely, National Park designation may also provide new opportunities in relation to diversification of farm income, although this must be set against the seasonality and other challenges of greater reliance on a visitor-based economy.

Stakeholder engagement findings

6.8 The stakeholder engagement highlighted the significant impact that policy has on land management and the need for sufficient return on investment for farmers to retain viability. In addition, policy is an important force for change to consider in relation to agri-environment schemes governance structures, and updated purposes. The stakeholders also highlighted the potential negative impacts of visitors on land management activities within the area, and the need to ensure these are not adversely impacted.

6.9 The need to enable farm diversification within the context of a national park, and to ensure that planning controls do not restrict this was highlighted. Economic pressures may also influence future changes in land management, which may further affect the forces for change being experienced in the area.

Forestry and Woodland management and expansion policy and associated drivers

6.10 As a force for change, Forestry and Woodland management and expansion is influenced by the following policy framework. This includes:

- Grey squirrel management action plan for Wales [\[See reference 65\]](#)
- Mid Wales Area statement [\[See reference 66\]](#)
- National Forest for Wales [\[See reference 67\]](#)
- Natural Resources Policy [\[See reference 68\]](#)
- North East Wales Area statement [\[See reference 69\]](#)
- Phytophthora ramorum: Strategy for Wales [\[See reference 70\]](#)
- Science and innovation strategy for forestry in Great Britain [\[See reference 71\]](#)
- Woodlands for Wales [\[See reference 72\]](#)

6.11 Based on a review of these policy documents, the following key themes have been identified:

- Increased woodland cover and management
 - Increased area of woodland under management, expansion of woodland cover, creation of a national forest for Wales, and locating woodland to deliver benefits to people, close to where they live.
 - Diversification of age structure, tree species and genetic base
 - Increased value of woodlands and trees, contribution of woodland and trees to green infrastructure
- Management of risks to woodland and forests
 - Management of grey squirrels and *Phytophthora ramorum*
 - Forestry and woodland research.

Increased woodland cover and management

6.12 The policy support for increased woodland includes expanding the area of woodland and improving the management of this resource. Expanding woodland cover brings about potential significant landscape change, and impacts on the delivery of other ecosystem services, depending on the location.

6.13 Changing woodland management will improve the ecosystem services provided both in terms of habitat and biodiversity and the production and quality of both fibre and fuel. There is support for increased ownership or management of woodlands as a local resource which in turn can contribute to community cohesion and sense of place. The policy also supports employment through forestry management and processing, leisure and tourism.

Management of risks to woodland and forests

6.14 Risks and threats to woodland and forestry include pests and diseases, alongside the compounding issue of climate change. *Phytophthora ramorum* is a key impact on the current and future woodland landscape in Wales, influencing felling, planting and species choice. The management of the impact of grey squirrels will bring biodiversity benefits both in terms of habitat for red squirrels and also the health and productivity of woodlands. Across the UK, there is a strong emphasis on research and information gathering to improve future knowledge and actions for the management of woodland and forestry.

How National Park designation may influence forestry and woodland management and expansion

6.15 A number of National Park authorities have produced tree and woodland strategies for their areas to support the management and expansion of this resource. A National Park designation may therefore facilitate the development of a similar strategy for the area. A strategy will typically cover all scales and types of woodland management and inform woodland planting and management in relation to biodiversity, climate change, landscape, economy, integration with other land uses, community involvement and public access.

Stakeholder engagement findings

6.16 Stakeholders highlighted the impact of forestry affecting landscape character but also affecting underground archaeological remains which is particularly damaging, especially where there are shallow deposits.

How land management, agriculture, forestry and natural environment has been considered by other Designated Landscapes in Wales and England

6.17 A review of the management plan for the Clwydian Range and Dee Valley (CRDV) National Landscape and several other National Parks has identified several forces for change associated with land management, agriculture forestry and natural environment. These are summarised below, against some of the key characteristics of the AoS.

Comparative assessment of forces for change for other nationally designated areas, CRDV National Landscape, and the characteristics of the AoS

Agricultural change

CCRDV National Landscape

- The impact of agricultural policy and funding schemes.
- Under grazing encouraging scrub encroachment.
- Changes in agricultural practices, leading to changes in landscape character.
- Approximately 95% of the Clwydian Range and Dee Valley National Landscape is grassland, followed by arable farming (4.6%), with the small remainder under horticultural use. There had been little change in the proportion of types of agricultural land since 2008.

Chapter 6 Force for change: Land management, agriculture, forestry and natural environment

- There had been a decrease in overall livestock numbers in the National Landscape. An increase in the number of farms is likely to be attributable to the division of holdings. The number of sheep and cattle both fell between 2008 and 2012, by 1,569 and 362 respectively. Numbers of pigs and poultry both increased by around 30% over the same timescale, although they are farmed on a much smaller scale in the National Landscape than sheep or cattle.

AoS

- The AoS contains multiple areas with landscape designations including Special Landscape Areas, National Landscape Character Areas and the Clwydian Range and Dee Valley National Landscape. In the southwest, the AoS also borders Eryri National Park.
- Craggatak Consulting, 2023 identified that the AoS' landscape is largely characterised by “an extensive area of uplands and interlacing valleys”. Much of the area contains large-scale upland (and headwaters) or interlacing river valleys – all with very diverse landscape and biodiversity features.
- Agriculture is a significant land use and 55% (75,511 ha) of the AoS is covered by agricultural land. 49.7% of this is classified as pastures, 4.7% as non-irrigated arable land
- Just under 14% of the area is natural grassland and 11% (14,306 ha) moors and heathland.
- **Agricultural land:** Powys has just under 40% of Wales' common land rough grazing. The local authority area has an estimated 10 million chickens on 200 farms. There have been 139 applications for poultry units approved in Powys since 2015. Most of the land in both Denbighshire and Flintshire is rural and managed by farmers.
- support for environmental works provide to farmers through Tir Gofal and Glastir have had significant impact on positive habitat and landscape conservation, particularly with regard to management on Common Land. Changes in these support mechanisms may affect the scope of these works in the future [\[See reference 73\]](#).

- The Sustainable Farming Scheme (SFS) is under development.

Biodiversity impacts from land management change, including on birds of prey

CCRDV National Landscape

- Integration of habitat improvement and creation
- Overgrazing, enrichment of soils, acidification and nitrogen deposition leading to loss of species diversity
- Loss of indicator species
- Bracken invasion/invasion by other naturalised species

AoS

- Berwyn & South Clwyd Mountains SAC, Y Berwyn SPA, and Berwyn NNR are the main designations within the boundary. Priority sites include blanket bogs and European dry heaths. Birds of importance include black and red grouse, curlew, hen harrier, merlin, peregrine and red kite. Grazing, burning, drainage and off-road vehicles are prohibited/ managed to protect these sites at risk **[See reference 74]**.

Changes in military strategy

CCRDV National Landscape

- Not applicable

AoS

- Not applicable

Changes in moorland management

CCRDV National Landscape

- Heather burning or wildfires
- Impact of heather cutting
- Lack of appropriate heather rotational management.

AoS

- Approximately 10% of the area is moors and heathland.

Disease risk impacts on forestry and woodland

CCRDV National Landscape

- Pests and diseases - affecting bilberry, larch, ash, alder
- Ash woodlands are particularly important in the Alyn Valley where it has been designated SAC.

AoS

- Approximately 15% of the area covered by woodland **[See reference 75]**
- Ash is a very common tree species throughout the AoS. Much of the areas woodlands and hedgerows will change.

Energy related development (biomass)

CCRDV National Landscape

- Not applicable

AoS

- Not applicable

Forestry and woodland planting, management and felling

CCRDV National Landscape

- The impact of forestry policy
- geometrical forestry planting and harvesting
- Afforestation/loss of semi natural woodlands
- Implications of appropriate woodland management
- Pests and diseases
- Wind throw – as a result of disease
- In 2011 ‘Agriculture and Forestry’ provided 4.9% of employment. The data shows that employment in the agricultural and forestry industries have witnessed a decline.
- 46% of woodland cover in the National Landscape is coniferous forestry, followed by 36.3% broadleaved woodland.
- Woodlands cover around 13% of the total area of the Clwydian Range and Dee Valley National Landscape. Both broad leaved and conifer woodlands

contribute to timber markets at Kronospan but many small woodland owners are engaged in coppicing and charcoal production.

- Ash woodlands are particularly notable feature of the Alyn Valley SAC. Oak woods are also significant. The historic parklands contain some of the oldest veteran trees in the area. The parkland trees at Chirk are a feature of an SSSI supporting invertebrates and lesser horseshoe bats.
- In the National Landscape, associated issues include grazing preventing natural regeneration of trees, loss due to localised quarrying, cessation of traditional management, fragmentation of ownership, pests and diseases such as ash dieback and invasion by naturalised species (beech and sycamore) leading to changes in structure and composition **[See reference 76]**.

AoS

- Approximately 15% of the AoS is covered by woodland - similar to the area for Wales **[See reference 77]**. Approximately 18% of this comprises ancient woodland.
- Employment in forestry **[See reference 78]**. The forestry industry in North East Wales employs and estimated 3,000 people directly and indirectly within three sawmills, the country's largest forestry nursery and many contractor businesses **[See reference 79]**.
 - Powys: Mid Wales provides 350,000 cubic metres of timber every year to Wales' wood processing industry.
 - Denbighshire: Dominated by the extensive Clwydian Range upland plateau areas along with small blocks of farm woodland and rural estates.
 - Wrexham: is the least wooded of the counties within the AoS, with woodlands covering 9.4% of the county, well below the Welsh national average of 14%
 - Flintshire's woodland cover is slightly higher than Wrexham at 9.8%.

Impact of invasive non-native species

CCRDV National Landscape

- Invasive non-native species

AoS

- No data

Impacts on soil

CCRDV National Landscape

- Not applicable

AoS

- No data

Loss of traditional field boundaries

CCRDV National Landscape

- Loss of hedges and walls.

AoS

- No data

Nature restoration activities including rewetting, river and floodplain restoration, rewilding, catchment management

CCRDV National Landscape

- Not applicable

AoS

- No data

Policy impacts on agricultural support and future nature restoration

CCRDV National Landscape

- Not applicable

AoS

- No data

Water pollution

CCRDV National Landscape

- Water pollution
- Water abstraction and discharge for hydro-power generation

Chapter 6 Force for change: Land management, agriculture, forestry and natural environment

- Modification of water courses
- Loss of bankside vegetation
- Land drainage

AoS

- Land cover mapping indicates, water bodies cover 0.33% (456 ha) of the AoS.
- Craggatak Consulting (2023) identified that the quality (ecological and chemical), supply (including extractive and export), flood risk management associated with water bodies, inextricably influence landscape character, biodiversity, human habitation and culture.

Chapter 7

Force for change: People, communities and management of cultural heritage

Summary

People, communities and management of cultural heritage are influenced by key policy drivers including supporting inclusive and cohesive communities, public service provision, Welsh language and health improvement. The policy framework for the historic environment includes protection and maintenance, increased access and enjoyment. National Park designation can provide key opportunities for communities including community employment, participation, volunteering and skills development, alongside increasing access and understanding of these resources. In addition to these opportunities additional pressures may arise from access to affordable housing and local employment, although designation can also provide policy response to address these through planning functions.

Forces for change include:

- Impacts upon cultural heritage resources from diverse sources and varying scale of effect including climate change, land management, and visitors.
- Population change from migration and age structure can impact on community involvement and participation in local events and traditions, knowledge and use of the Welsh language and the viability/ demand upon local services.

- Changes in employment, including a decline in employment in land-based industries can result in loss of knowledge, skills and Welsh Language.
- The availability of local housing and employment affects the viability of rural communities.

7.1 This section explores the force for change arising from changes in population and communities, and management of cultural heritage resources.

People, communities and management of cultural heritage associated policy and drivers

7.2 As a force for change, people, communities, and cultural heritage is influenced by the following policy framework. This includes:

- Community Cohesion National Delivery Plan [\[See reference 80\]](#)
- Cymraeg 2050: Welsh language strategy and action plan [\[See reference 81\]](#)
- Future trends report 2021 [\[See reference 82\]](#)
- Light Springs through the Dark: A Vision for Culture in Wales [\[See reference 83\]](#)
- Priorities for the Historic Environment of Wales [\[See reference 84\]](#)
- Town centres: position statement [\[See reference 85\]](#)
- Wales Infrastructure Investment Strategy [\[See reference 86\]](#)
- Well Being Plans and their underpinning Well Being Assessments (See Appendix A)

7.3 Based on a review of these policy documents, the following key themes have been identified:

Chapter 7 Force for change: People, communities and management of cultural heritage

■ Communities

- Inclusive and cohesive communities
- Promoting the value of culture
- Relocation of public services into town centres
- Increasing Welsh language speakers, increasing and supporting the use of Welsh
- Improving health and wellbeing and reducing health inequalities

■ Historic environment

- Sustainable use of historic assets
- Protection of the historic environment
- Supporting skills to maintain the historic environment
- Increased access, understanding and enjoyment of the historic environment and heritage, including maximising the value of heritage icons for the economy.

Communities

7.4 In relation to health there are key actions around provision of services to communities and increasing physical activity. Infrastructure improvements for communities include improving transport, the delivery of cultural activities, public service access and investment to support community cohesion. Support for the Welsh language includes increasing the numbers of Welsh speakers and the use of Welsh. The support for affordable housing for local people, helps to retain Welsh speakers, linguistic infrastructure, place names and culture.

Historic environment

7.5 There is support for sustainable management, increased understanding and improved public access to historic environment assets. This includes improved

protection for some resources and greater public participation, understanding and enjoyment. In addition the policy recognises the role of heritage icons to the Welsh economy. There is support for the need for improved stewardship and also skills for caring for the historic environment.

How National Park designation may influence people, communities, and cultural heritage

7.6 National Park designation can bring benefits to people and communities. It may provide a framework to help to reverse working-age population decline through education and skills programmes which meet local business needs and support a growing green sector in the local economy. It can also promote opportunities for community land ownership and support community participation in decision making. The development of National Park projects can provide opportunities for outdoor learning and volunteering. In relation to heritage assets, National Park designation can also provide additional policies and initiatives to protect landscape and historic character, and also coordinate grant funding and provide support for community heritage projects.

7.7 National Park designation may have particular impacts on people, communities and cultural heritage. These relate to both challenges and opportunities in terms of housing pressure and employment opportunities. The impact of National Park designation is likely to increase the amount of visitor accommodation provided within the area, and increase house prices, making it harder for local people to afford to buy in the area. It may also cause a change in the perceived desirability of the area, further impacting on house prices. However, the planning functions of a national park may provide opportunities to further address issues of affordable housing or control of short term lets.

How has people, communities and management of cultural heritage been considered by other Designated Landscapes in Wales and England

7.8 A review of the management plan for the Clwydian Range and Dee Valley (CRDV) National Landscape and several other National Parks has identified several forces for change associated with people, communities and management of cultural heritage. These are summarised below, against some of the key characteristics of the AoS.

Comparative assessment of forces for change for other nationally designated areas, CRDV National Landscape, and the characteristics of the AoS

Built heritage and historic environment

CRDV National Landscape

- Deterioration of structures and monuments
- Erosion of sites following excavation
- Inappropriate land management
- Damage from metal detection
- Recreation damage, particularly off-road motorcycle and 4x4 damage
- Lack of maintenance of historic environment features
- Inappropriate methods of repair

Chapter 7 Force for change: People, communities and management of cultural heritage

- Lack of awareness of archaeological heritage
- Lack of protection of historic environment features
- Vegetation growth affecting key views
- Erosion from visitors
- Damage from inappropriate land management, such as quarrying, tree planting and overgrazing
- There are a number of historic settlements within the area. Llangollen is the largest with a population of around 3,000. The Cistercian Abbey of Valle Crucis lies near the confluence of the Eglwyseg and the Dee rivers, north of Llangollen. Historic parks and gardens form an important and integral part of the historic and cultural fabric of an area. 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.
- Settlement: The settlement pattern of the Clwydian Range is characterised by villages and hamlets on either side of the main ridge and along river valleys. 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. The settlement patterns in the south of the National Landscape are found primarily along river valleys. There are a number of small villages and similar to the to the Clwydian Range, scattered farmsteads and isolated dwellings are found higher up the slopes. Development in the National Landscape and its setting is not always in sympathy with the local landscape character and settlement pattern.
- Historic Settlement and Archaeology - Industrial Features and World Heritage Site - Pontcysyllte Aqueduct and Canal has World Heritage Status and, offering it increased awareness properties inscribed in the UK. The Vale of Llangollen Railway and Loggerheads are also notable. There are a number of features associated with the mines at Loggerheads.
- Hillforts and Defensive Structures - The chain of Iron Age Hillforts along the ridgeline of the Clwydian Range are its most high profile and unique

Chapter 7 Force for change: People, communities and management of cultural heritage

archaeological sites. Castell Dinas Bran and Chirk are both notable defensive features.

- Boundaries - The main types of boundaries 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. An unusual feature unique to Corwen within the area is boundaries using upright slate slabs.

AoS

- There are 1,835 listed buildings in the AoS, 33 of which are Grade I. In addition, there are 246 scheduled monuments, 39 registered parks and gardens and 48 conservation areas.
- Iconic sites in the AoS include Castell Dinas Bran, Glyn y Groes, Valle Crucis, Pennant Melangell, Plas Newydd and Pen Plenau Roman marching camp.
- Craggatak Consulting (2023) identified that key features and common themes of the AoS include its:
 - Ancient feel with strong links to the Mabinogi
 - Archaeology
 - Bronze age burial mounds, hillforts
 - Industrial archaeology and former mine, slate and kiln sites.

Culture

CRDV National Landscape

- Community involvement and participation in local events and traditions
- Lack/loss of facilities to celebrate cultural associations

Chapter 7 Force for change: People, communities and management of cultural heritage

- Loss of culturally significant views due to changes in vegetation or development
- Picturesque and romantic movement - The story of the picturesque movement in the National Landscape goes back to the late 18th century, particularly in the Dee Valley around Llangollen, painted by Turner and Wilson amongst others. Llangollen is known throughout the world for the International Eisteddfod.
- Sense of place – Lack of awareness of the National Landscape and its purposes within parts of the local communities. Unfocused community and voluntary actions that contribute to local distinctiveness.
- A Vibrant Culture and thriving Welsh Language is supported by establishing the conditions to allow sustainable communities to thrive. Culture and the Welsh language make a distinctive contribution to the vitality of communities. A Vibrant Culture and thriving Welsh Language are supported by the provision of jobs and economic activity which needs to be strategically planned and managed. The Welsh language and culture makes a distinctive contribution to the viability of communities.
- There is a rich mix of culture and a strong sense of community- facilities and services in the National Landscape are essential to sustaining rural life and thus need to be maintained.
- Iconic visitor and cultural attractions – The National Landscape includes sites that have helped to shape the identity of the AONB as a visitor destination such as Loggerheads, Moel Famau, Castell Dinas Bran, Valle Crucis Abbey, the Horseshoe Pass and Pontcysyllte Aqueduct and Horseshoe Falls. However, interpretation and awareness of the culture and history of the area is low.

AoS

- Craggatak Consulting (2023) identified that key features and common themes of the AoS include its:
 - Close knit communities, which are very culturally distinct
 - Tourism

Chapter 7 Force for change: People, communities and management of cultural heritage

- Recreational activities – including cycling, climbing, walking, water sports, fishing, hunting and shooting.
- Country parks
- Commons
- Open access land
- Exploring old workings
- Extensive ridge line walks
- Offa's Dyke
- Wat's Dyke
- Home of sheepdog trials
- A stronghold of spoken Welsh.

Employment

CRDV National Landscape

- Lack of employment resulting in outward migration
- In 2011 'Agriculture and Forestry' provided 4.9% of employment in the area. The data shows that employment in the agricultural and forestry industries have witnessed a decline.
- Jobs in the Clwydian Range and Dee Valley National Landscape in tourism account for 6% of total employment in 2012 and employment opportunities in the tourism sector are increasing. The overall number of people employed in the tourist sector has more than doubled 2006- 2012. The largest employment sector in tourism for the area as a whole is now shopping. Estimated visitor spending in the National Landscape had increased more than 150% from 2006, to £39.4 million in 2012.

AoS

- Employment: In Mid Wales 13.2% of employment was in a tourism industry in 2020, North Wales was similar at 13%.
- Public administration, defence, education and health is the industry which employs the most people overall in both Denbighshire (33.92% of jobs as of 2019) and Wrexham (30.14% of jobs). Wholesale, retail, transport, hotels and food is also a large employer in North East Wales, with this being the largest industry in Powys, accounting for 27.02% of jobs. Production is a moderately large employer in North East Wales, with this being the largest industry in Flintshire, making up 25.84% of jobs **[See reference 87]**.
- There is regional variation within Wales in the extent of jobs in agriculture. In 2019, Powys had the second highest share of workplace jobs in agriculture, forestry and fishing (14.17% of jobs). This is much smaller for Denbighshire (4.81% of jobs), Wrexham (2.75% of jobs) and Flintshire (2.12% of jobs)
- The food and drink manufacturing sector in Wales employs 23,000 people, and has a turnover of £4.8bn (2018) (representing around 4% of the turnover of the non-financial business economy in Wales) and contributed £1.5bn (2016) to Welsh GVA **[See reference 88]**.

Housing

CRDV National Landscape

- Need for affordable housing

AoS

- Powys **[See reference 89]**: the distribution of additional dwellings across the settlement hierarchy is generally in line with the adopted LDP strategy. However, the percentage of completions taking place in Towns has

Chapter 7 Force for change: People, communities and management of cultural heritage

decreased since the previous monitoring period and the percentage of completions in the Small Villages and Open Countryside has increased. Dwellings in Small Villages, Rural Settlements and the Open Countryside being granted permission and built to meet the needs of rural communities, this includes for affordable housing and rural enterprise dwellings.

- Wrexham [See reference 90]: As of 2015, there is a shortage of affordable housing, generally across the entire County Borough and more supported and general housing is needed for older persons.

Land management and traditional skills

CRDV National Landscape

- Reduction in the number of agricultural holdings and overall increase in holding size

AoS

- There are some issues that are particularly relevant to upland areas [See reference]:
- **Challenges:**
 - **Financial** - securing adequate funding to support sustainable land management. Much of farming depends on support from the CAP, and in response to change, including a reduction in public funding, there is a danger that intensifying farming practices is seen as the only option.
 - **Common land issues** – some of the opportunities require large scale agreement, where co-operation between commoners, who have a particularly useful role because of the often large areas farmed, is essential;
 - Differences between land requirements and landlord's rules – where land is rented, landowners and tenants may have differing priorities, for example concerning stocking systems or specific farm practices.

■ **Opportunities:**

- Specialised market opportunities – both local and export opportunities exist for high quality pasture-fed, local provenance lamb and beef. These are considered to be premium products because of their international reputation and cultural associations;
- Payments for ecosystem services – the uplands potentially offer major opportunities for natural flood management schemes, biodiversity and habitat protection, carbon storage and energy generation. More imaginative schemes for tourism, recreation, health and wellbeing services need to be explored;
- Personal pride – the valuing of the uplands for their many qualities under sensitive management would increase the value the public places on upland farming and the pride that farmers feel in their efforts;
- Specialised skills and expertise – some traditional skills are being lost, but many of the management practices required by farming to provide wider societal benefits would be needed, along with new expertise in managing for ecosystem services.

Demographic trends

CRDV National Landscape

- Inward and outward migration
- Increasing life expectancy and demand from older age groups for recreational access
- More population living close to the area
- The Clwydian Range and Dee Valley National Landscape 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.

Chapter 7 Force for change: People, communities and management of cultural heritage

- The age profile of the Clwydian Range and Dee Valley National Landscape shows an older population than Wales, Denbighshire and Flintshire.

AoS

- Population projections: projections for the four local authorities show relatively minor population change over the next 20 years 2023-2043, with increases for Denbighshire, Flintshire, and Powys and an overall slight decrease for Wrexham.
- Population density in the AoS is greatest in the north, particularly along the east and northern borders near Cefyn-mawr, Coedpoeth, Pen-y-cae, Brymbo, Mold, and Prestatyn. Ruthin and Denbigh also have a relatively high population density just outside the AoS. The southern half of the AoS is very sparsely populated, with most of the area having 5-20 persons per square kilometre. Llangollen and Llanfyllin are the only towns in the AoS.
- The age range 45-64 is the largest category in all four local authorities in the AoS, with the majority of their age structures indicating ageing populations. Powys has the oldest population, with 56.8% of its population over 45 years old, followed by Denbighshire. Wrexham has the youngest population of the four local authorities, with 47.4% of the population over 45 years old, the only LA which is below the national value for Wales of 48%. The population of Wales as a whole is ageing due to falling birth rates and migration.

Infrastructure and services

CRDV National Landscape

- Visitor pressure degrading landscape character
- Access to services and facilities in the area 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 populated areas.

AoS

- Not applicable

Skills

CRDV National Landscape

- Not applicable

AoS

- Not applicable

Transport

CRDV National Landscape

- Not applicable

AoS

- Not applicable

Welsh language

CRDV National Landscape

- Sustaining the Welsh language

Chapter 7 Force for change: People, communities and management of cultural heritage

- The use of Welsh in the Clwydian Range and Dee Valley National Landscape 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 southern parts of the area.

AoS

- The percentage of people who can speak Welsh in 2022/23 **[See reference 91]** in the local authorities of the AoS is as follows:
 - Denbighshire 21%
 - Flintshire 12%
 - Wrexham 17%
 - Powys 14%
- All local authority areas in the AoS have shown a decline in the percentage of people aged three years or older able to speak Welsh **[See reference 92]**

Stakeholder engagement findings

7.9 The stakeholders identified that the sustainable management of natural resources in the area impacts on wellbeing. They also highlighted the impact of changes in the economic profile of the area with an increase in environmental and tourism jobs. This may have a knock-on effect on the local economy due to lower pay and seasonal characteristics of this work. Additionally National Park designation may impact on the diversity of employment. The impact of any changes in game shooting would also impact on the local economy, and is a key consideration for Powys.

7.10 The stakeholders highlighted the opportunity for new National Parks being part of a just transition and supporting rural communities through levelling up funding.

7.11 The stakeholder engagement noted that the historic environment is impacted by a number of forces for change. Forestry can affect underground archaeological remains and is particularly damaging, especially where there are shallow deposits. They also highlighted that the historic environment is dynamic and that data can get out of date quickly. Some forces for change are also opportunities to discover more about the historic environment. There is a need to recognise interlinkages between different activities and our response to them. The historic environment and cultural heritage are also noted as being particularly impacted by climate change, and climate change mitigation measures such as land management and forestry which will impact new areas.

7.12 The need to ensure employment to sustain communities was highlighted, noting that tourism and seasonal jobs don't support cohesive communities, and a national park has a role in ensuring the provision of well-paid, long term, secure and quality sustainable jobs.

7.13 Community engagement in future planning decisions was also noted as important. Additionally, the impact of designation on house prices was raised. It

Chapter 7 Force for change: People, communities and management of cultural heritage

was identified that the benefits to communities should be central to a new national park proposal, including sustaining farming communities.

7.14 Health and wellbeing was identified as important through the role of a national park in addressing deprivation, improving access to services, improving health, and ensuring economic wellbeing. Culture and Welsh language also needs to be considered, with potential mechanisms for how a national park could support these to be explored.

Chapter 8

Force for change: Recreation, tourism and access

Summary

Recreation, tourism and access related issues are influenced by a variety of factors and bring a range of impacts. Key policy influences include the development of the visitor economy and associated skills, and improving and supporting access for all, and increasing outdoor recreation.

National Park designation may influence recreation, tourism and access through providing a mechanism to manage visitor pressures. In addition to the management opportunities, National Park branding is likely to encourage people to visit the area, increasing pressure, and exacerbating the combined impacts of climate change on visitor resources.

Forces for change include:

- New tourist accommodation and facilities
- Increased levels of recreation and tourism with potential for impacts on communities, land managers, and wildlife
- Impacts on existing recreational resources including honeypot sites, trails and routes
- Traffic, congestion, parking and a lack of public transport and active travel options

Compounding these forces for change are climate change impacts, lack of maintenance of Public Rights of Way (PROW) and concentrations of visitors in key areas.

8.1 Recreation, tourism and access related issues are influenced by a variety of factors and bring a range of impacts across the natural environment, for land management, for designated resources and for communities. These impacts are varied from the temporal impacts of increased congestion or parking pressure during the peak season, impacts from development of visitor accommodation, to conflict with land management activities, increased erosion or damage and disturbance to habitats and species or historic environment features. Direct impacts on land management, access infrastructure and the natural environment may be further exacerbated by the compounding impacts from climate change. However, tourism and recreation is also an important factor in the rural economy.

Recreation, tourism and access policy and associated drivers

8.2 As a force for change, recreation, tourism and access is influenced by the following policy framework. This includes:

- An Active Travel Action Plan for Wales [\[See reference 93\]](#)
- Facilities for Future Generations: A blueprint for sport and active recreation in Wales [\[See reference 94\]](#)
- North East Wales Area Statement [\[See reference 95\]](#)
- Outdoor Recreation and Access Enabling Plan 2015 - 2020 [\[See reference 96\]](#)
- Sport and physical activity strategy (Climbing Higher) [\[See reference 97\]](#)
- Wales visitor survey [\[See reference 98\]](#)

- Welcome to Wales: Priorities for the visitor economy 2020 – 2025 [See reference 99].

8.3 Based on a review of these policy documents, a number of key themes have been identified, these are grouped under the following headings:

- Visitor economy and skills
 - Developing, promoting and growing the visitor economy to ensure continued economic benefit from the special landscapes
 - Improving skills in tourism hospitality and events, and supporting businesses to enhance local employment opportunities and to support local communities
 - Sustainable use of natural resources to ensure the appropriate management of the key attributes of an area.
- Access
 - Inclusive access for disabled visitors to improve equality of access for all
 - Supporting increased outdoor recreation, including the sustainable use and management of natural resources but also supporting awareness and understanding of responsible access
 - Increased levels of physical activity including through active travel to improve health and wellbeing, reduce private vehicle use and the impacts of this.

Visitor economy and skills

8.4 There is policy support to grow the visitor economy in Wales, reflecting the skills development, economic growth, environmental sustainability, social and cultural enrichment and health benefits of this. The development of skills associated with the visitor economy brings key benefits to communities through employment and business opportunities. The Welsh language is also recognised as a key element of the visitor economy.

Access

8.5 There is strong support for increasing the reach of outdoor recreation across the population. The aim behind this is to bring a range of benefits in relation to people's understanding and appreciation of the environment, support for social equity and community cohesion, the economic benefits from recreation and the associated health and wellbeing improvements. There is recognition of the need to support and promote inclusive access and tourism. Linked to this theme is improvements to active travel, with support for local journeys being undertaken by walking and cycling.

How National Park designation may influence recreation, tourism and access

8.6 National Park designation can provide a mechanism to help to manage visitor impacts. This can include providing coordinated education and engagement, investment in facilities and management measures and regulation to support sustainable use of the area. This could include additional resources to manage particular issues e.g. disturbance to wildlife, or littering. At a strategic scale, this could include coordination of sustainable access by improvements to strategic routes, active travel infrastructure and public transport provision. National Park designation may also facilitate promotion of the area as a year round destination, increasing off peak tourism. Targeted action can also seek to ensure access to the area from a wider demographic.

8.7 In addition to the opportunities to manage visitor pressures, National Park branding is likely to encourage people to visit the area, increasing pressure, and exacerbating the combined impacts of climate change on visitor resources. This will include pressures on all tourist infrastructure, road congestion, parking issues, littering, toileting, increased erosion of access routes and heritage assets, and increased disturbance to land management, habitats and species.

How recreation, tourism and access has been considered by other Designated Landscapes in Wales and England

8.8 A review of the management plan for the Clwydian Range and Dee Valley (CRDV) National Landscape and several other National Parks has identified a number of forces for change associated with recreation, tourism and access. These are summarised below, against some of the key characteristics of the AoS.

Comparative assessment of forces for change for other nationally designated areas, CRDV National Landscape, and the characteristics of the AoS

Accommodation – including new accommodation such as campervan, camping and caravan sites, how this accommodation supports increased numbers of visitors

CRDV National Landscape

- Denbighshire Local Planning Authority Supplementary Planning Guidance - Caravans, Chalets & Camping 2018 seeks to guide successful planning applications for this type of rural tourism accommodation,

AoS

- Information within the Powys Annual Monitoring Review illustrates a number of tourism related accommodation planning applications within the

open countryside, which included development of facilities such as cabins and glamping pods, alongside holiday lets. Although tourism is noted as important to the Powys economy, this indicates a potential trend in types of tourism development and their location.

Dark Skies

CRDV National Landscape

- Light from the major settlements, particularly to the east and north of the area, significantly affect dark sky experience

AoS

- Much of the AoS provides experience of the two darkest night sky categories **[See reference 100]**

Levels of recreation and tourism – increased access, impacts on key destinations, and infrastructure, impacts on the access network, associated impacts of congestion, antisocial behaviour, disturbance to wildlife and livestock, conflicts with land management and communities.

CRDV National Landscape

- Visitor pressure in key conservation areas
- Visitor impacts in river valleys

- Recreation pressure causing erosion, including illegal off road vehicle use
- Visitor disturbance to habitats and species
- Visitor pressure on historic environment resources
- Lack of high quality facilities, public transport, car parking, cafes, toilets, information
- Localised degraded environment due to congestion, litter and vandalism
- Erosion in sensitive areas
- Impact of access on stock and farming, particularly impact of dogs
- Congestion in honey pot areas
- Litter, noise, damage.
- Honey pot sites include:
 - The Pontcysyllte Aqueduct and Canal World Heritage Site.
 - Loggerheads Country Park.
 - Tŷ Mawr Country Park
 - Minera Lead Mines Country Park, Clywedog Trail and Minera Mountain.
 - Moel Famau and Jubilee Tower.
 - Offa's Dyke National Trail and the Panorama Drive.
 - The Horseshoe Pass.
- Adventure activities are supported in Clwydian Range and Dee Valley National Landscape, including the mountain Biking centre at Coed Llandegla.
- Visitor numbers: The number of visitors to the area has increased by approximately 120% 2006-2012 (to just over 700,000). For the National Landscape as a whole, visitor days were up 64%. The most common type of visitor continued to be day visitors, who accounted for three-quarters of tourists to the area as a whole in 2012. Nationally, the majority (78%) of UK

day visitors to Wales in 2019 came from Wales and 22% from England
[See reference 101]

AoS

- Pistyll Rhaeadr – the highest waterfall in Wales and one of the 'Seven Wonders' of North Wales
- Llyn Vyrnwy

Recreation facilities and types of recreation – demand for increased facilities, increase in the range of activities carried out with associated impacts on litter, disturbance etc. in more areas.

CRDV National Landscape

- Intrusion from accommodating visitor access and development.
- Inappropriate existing and new development

AoS

- National Trails and Promoted Routes – The Offa's Dyke National Trail travels through the centre of the northern half of the AoS, while part of the Glyndwr's Way travels through the south of the AoS. The Clwydian Range and Dee Valley National Landscape has an extensive network of paths, bridleways and byways, some with historical significance. This network brings benefits to the local economy.

Traffic and travel – congestion and associated impacts on communities, but also the trend towards improving access and active travel provision.

CRDV National Landscape

- Traffic management, congestion and car parking, compounded by poor public transport links

AoS

- Road coverage in the area of search is greater in the northern half of the AoS. The southern half of the AoS has a more rural upland character and is partially accessible by mainly B Roads.
- Very little of the National Cycle Network intersects with the AoS. There is a traffic-free section which starts north of Chirk and extends west to Llangollen. There are also limited routes in the north of the AoS, passing northwards through Llanasa and Gronant and along the coast east to Prestatyn.

Stakeholder engagement findings

8.9 The stakeholders highlighted a lack of investment in PROW infrastructure. This highlights the opportunity of National Park designation to bring in longer term funding and investment in the area. There are also issues of the impact of climate change combined with recreation pressure and damage to soils. Additionally, increased recreational pressure on historic features is exacerbated by climate change. They also highlighted that demand for visitor infrastructure will continue, and there are already issues with parking and infrastructure around the area.

8.10 The AoS has a huge catchment area which will lead to more people and more recreational pressure raising concerns over whether the area is capable of handling more people. Transport network improvements will further increase accessibility of the area.

8.11 Other impacts associated with recreation and tourism include the impact of motorhomes, and the need to encourage sustainable travel, and avoid further encouraging car use. Ways to disperse visitor impacts were also highlighted, including lesser known locations.

Chapter 9

Evaluation of forces for change against the Area of Search special qualities

9.1 This chapter evaluates the forces for change against the special qualities of the area (as identified in the Special Qualities report) and described in the introduction. Information on the forces for change, the drivers and their relevance to the area of search is provided in Chapter 4. This provides the baseline information to inform the evaluation text for each special quality set out below.

9.2 The evaluation is informed by key Welsh policy documents and the State of Natural Resources Report (SoNaRR) for Wales 2020. This approach also facilitates the integration of SMNR into the assessment of the impacts of forces for change on the AoS special qualities. The SMNR framework is further applied through Stage 2 of the project, where the comparative assessment of mechanisms to manage the forces for change is aligned with the SMNR principles.

9.3 This chapter is structured around the six special qualities of the AoS.

An inspiring space that promotes mental, physical and spiritual health and wellbeing

the experience of the landscape and the access and recreation opportunities it provides

9.4 This special quality includes characteristics such as iconic landscapes, scenic views, dramatic and spectacular, dark skies, places that provide an experience of tranquillity, wildness, heritage and nature, rights of way, country parks, car parks, visitor facilities, artworks, programmes and events.

9.5 Key types of force for change relevant to this special quality include development, land management changes, changes in accessibility and increases in visitor numbers. Forces for change include direct changes to the landscape and features within it, and indirect effects upon peoples' visual and sensory experience of the landscape.

9.6 There are several formal recreation and visitor sites that support this special quality. There is some overlap with the historic environment features described in relation to 'a story of human interaction over the millennia'. Access to remoter places provides opportunities to experience tranquillity, wildness, spiritualness. Access to nature is also known to benefit wellbeing. These qualities can be experienced to a lesser or greater degree across the entire AoS. Below are some examples:

- Offa's Dyke National Trail and Clwydian range
- historic Llangollen, a famous market town rich in cultural and industrial heritage
- Pontcysyllte Aqueduct and Llangollen Canal, a designated World Heritage Site. (Including aqueducts, Horseshoe Falls, canal and tunnel)

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- Graig Fawr and Gop Hill
- Hope Mountain - Waun y Llyn Country Park
- Horseshoe Pass
- Loggerheads Country Park
- Pistyll Rhaeadr – the highest waterfall in Wales and one of the 'Seven Wonders' of North Wales
- Llyn Vyrnwy
- Moel Famau
- Castell Dinas Bran
- Valle Crucis Abbey.

9.7 Direct impacts on the physical natural and cultural heritage features of the landscape are likely from the effects of **climate change**, which in turn will alter landscape character, and the visual and sensory experience. These impacts are further explored in relation to 'a distinctive, complementary and contrasting landscape'.

9.8 New development, depending on the location and scale may detract from the landscape experience. In terms of built development Welsh policy supports sustainable communities and the growth of renewable energy. Onshore wind and solar PV make up the majority of existing renewable capacity in the four local authorities in the AoS. The trend for further renewable energy development is set to continue both within and around the AoS.

9.9 Large scale developments such as wind farms may result in community benefit funding which may provide funding to support local community needs. This also presents opportunities to enhance the access network and facilities at a strategic scale, bring about habitat enhancement and increase connectivity to the area of search. An example of this is the Hagshaw Hill wind energy cluster **[See reference 102]**. New housing and infrastructure development will be an ongoing pressure largely focused within the nearby regional and national growth areas outside of the AoS, and to a lesser degree within the AoS. Changes

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

within the AoS may be smaller in scale, but they still have the potential for significant local community benefits and landscape effects. Development can result in incremental cumulative effects e.g. the growth of a rural village leading to suburban and urban characteristics and additional lighting, impacting on the dark skies of the area.

9.10 A number of forces for change will alter the landscape and its character, however their potential to detract from or enhance the special quality is much more contextual. An increase in the area of woodland and forestry, and changes in the management of woodland and forestry may impact on views. It may also create a sense of enclosure, tranquillity or reduce the visibility of other changes within the landscape. In addition it may contribute to habitat diversity and carbon sequestration. The Natural Resources Policy supports the creation of well-located woodland, for example close to towns and cities where it will have the greatest recreational and ecosystem service value.

9.11 Sustainable farming practices are seeking to support food production and farming livelihoods, whilst also realising the opportunities for environmental and wellbeing benefits. For example, the planting of farm woodlands, hedgerows, and the creation of areas of habitat including ponds, scrapes and buffer strips. These changes can strengthen the traditional farmed character of the landscape and support habitat diversity and connectivity. By allowing public access and engagement mental and spiritual health is supported.

9.12 Future strategic transport infrastructure improvements both to the east and north of the AoS will enable increased access to the area. This includes plans for the North Wales Metro, which will increase accessibility in North Wales and therefore have indirect accessibility benefits for the AoS. There are also future trends in a modal shift to more sustainable travel in and around the AoS. This will mean the AoS will be more accessible to a greater number of people, alongside trends in increased recreation.

9.13 Greater accessibility and visitor numbers provides people with an opportunity to experience this special quality for mental, physical and spiritual health and wellbeing. However, greater numbers of people may result in

additional pressures on parking, visitor attractions, littering, public rights of way, farming and cultural heritage features. Furthermore an increase in visitors may harm perceptions of tranquillity and remoteness that people visit the area for. Additional visitor facilities may be needed. Accommodating new development, associated infrastructure and facilities bring further local impacts.

A place with cohesive communities and distinctive settlement patterns

the cultural associations, events and language of the area both past and present

9.14 This special quality includes characteristics such as the vibrancy of Welsh culture, 'bro', traditions, language and place, literature, community-based events, stories and songs, memoirs. It also refers to the relatively small-scale towns and villages in the area, with local character and which are largely strongly influenced in location, scale and pattern by landform and access. Key types of force for change for this special quality include population change, loss of services within rural communities, development, and increases in visitor numbers.

9.15 Changes in community composition from population change and migration patterns can impact on the community knowledge and the vibrancy of Welsh culture, 'bro', traditions, language and place. For example there may be dilution of Welsh language, culture and identity due to in-migrants who either are not Welsh or who cannot speak Welsh. However, it is also the community characteristics which contribute to the attractiveness of the area and desire to live in the area. There is a key opportunity to develop knowledge and awareness of culture, language and traditions as a means of both maintaining these attributes and in enhancing the distinctiveness of the area and its attraction to visitors.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

9.16 New development is a key pressure on the distinctive settlement patterns and cohesive communities of the AoS. It has been identified that within the National Landscape and its setting development is not always in sympathy with the local landscape character and settlement pattern. In addition, it is important that development supports economic self-containment. A lack of this in the National Landscape is resulting in fewer people 'embedded' in their local area, resulting in a reduced sense of community. New patterns of development include settlement expansion, development in the countryside in relation to rural housing, visitor accommodation such as caravan and chalet sites, and changes in agricultural buildings such as new large-scale sheds. In addition, appropriate provision of affordable housing and the maintenance and development of local services and facilities are important factors in maintaining cohesive communities.

9.17 In addition, increased regional connectivity and accessibility to the AoS, such as via transport infrastructure development and the modal shift to more sustainable forms of transport including bus and train services, electrification of transport, car clubs and car sharing could result in more cohesive communities.

9.18 Welsh policy seeks to support and improve the cohesiveness of communities by supporting the rural economy, keep farmers, foresters and other land managers on the land, and support the economic activities of the farming community in the AoS. An increase in tourism and recreation can affect communities if not managed. Rural services and transport are both a need and an impact upon the cohesiveness of communities. There are perceptions that greater interest in the area could lead to the purchase of second homes and holiday lets altering communities and the number of permanent residents [[See reference 103](#)].

9.19 Forces for change present a number of opportunities to support communities within the AoS. Increased levels of tourism and recreation on one hand bring pressures on local services and housing, however they also provide an economic opportunity for employment and diversification and provide additional support for the viability and provision of local services.

9.20 Climate change will place pressures on cultural assets and communities, particularly those who live in vulnerable locations. Displacement caused by damage to homes, services and facilities from storms and flooding disrupts communities and affects mental health. Adaptation measures to climate change will need to be implemented if community resilience and cohesion is to be supported.

A story of human interaction with the landscape over millennia

the historic features of the landscape, including physical features and associations

9.21 This special quality includes characteristics such as people and place shaped by the past, industrial sites, drove roads, historical features, archives, photographs, and historic maps. Key forces for change on this special quality include climate change, land management, built development and increased access.

9.22 Key features relevant to this special quality include:

- Bronze age hillforts, settlement, funeral and ritual relics and field systems within the uplands of the Clwydian Range, Llantysilio Mountain and the Berwyn. There are many Scheduled Monuments and a number of Registered Historic Landscapes and Registered Historic Parks and Gardens across the area. Cofelin provides access to the Heritage Environment Record – local non-designated surface archaeology.
- CRDV National Landscape includes small towns, villages, hamlets and scattered rural settlement. Some are particularly distinctive or of heritage value recognised by Conservation Area and listed status. Stone walls and hedges define field enclosures. Traditional materials, rural crafts and countryside skills are evident.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- The Vale of Clwyd, Vale of Llangollen and Tanat Valley Registered Historic Landscapes
- Castell Dinas Bran and Chirk Castle, medieval Motte and Baileys at Tomen Y Rhodwydd, Tomen Y Fadre and Glyndwr's Mount, Carrog
- Historic Llangollen, a famous market town rich in cultural and industrial heritage
- Pontcysyllte Aqueduct and Llangollen Canal, a designated World Heritage Site
- The Offa's Dyke National Trail
- Clwydian Range and Llantysillio hillforts
- Halkyn Mountain active limestone quarries, historical small-scale quarrying, limekilns and hillfort
- Northop parklands includes registered historic parks and gardens Halkyn Castle, Soughton Hall, Gwysaney, and Rhual) and a section of Watts Dyke (scheduled monument)
- The Motte and Bailey at Sycharth to the south of Llansilin was the birthplace of Owain Glyndwr
- Cwm Pennant includes Pennant Melangell Church – a shrine to Saint Melangell dating from the early 12th century and its Outstanding scenic quality. The valley lies within the Tanat Valley Register of Historic Landscapes
- Llyn Vyrnwy Victorian stone dam and gothic straining tower are ornate structures.

9.23 Climate change has the potential to impact the historic environment of buildings and monuments and buried historic relics. For example, changes in temperature, wet and dry fluctuations and extremes can affect fungal, plant growth and insect infestation of historic building materials. Shrinkage of clay-rich soils can lead to building subsidence, structural deformation and collapse in the most severe cases. Flooding can impact inland and coastal sites. Archaeology within wetland sites, where organic materials are preserved by

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

anaerobic (oxygen free) conditions is particularly vulnerable. Desiccation of soils and lowered groundwater levels can increase the risk of decay to waterlogged archaeological and paleoenvironmental remains. [\[See reference 104\]](#).

9.24 Land management – Much of the uplands within AoS is poor and very poor quality agricultural land, with thin soils over bedrock. Grazing in combination with climate change and visitors, has the potential to cause erosion near and on historic features. New woodlands can obscure or directly impact surface and buried historic features. Changes in agricultural policy, funding and farm viability can influence whether stone walls and hedgerows are intact and maintained. The presence of livestock in the landscape is a cultural association. Changes in employment and demographics in land management can result in loss of knowledge about farming and about the wildlife and habitats of the landholding itself.

9.25 Population change within communities may also impact on knowledge and awareness of language, cultural events and traditions.

9.26 Development to mitigate or adapt to climate change will increase, and this will also place pressures on the historic assets in the AoS and their setting. This may include flood defence and renewable energy infrastructure development.

9.27 The future trend in greater visitor numbers is a key force for change regarding this special quality. More people in the AoS will result in greater pressures on the historic environment of the AoS and their setting. Pressures arise from the need for the development of more buildings, infrastructure and facilities and from increased traffic and light pollution. However, policies to increase active travel and reduce the need to travel, such as supporting remote working, will result in opportunities to reduce traffic pressure on the historic environment. The trend in pressure from visitors is particularly driven by access to the AoS increasing over time. For example, via strategic transport infrastructure improvements both to the east and north of the AoS such as the North Wales Metro and a modal shift to more sustainable travel in and around

the AoS. In addition, the planned strategic growth areas within and around the AoS will mean the AoS will be more accessible to more people.

9.28 Trends of increasing tourism in the AoS provides opportunities for the promotion and thus greater appreciation of the AoS' historic environment. This, along with policy drivers to support conservation, will also help support conservation and restoration efforts.

A home to internationally and locally important species and habitats

the diversity of species and habitats both in protected areas and in the wider landscape

9.29 This special quality includes characteristics such as sounds of nature, protected sites, habitats and species, dunes, moorland, ffridd, woodlands, iconic species, State of Nature for Wales, invasive species, and species introductions. Key forces for change on species and habitats include the direct impact of climate change, changes in land management, built development, the impact of population change and the impacts of recreation, tourism and access. These forces for change result in direct loss and damage to habitat, habitat change, habitat fragmentation, pollution, disturbance and the spread of invasive non-native species. However, policy to support sustainable land management and nature conservation and restoration brings about positive forces for change to address the adverse effects being experienced.

9.30 Over 20% of the AoS is a protected area, and includes the extensive Berwyn and South Clwyd Mountains SAC and Berwyn SPA designated for the blanket bog, dry heaths, calcareous semi-natural dry grasslands, calcareous screes and raptors. Other more extensive SSSI of note include:

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- Chirk Castle and Parkland, designated for its ancient woodland pasture and parkland
- Bryn Alyn designated for its limestone grassland transitional grassland, limestone heath and rock and scree habitats
- Craig Adwy-wynt a Choed Eyrarth House a Chîl-y-groeslwyd, designated for its botanical and entomological features
- Alyn Valley Woods and Alyn Gorge Caves, designated for its geomorphology and its semi-natural broadleaved woodlands, its calcareous and mesotrophic grasslands, its scarce plant assemblage, its population of wayfaring tree *Viburnum lantana* and its population of the grizzled skipper butterfly
- Halkyn Common and Holywell Grasslands designated for its mineralisation associated with the Carboniferous Limestone and cherts which is found in spoil tips and in situ exposures; open vegetation on soils rich in heavy metals; calcareous grassland; dry heath; fen meadow; base-rich flush; plant and amphibian species
- Gronant Dunes and Talacre Warren, designated for botanical, entomological and ornithological interest.
- the Dee Estuary, designated for its populations of waterfowl and tern species, intertidal and transitional habitats.

9.31 The varied geological and topographical nature of the AoS has given rise to a variety of priority habitats. This includes the moorland ridges of the central Clwydian Range, Llandegla and Ruabon Moors, Llantysilio and North Berwyn. The rivers of the Dee and the smaller sinuous courses of the River Alyn and River Wheeler also provide key riparian features.

9.32 Climate change will result in significant pressures on habitats and species in the AoS, through changing weather patterns, periods of drought and waterlogging, damage from storms, flooding and erosion. In addition, climate change increases the risk from pests and diseases and the spread of invasive non-native species.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

9.33 Built development, including new housing, energy and mineral extraction, creates pressures on this special quality, if development is deemed to outweigh the protection of habitats. The Section 6 Biodiversity and resilience of ecosystems duty however seeks to address this.

9.34 The sustainable farming scheme is looking to encourage farmland management to realise opportunities for habitats and species alongside food production. The management of moorland is likely to need to factor in the effects of climate change and the opportunities to develop ecological networks and resilience.

9.35 The drivers for more woodland, and the application of “right tree - right place” and the UK Forest Standard, has the potential to develop tree cover in a sustainable - landscape, ecological and environmental way. The unregulated market developing around tree planting for carbon offsetting is however a risk to protecting peatlands, priority habitats and developing ecological resilient networks.

A distinctive, complementary and contrasting landscape

the key landscape features and experiential qualities of the area

9.36 This special quality includes characteristics such as notable landscapes and places, views, colours, exposure and enclosure, scenic, a diverse landscape of uplands, farmland, coast and settled rural valleys, artwork, poetry and writing, Cadw records, photography and a notable sense of place and identity. Key forces for change on this special quality include climate change, land management, built development and increases in visitor numbers.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

Woodland

- Vale of Clwyd
- Much tree cover between Halkyn Mountain and the Clwydian hills
- Woodland within Northop Parklands with both irregular blocks and linear patterns
- Wooded hillside of Hope Mountain
- Hope Mountain – wooded Ffridd Valley
- Llandegla Forest
- Mosaic of farms and woodland in Ceiriog Valley
- Llyn Vyrnwy afforested valley.
- Llanfyllin valley and hills includes a mosaic of woodland - both deciduous and mixed and irregular field patterns complement the landform.
- The Vyrnwy, Banwy and Cain valleys and hills wooded valley sides and hilltops.

Geodiversity

- CRDV National Landscape - Limestone grasslands, cliffs and screes, of Prestatyn Hillside, Graig Fawr, Moel Hiraddug and Gop Hill
- The Silurian Clwydian Range with distinctive landforms of Moel Y Parc and Moel Arthur
- The limestone outcrops at Loggerheads, Bryn Alyn, Llanarmon yn Lal and Minera
- The dramatic Eglwyseg Escarpment
- Pwll Glas limestone outcrops
- Llansilin valley and hills has notable hills/ scarps at Gyrn Moelfre and Graig Orllwyn
- The Berwyn (Wrexham) The eastern facing aspect of the Berwyn include glaciated cwms and a striking skyline

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- The Rhaeadr Valley - This is a steep sided U-shaped valley of the Afon Rhaeadr which cuts into the Berwyn uplands and made particularly striking by the cascade of Pistyll Rhaeadr.
- SSSI Geological Conservation Review Sites
- Regionally Important Geological Sites
- Built Heritage.

Landscape character

- Upland character and tranquillity
- The Berwyn forms a southern continuation of a chain of uplands that define the eastern edge of north Wales – Llantysillio/ Ruabon Mountain and the Clwydian hills lying to the north. The Berwyn extends eastwards into Wrexham and southwards into Powys. The area is notable for its extensive upland moorland character with remote, wild, tranquil and spiritual qualities
- Dee Valley – Cefn Coch hill
- CRDV National Landscape – tranquillity, and dark skies
- Ceiriog Valley has attractive, tranquil, remote qualities and a strong sense of place
- The Berwyn (Wrexham) has outstanding scenic quality, remote and wild qualities
- The Berwyn (Powys) has strong topographical links to the Eryri National Park. The area has attractive, tranquil, remote, wild and spiritual qualities
- Rhaeadr Valley has attractive, remote, wild, tranquil and spiritual perceptual qualities and is of Outstanding scenic quality (LANDMAP)
- Llyn Vyrnwy The reservoir (whilst manmade) in combination with its steep side afforested valley has strong aesthetic, attractive, tranquil and remote perceptual qualities – creating Outstanding scenic quality (LANDMAP)
- Sections of the Banwy Valley are of Outstanding scenic quality (LANDMAP) for their high aesthetic qualities and limited intrusion by modern development.

Views

- Long ranging, expansive aerial views are a feature of many of the upland areas of the AoS. There are a variety of local and regional scale views that can contribute a local and a more national sense of place within the northern borderlands of Wales. From the Clywdian Hills looking northwards the coastal edge of north Wales comes into view, whilst from Llantylliso and the Berwyns looking southwards, a horizon of overlapping ridgelines dissected by deep valleys appears to continue to infinity
- There are a number of built heritage focal points in the landscape – e.g. Talacre light house within the Gronant /Talacre dunes; Gop Hill cairn; Jubilee Tower remains; Pontcysllte Aqueduct, Chirk Aqueduct and Horseshoe Falls in the Dee and Chirk Valleys; Castell Dinas Bran; Chirk Castle
- There are many natural focal points across the AoS - e.g. The limestone escarpment between Prestatyn to Dyserth; Moel Y Parc has the appearance of an upland massif from the northern Vale of Clwyd; The rounded hilltop of Moel Arthur stands clear on Clywdian skyline; The Eglwyseg limestone escarpment and Dinas Bran within the Vale of Llangollen; The cascade, woodland, cliffs and glaciated valley of Pistyll Rhoadr; the steep valley enclosure to Llyn Vyrnwy
- The skylines of the Clwyds, Llantysillio Mountain, Ruabon Mountain and Berwyns are all different. They form the backdrop and context to the communities within the settled valleys and vales below. The scarp and dip slope profiles, location of glaciated cwms, the presence of outcropping limestone – present very different topographical characteristics depending on which aspect of the uplands is seen.

9.37 Climate change will affect future vegetation species and patterns, coastal erosion and the patterns and frequency of flooding. Saturated soils and storms could affect how wind-firm trees and woodland are. Veteran trees and historic parklands could require careful management.

9.38 New development can visually alter perceptions of scenic quality, tranquillity, wildness, remoteness and escape from the more settled and

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

developed lowlands. Where development is poorly related to its landscape context, it can draw unnecessary attention and create a sense of visual impact. Long views are noted from many of the upland ridges, hillslopes and places elevated slightly above adjacent valleys. The scale and siting of new built features such as agricultural buildings, telecoms, power lines and wind turbines can draw the eye and interrupt views.

9.39 Parts of the AoS have a strong upland character including the Berwyn, the hills at the edge of the Dee Valley, the semi upland character of Halkyn Mountain and Hope Mountain. The tranquil qualities of the landscapes are noted in areas such as Pwll Glas Limestone country, the Berwyn, Ceiriog Valley, Rhaeadr Valley and Llyn Vyrnwy.

9.40 Quarrying/ mineral extraction/ processing is an active force for change in localised areas such as Halkyn, Hendre, the Wheeler valley and Horseshoe Pass.

9.41 Within settlements and rural areas, built development may include both larger scale developments and the incremental small-scale changes. Small scale changes can include those driven by actions to support climate change mitigation such as domestic renewable energy development. New development may also impact on the character of these areas through the introduction of features such as kerbs, lighting and traffic management. The cumulative effects of new developments, including lighting will impact on the dark skies of the area. New development may be driven by trends in population increases, strategic transport improvements and increased recreation and tourism pressure. Visitor and recreational pressure may also impact on the landscape quality as a result of the impacts of visitor numbers including parking pressures, littering and direct damage to landscape features.

9.42 The historic character of the landscape is also a key aspect of the landscape diversity. There are 39 Registered Historic Parks and Gardens within the AoS, and historic parks are noted as a feature of the Vale of Clwyd, Halkyn Mountain, Northop Parklands, and Tanat Valley. Challenges including lack of management and combined with impacts from climate change can

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

increase the rate of deterioration of the historic environment resource. New development may further impact on the setting of historic environment features. As outlined previously, the impacts of land management changes can impact on unknown archaeological resources and recreational pressures can lead to further impacts including erosion.

9.43 Based on Corine landcover data, 50% of the AoS comprises pasture, just under 5% is arable land, and nearly 14% is semi-natural grasslands. Farmland field boundaries, grazing levels, farm buildings, farm woodland, and farm management contribute to landscape diversity, the condition and intactness of the landscape.

9.44 Changes in agricultural support will influence land management activities and potentially alter landcover type and farm development. Policy support for developing priority ecological networks to support biodiversity and ecosystem resilience means that the current farmland character – which can be perceived to be a traditional farmland character, is likely to evolve.

9.45 Moorland is a feature of the Clwydian Range, Llantysillio and Ruabon Mountain, the Berwyn, and the upland fringes surrounding the Rhaeadr Valley, Cwm Pennant and Llyn Vyrnwy. Policy influences on moorland management, the effects of climate change and the priorities for sustaining iconic species such as Grouse and Curlew and the lesser but important bird species, mosses and lichens - will require monitoring and adaptive management approaches. Actions to restore protected areas and connect them within ecological networks, is seen as an important step towards improving biodiversity in extent and resilience. Upland peatlands are present within the Berwyn and South Clwyd mountains Special Area of Conservation and Berwyn Special Protection Area. The conservation and improved condition of peatlands in turn benefits carbon storage, water absorption and associated habitats and species.

9.46 Woodland (broadleaved and coniferous) is a feature of farmlands, hillslopes and river valleys across the AoS. Coniferous plantations and shelter belts have typically extended into the uplands and their fringes. Policy influences seek to increase woodland for carbon sequestration, soil

management, habitat extents/ diversity, and to benefit the health of rivers and streams. The Welsh Government has set a target to increase woodland cover in Wales by at least 2,000 hectares per annum from 2020 [See reference 105]. Climate change could lead to new outbreaks of pests and diseases within woodland, drought and waterlogged soil conditions. These will affect existing tree species, future choice, planting locations and management approaches.

A landscape providing benefits beyond its borders

the ecosystem services provided by the area

9.47 This special quality recognises how the landscapes, habitats and natural environment and AoS benefits society by providing clean water, air, food, biodiversity, carbon storage, water storage, health and wellbeing and economic activity such as farming, forestry, minerals, tourism and renewable energy. The Ecosystem Service framework uses the terms supporting, regulating, provisioning and cultural services, to categorise the different ways the natural environment can provide benefits (see below). The forces for change set out in this report all have a bearing on what the future use of land and environmental resources within the AoS might look like. Climate Change is perhaps the most dynamic and least predictable of these.

Cross cutting influences

9.48 There are several cross cutting influences on the delivery of ecosystem services. At a policy and funding level this includes the new Sustainable Farming Scheme which should result in positive outcomes for ecosystem service provision. The scheme aims to maintain and enhance the resilience of ecosystems and the benefits they provide.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

9.49 For example, an increase in woodland/forest cover would support regulating ecosystem services such as soil formation, quality and fertility, nutrient cycling, water cycling, provision of habitats, biodiversity, climate regulation and carbon storage. It would support provisioning services if used for productive timber. That land might also provide opportunities for other provisioning services e.g. food production or mineral extraction.

9.50 Increases in woodland can improve cultural services by providing opportunities for recreation, tranquillity and spiritual experience, which supports mental and physical health and wellbeing. These benefits rely on “right tree – right location “. The Welsh Natural Resources Plan supports woodland being located close to towns and cities where it can have the greatest recreational and cultural service value.

9.51 Increased levels of recreation and tourism can increase pressures on the area’s ecosystems. For example, from increased development of associated infrastructure, increased congestion and air, noise and light pollution.

9.52 Cultural Services are provided when communities and visitors interact with landscapes, nature and cultural heritage. Recreation is one way – providing physical and mental benefits. Education and promotion is another, whereby the area’s Special Qualities are explained allowing people to connect, understand and care. Experiential is the cultural service from people visiting places that evoke a strong positive emotion. The UK National Ecosystem Assessment and other discussions about Cultural Services use a variety of terms - belonging, sense of place, tranquillity, escape, inspiration, spiritual. [\[See reference 180a\]](#). The designation of a new National Park is dependent upon Natural Beauty being strongly evident in the landscape. There is also considerable diversity in landscapes across the AoS giving people the opportunity to choose places that are important to them. Cultural Services would be explicitly supported.

Supporting services

9.53 Supporting services are critical to the delivery of ecosystem services and include the nutrient cycle, soil formation and habitat provision for biodiversity, forming the basis for the other three types of services.

9.54 Climate change has a strong influence on many ecosystem processes, including supporting services. Changes in temperature and moisture affect soil processes, including carbon and nutrient cycling, and there are complex interrelationships and feedback.

9.55 The policy drive towards lower carbon transport will also benefit the nutrient cycle, reflecting the role of nitrogen deposition.

9.56 Increased development in and near the AoS will likely result in negative impacts on supporting services. This is because increased development will likely lead to increased pressures on the natural environment, including habitats and species. Increasing the built-up area in the AoS will therefore inhibit the provision of supporting services, such as biodiversity, nutrient cycling and soil formation. However due to the character of the AoS, the scale of future development is unlikely to be extensive.

9.57 Land cover and land use can have a significant impact on the provision of supporting services through disrupting or enhancing key aspects of these processes. In particular, the protection, restoration and creation of ecological habitats can deliver benefits to support the resilience of this ecosystem service through restoring natural processes.

Regulating services

9.58 Regulating services support the provision of ecosystem services and include processes such as climate regulation, carbon storage, flood

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

management, erosion control, pest and disease control, clean air, water filtration and pollination.

9.59 Changes in climate directly impact on regulating services, and extreme climatic events are a particular threat to these services. Increased periods of drought affect carbon storage in peatlands, wildfire causes release of carbon from moorland and woodland, changes in climate enable the spread of pests and diseases, or increased intensity of precipitation leads to flooding. At the same time, regulating services are part of the approach to moderating the impacts of extreme events on people.

9.60 The water cycle is important to the supply, quantity and quality of water. We are seeing changes in seasonal patterns of rainfall and intensity with more frequent periods of high and low flow within rivers and low levels in reservoirs and ground water after winter. Water abstraction for drinking water, industry and farming is a continued pressure on a more variable and sometimes reduced resource. Concentrations of some nutrients and contaminants could start to become more of an issue. Although water abstraction is regulated and the health of rivers is monitored by NRW/EA to control these issues. Increased levels of visitor numbers can also impact on the regulating services through increased pollution to the water environment, for example through increasing pressure on local sewage infrastructure.

9.61 Land management practices can influence water use, and water availability, as well as water storage and rates of run-off. Flood and erosion control services will be under greater pressure in the future due to increases in frequency and intensity of extreme events. Changes in climate are also likely to impact (either positively or negatively) on the ecosystem structure and composition providing the services [[See reference 106](#)]. In particular, climate change will result in lower primary productivity, fewer and less diverse species interactions and compromised ecosystem resilience. Services provided are likely to be significantly reduced especially where ecosystems are already degraded. For example, high temperatures and increased atmospheric CO₂ affect below ground biogeochemical processes, such as carbon and nitrogen cycling, which can affect terrestrial production.

9.62 Climate change can impact on pollinators. Population declines, changes in distribution and mismatches in normal seasonal interactions between pollinators and host plants has been predicted due to climate change. To ensure the resilience of pollination services a diversity of pollinators needs to be maintained, because pollination networks typically involve multiple species interactions which are relatively resilient.

9.63 Increased development can bring about pressures on regulating services. This includes air quality and climate, as increased development may result in increased traffic and congestion. In addition, there is potential that soil quality/fertility, pollination and biological regulation will be negatively affected. Built development also reduces flood mitigation capacity by increasing the area of hard surface and increasing run off. However, the extent of these pressures is dependent on the type and scale of development and a number of these pressures can be mitigated through appropriate design.

9.64 Land management changes will affect the delivery of regulating services, with both positive and negative effects identified. Demographic changes in the land management community such as an aging farming community and out migration of young people may further contribute to changes in the regulating services provided by the area. This includes the impact of changes in agriculture with some areas experiencing over grazing, or intensification resulting in loss of ecosystem service provision, and some areas experiencing under grazing and becoming more naturalised and able to provide more regulating services.

Provisioning services

9.65 Provisioning services are tangible goods that people can harvest from the environment such as food, materials, water, renewable and non-renewable energy and natural medicines.

9.66 Climate change has a key influence on provisioning services. Direct impacts from climate change may impact on the viability of different crops and

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

livestock, and the availability of water to support these at some times or year, or damage from flooding impacting on crop viability, harvesting or animal health.

9.67 Similarly for forestry climate change may impact on pests and diseases affecting key commercial species, the resilience of some species during drought conditions or waterlogging. As for agriculture, weather events, including flooding may impact on harvesting activities. The policy support for sustainable land management and nature restoration is likely to enhance the water provisioning service, through increasing water storage and enhancing water quality.

9.68 Land use for built development impacts on food production, timber production and raw materials. However, development of renewable energy infrastructure and mineral extraction and quarrying will enhance the provision of energy and raw materials/mineral resources.

Cultural services

9.69 Cultural services include ways in which nature impacts people's physical and mental health and wellbeing through recreation, tourism and education sense of place, spiritual and religious connections and inspiration.

9.70 Climate change impacts on cultural services depend on personal values and preferences. For the tourist trade in Wales, climate change may alter the value of different locations with a northward shift in choice of destination and greater number of domestic holidays.

9.71 Changes in species populations due to climate change may impact recreational activities, such as bird watching or grouse shooting. Climate risks such as flooding and wildfire may impact on people's access to the area, including through damage to infrastructure. Climate impacts on the historic environment may impact on the sensitivity of these resources to visitor impacts requiring greater management and potentially reducing the accessibility of these resources.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

9.72 Increased development may impact negatively on cultural services. The impacts from development may impact on the cultural services provided by the natural environment, negatively impacting on health and wellbeing, sense of place, spiritual experience as well as associated recreational and tourism opportunities. Increased development will increase connectivity and access to the natural environment, including for tourists, and increased active travel infrastructure will result in further enhanced health and wellbeing. However, increased development and subsequent increase in access will also increase pollution and negatively affect tranquillity.

9.73 Changes in land management, and associated changes to the landscape may impact on the recreational experience positively or negatively through increases or decreases in different land management activities. Intensification of agriculture, combined with an increase in built development such as agricultural buildings, or visitor accommodation may detract from the experience. An expansion of land management to support nature restoration, or naturalisation from lower levels of grazing may support a different landscape.

9.74 The following section overleaf provides a summary of the forces for change for each special quality.

Summary of issues relating to each force for change

9.75 This section summarises the issues relating to each force for change.

Climate Change

- The impacts of extreme weather events, including storms and coastal erosion
- Management of water resources for flood risk and water supply
- Nature based solutions to mitigate impacts on communities and land within and beyond the AoS

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- The response of habitats and species to climate change
- The response of farming and forestry to climate change
- Impacts on the historic environment

Built development and Infrastructure

- The impact of new built development on the area's special qualities, including cumulative effects
- Existing challenges of affordable housing and local sites for employment
- Regional growth in surrounding areas
- Renewable energy development and associated grid infrastructure
- Potential expansion of mineral extraction
- Future improvements to public transport, active travel and transport connectivity
- New visitor infrastructure

Land management, agriculture and natural environment

- Viability of agriculture and the need for income diversification
- Agricultural change influenced by agricultural support - framed to deliver food and wider benefits for nature and climate mitigation
- Forestry and woodland forestry planned and managed to support a National Forest for Wales for timber and wider benefits for nature and climate mitigation
- Climate change bringing additional challenges to farming and land management in terms of flooding, soil erosion, pests and disease, less predictable weather and seasons

People communities and management of cultural heritage

- Impacts upon cultural heritage resources from diverse sources and scale of effect including - climate change, land management, and visitors
- Population change from migration and age structure can impact on community involvement and participation in local events and traditions, knowledge and use of the Welsh language and the viability/ demand upon local services
- Changes in employment, including a decline in employment in land-based industries can result in loss of knowledge, skills and Welsh Language
- The availability of local housing and employment affects the viability of rural communities

Recreation, tourism and access

- New tourist accommodation and facilities
- Increased levels of recreation and tourism with potential for impacts on communities, land managers and wildlife
- Impacts on existing recreational resources including honeypot sites, trails and routes
- Traffic, congestion, parking and a lack of public transport and active travel options

Summary of impacts of the forces for change on the special qualities of the AoS

9.76 The following section builds on the content of the previous section and provides a summary of the forces for change for each special quality.

1. An inspiring space that promotes mental, physical and spiritual health and wellbeing

■ Climate change

- Changes in farming, habitats and woodland landcover patterns are likely as a result of changing temperature and rainfall patterns.
- Nature based solutions to mitigate climate impacts could include peatland restoration, soil management and tree planting (in the right place for farming and nature) for carbon capture and reduction in downstream flooding.
- Our current experience of landscape and nature of views has the potential to change and evolve over the long term because of climate impacts. Conserving valued natural and cultural heritage features and qualities of a place - within an evolving landscape, can help maintain the Special Quality.

■ Built development and infrastructure

- New development, depending on the location, scale and character can complement or detract from the landscape experience.
- To meet decarbonisation targets renewable energy development and associated infrastructure will continue to grow in Wales. Large-scale strategic wind farm development is proposed outside the AoS. Local Development Plan search areas for solar farms lie within a small extent the AoS. Single wind turbines to power farms are present in two locations, and there are several small-scale hydro-electric power schemes. New strategic grid connection is needed to link renewable energy development in Wales with the National Grid in England.
- Wind farms and community windfarm development may result in community benefit funding, with opportunities to support local projects that enhance and promote the rights of way network, and support nature and built heritage projects, repair of field boundaries, the planting of trees, woodlands and orchards. Local co-ordination, project ideas, volunteers and project management are required to make the most of funding.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- New housing and infrastructure development will be an ongoing pressure largely focused within the nearby regional and national growth areas outside of the AoS.
- The growth of villages and towns within the AoS will also take place, but at much smaller scale.
- Incremental change can see traditional rural villages evolve and become more suburban and urban in character. Additional lighting, can also alter the dark sky character of the area.
- Land management, agriculture, forestry and natural environment
 - Land management changes are a key force for change relevant to this special quality.
 - Food production, forestry and land management are likely to evolve in response to climate change. The nature of views and landscape character will similarly evolve.
 - Sustainable farming practices to balance food production with nature recovery and climate change mitigation has the potential to maintain important uses of land and traditional farmland features, alongside improving habitat diversity and connectivity.
- People, communities, and management of cultural heritage
 - Landscape provides the everyday setting and backdrop to the villages, towns and dispersed rural communities within the AoS. Farmers have shaped the Welsh landscape that is evident today. Future requirements from farmland to produce food and help address some of the impacts of climate change and reverse the loss of native habitats, means that the farming community has much to contribute to this Special Quality.
 - The pressing issues of climate change and addressing nature loss means that some form of landscape change will occur within the medium to long term. What this is, where, and the degree of change, requires oversight and opportunities for communities and interest groups to inform. (The principles of the European Landscape Convention are imbedded within the Sustainable Management of Natural Resources and the development of Area Statements).

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- Recreation, tourism and access
 - The designation of a National Park has the potential to encourage additional visitors to sites and facilities that are already popular and showing signs of pressure.
 - Future strategic transport infrastructure improvements to the east and north of the AoS have the potential make access to the area a little easier.
 - Plans to improve public transport and active travel within the AoS have the potential to enable access for communities and visitors with less reliance on motor vehicles, encouraging green tourism.
 - Improvements to accessibility increase the opportunities for people to experience the inspiring space of the AoS, bringing opportunities for mental, physical and spiritual health and wellbeing.
 - Increased number of visitors can bring additional pressures and may detract from the experience of the area.

2. A place with cohesive communities and distinctive settlement patterns

- Climate change
 - The impacts of extreme weather events, including storms, flooding and coastal erosion could affect some communities.
 - Climate change will place pressures particularly on vulnerable cultural assets and communities.
 - Climate adaption measures, such as nature-based solutions in the uplands and along watercourses, together with traditional flood defences, can help alleviate the physical and emotional impacts of flooding. This helps maintain viable and cohesive communities.
- Built development and infrastructure
 - The availability of local housing and employment is an existing issue.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- Development may not always be in sympathy with the local landscape character and settlement pattern.
- New development that addresses local needs, in the provision of affordable housing, local services and facilities, is important in maintaining cohesive communities.
- The designation of a National Park is likely to stimulate the need for tourist accommodation and facilities – both an opportunity and something that would need to be managed alongside the needs of existing communities.
- Land management, agriculture, forestry and natural environment
 - Policy and the future funding support for agriculture, land management and rural businesses will influence employment, the rural economy and the contribution to cohesive communities.
- People, communities, and management of cultural heritage
 - Population change from migration and age structure can impact on community involvement and participation in local events and traditions, knowledge about heritage, the use of the Welsh language, 'bro' and the viability/ demand for local services.
 - A decline in employment in land-based industries could lead to a loss of knowledge, traditional skills and Welsh language.
 - Future improvements to public transport, active travel and transport connectivity are being planned for rural communities (Regional Transport Plan 2050 and National Transport Plan 2022- 2027).
 - The availability of local housing and employment affects the viability of rural communities. A National Park designation could encourage inward migration and purchase of second homes; increase levels of recreation and tourism – but also an opportunity for local employment.
- Recreation, tourism and access
 - Increased tourism and recreation bring economic opportunity.
 - Although visitors can increase pressure on local services, they also provide additional support for the provision of these services.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- Future improvements to public transport, active travel and transport connectivity could provide opportunities for Green Tourism.

3. A story of human interaction with the landscape over millennia

- Climate change
 - Climate change will bring new challenges to farming, land management and communities in terms of flooding, soil erosion, pests and disease, less predictable weather and seasons.
 - The pressing issues of climate change and nature recovery mean that agriculture and forestry is now required to deliver food and timber plus wider benefits for nature and climate mitigation. The scope of current land management practices will need to adapt and evolve.
 - Human action and interaction with the landscape is as ever active, but swift and dynamic changes to land management are being imposed by climate change.
- Built development and infrastructure
 - Development to mitigate or adapt to climate change will increase, and this could place pressures on the historic assets in the AoS unless factored within site planning decisions.
- Land management, agriculture, forestry and natural environment
 - Land management changes driven by both policy and climate adaptation could impact on the historic features of the landscape unless factored within management decisions.
 - Unregulated planting of forests for carbon offsetting has the potential to displace farming and people.
 - Changes in agricultural policy, funding and viability can influence the management of features.

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- A tradition of knowledge passed down through generations of farming comes to an end with the family line, or the next generation choosing another life.
- People, communities, and management of cultural heritage
 - Impacts upon cultural heritage resources from diverse sources and scale of effect including - climate change, land management, and visitors.
 - Population change from migration and age structure can impact on community involvement and participation in local events and traditions, knowledge and use of the Welsh language and the viability/ demand upon local services.
 - Changes in employment, including a decline in employment in land-based industries, leading to a loss of knowledge, skills and Welsh language.
- Recreation, tourism and access
 - People have been visiting the area for well over 100 years for tourism and recreation. There are established pressures on honeypot sites, trails and routes. A National Park has the potential to increase visitor numbers, but would seek to manage pressures affecting historic features, land managers and communities.
 - A National Park designation is likely to stimulate the need for new tourist accommodation and facilities.
 - The designation of a National Park would seek to promote an understanding of the landscape, historic environment, culture and historical evolution of the AoS to both communities and visitors. This along with policy drivers to support conservation would help support conservation and restoration efforts.

4. A home to internationally and locally important species and habitats

- Climate change

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- Climate change will affect habitats and species in the AoS, through changing weather patterns, periods of drought and waterlogging, damage from storms and flooding and erosion.
- Climate change increases the risk from pests and diseases and the spread of invasive non-native species.
- Climate change brings additional challenges to farming and the management of land.
- Built development and infrastructure
 - New development (housing, renewables, commercial, tourism transport and minerals) will in the main avoid or mitigate for direct, indirect and cumulative effects.
 - There are potential gains for habitats and species through the achievement of net benefits for biodiversity through the planning system and by supporting the Biodiversity Deep Dive Recommendations: 3. Unlock the potential of designated landscapes (National Parks and Areas of Outstanding Natural Beauty) to deliver more for nature and 30 by 30.
- Land management, agriculture, forestry and natural environment
 - Policy to support farming and wider ecosystem services from land brings about positive forces for change to support this special quality.
 - The new sustainable farming scheme has the potential to create opportunities for habitats and species alongside the primary aim of food production.
 - Changes in the management of moorland will also impact on the habitat for key habitats and species, and issues associated with the persecution of raptors.
 - Forestry and woodland are being planned and managed to support a National Forest for Wales for timber and wider benefits for nature and climate mitigation.
- People, communities, and management of cultural heritage

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

- The viability of farming and forestry affects the rural community in the AoS. Their capacity to manage land and adapt to food production, solutions for nature and climate change has a direct bearing on this special quality.
- Recreation, tourism and access
 - Current levels of access to landscapes within the AoS with sensitive habitats will continue and potentially increase as a result of a National Park designation. Existing 'honey pot' sites could see additional pressure, with impacts from footpath erosion and overspill parking. Dogs not on leads can disturb ground nesting birds as well as livestock. Off road vehicles where there is no legal right of access can damage habitats.
 - Tourism / ecotourism that promotes the natural, cultural, built heritage and dark skies of the area, provide opportunities to enhance public understanding and enjoyment of this special quality.

5. A distinctive, complementary and contrasting landscape

- Climate change
 - Climate change will affect the landscape qualities of the area through changing vegetation patterns, coastal and river erosion, extreme weather events and flooding. Waterlogged soils and strong winds can lead to the loss of woodland edges and veteran trees in historic parkland.
 - The response of habitats and species to climate change is evolving.
 - The response of farming and forestry to climate change will evolve.
- Built development and infrastructure
 - New built development (housing, renewables, commercial, tourism transport and minerals) introduces change that can affect rural character, visual amenity, the settings of historic features and perceptions of tranquillity and wildness. Good siting, design and

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

integration can resolve many of these issues. Vertical structures and large/extensive industrial type development are more difficult to integrate. Nighttime lighting can affect perceptions of dark skies and removal from developed areas.

- Land management, agriculture, forestry and natural environment
 - The Sustainable Farming Scheme in Wales is asking farmers to manage land to deliver food and wider benefits for nature and climate mitigation. Current land management practices will adapt and evolve. The landcover type and pattern seen today is similarly likely to evolve, potentially moving away from what is perceived to be the traditional farmland landscape.
 - Policy for the planning and management of forestry and woodland is to support a National Forest for Wales, to produce timber and wider benefits for nature and climate mitigation.
- People, communities, and management of cultural heritage
 - The capacity of communities invested in farming and forestry to assist nature and climate mitigation, alongside food and timber production, has a bearing on this special quality.
 - Population changes from migration and age structure; changes in employment; a decline in employment in land based industries - Communities have the potential to evolve and develop different connections to the land and how it is managed/cared for.
- Recreation, tourism and access
 - There are localised impacts on existing recreational resources including honeypot sites, trails, and routes, with issues of erosion, litter, traffic and parking. The designation of a National Park has the potential to add to these issues but would seek to proactively manage them.
 - New visitor accommodation and facilities – these provide opportunities to engage communities and visitors with their local landscapes and the wider AoS.

6. A landscape providing benefits beyond its borders

- Climate change
 - Climate change impacts directly on the delivery of many ecosystem services including, the water cycle, soil cycle and nutrient cycle, food and fibre production.
 - A National Park designation would seek to promote nature-based solutions to mitigate impacts on communities and land within and beyond the AoS.
- Built development and infrastructure
 - Renewable energy development and associated grid infrastructure – small scale, well integrated renewables within the AoS can play its part in decarbonising energy in Wales.
 - The National Park brand creates an identity and way to market this area beyond Wales. It can stimulate the need for visitor accommodation and infrastructure – both a pressure and an opportunity.
- Land management, agriculture, forestry and natural environment
 - The management of land within the AoS for food, timber, resilient habitats and species, carbon storage, water quality, capture and flood management – provides benefits that extend to communities within Wales and England.
- People, communities, and management of cultural heritage
 - Regional growth in surrounding areas – the centres of populations close the AoS derive wellbeing benefits from visiting the AoS.
 - Future improvements to public transport, active travel and transport connectivity - could benefit communities within and beyond the AoS and facilitate green tourism.
- Recreation, tourism and access
 - A new National Park would facilitate this, to benefit the enjoyment and wellbeing of communities within and outside the AoS. The

Chapter 9 Evaluation of forces for change against the Area of Search special qualities

management of existing and future impacts on honeypot sites, land managers and communities would be a key management objective.

Chapter 10

Conclusion and next steps

10.1 The interaction between the forces for change identified and the special qualities of the area of search is broad reaching and complex. However, the forces for change are widely represented within other protected landscapes which have already identified responses to the management of these issues.

10.2 The review of forces for change has highlighted the complexity of the issues. This relates to the fact that actions to address one force for change can result in a multitude of other 'ripple effects' across the other special qualities. For example, actions to address visitor pressure by the provision of visitor facilities can increase the attractiveness of an area, further increasing pressure on roads and other infrastructure. In addition, the provision of the visitor facilities may detract from the special landscape qualities of the area through the introduction of new built features, with impacts such as lighting, visual impact and disturbance.

Next steps

10.3 The next step for the work is to explore how National Park designation and other management mechanisms may provide opportunities to manage the forces for change. Many of the other National Parks and National Landscapes have already set out their approaches to managing these forces for change, and these provide an important resource in identifying future management options.

Appendix A

Methodology

Introduction to forces for change

A.1 A force for change is defined as something which either directly or indirectly leads to change in the area under consideration, in this case the Area of Search. There are many drivers for the forces for change, these include:

- Legislative and policy changes – this can include actions which facilitate or constrain undertaking certain activities. For example the planning system guides the location and type of development.
- Market and economic driven forces for change – this may influence behaviours of landowners and managers, developers and individuals when deciding on future actions, developments or choices in terms of housing, recreation or transport. It can also include incentives to support activities, such as agriculture forestry grants or nature restoration activities. Availability of employment can affect proliferation of commuter settlements and rural to urban migration.
- Social driven forces for change – such as population trends, skills, recreation or transport choices, and trends in employment such as remote working.
- Climate driven forces for change – including direct impacts, influences on policy responses, and impacts on behaviour change.

A.2 Forces for change occur both within the Area of Search, and as a result of changes in the surrounding areas. For example, people may travel some distance for recreational activities in the area, or large-scale development such as wind turbines may be visible over some distance.

Appendix A Methodology

A.3 Climate change is a complex overarching driver which creates multiple forces for change through direct impacts, policy responses and individual behaviours. For example, increases in the frequency and intensity of extreme rainfall events will result in more flood events. This impacts directly on communities, for example via property damage, damage to road infrastructure, or damage to agricultural land. The policy response is also a driver, as it sets out where natural flood management may occur or where hard flood defences are implemented. It may impact on the value of land or property in areas particularly threatened by flooding.

A.4 Different forces for change vary in their spatial impact on the AoS. Forces for change which impact moorland management are specific to the upland location of this habitat. Larger scale new housing development will typically be found in association with existing urban areas within lowlands, and onshore wind farm development is typically associated with more upland locations.

A.5 Furthermore, some forces for change may occur in the shorter term, such as new development. Other forces for change will take longer to become apparent, such as the time taken for new woodland to mature.

A.6 The impact of forces for change will also vary between the type of location and a person's response to a change. For example, changes which are apparent from main transport routes or key tourist destinations will impact on a larger number of people than, for example, a more localised change within a more remote location.

A.7 Some forces for change may affect a particular special quality of the AoS, for example the impact of water damage from climate change eroding the integrity of an historic features. Other forces for change may bring both positive and negative effects on a special quality. For example, the use of recreational routes can lead to some erosion which is further exacerbated by climate change. However, a high number of visits means that a greater number of people (local and beyond the area) are accessing the landscape, enjoying its special quality, which benefits their health and wellbeing. Developments such as wind farms may impact on special qualities such as views or tranquillity,

however the use of community benefit funding could bring other benefits in terms of access or nature restoration.

Method for identifying forces for change affecting the area's special qualities now, and in the future

A.8 The forces for change assessment included the following steps:

- Identifying forces for change resulting from climate change.
- The evaluation of national policy and guidance documents to understand how they are driving change in the Area of Search. Listing of the key policy themes.
- The review of statutory management plans for the Clwydian Range and Dee Valley National Landscape (which lies within the Area of Search).
- Review of forces for change or key issues for the Clwydian Range and Dee Valley National Landscape, plus those identified for other protected landscapes within Wales and a selection of other locations in England National Parks such as Peak District, North York Moors, Yorkshire Dales, Exmoor and Dartmoor, and National Landscapes of Howardian Hills, Forest of Bowland, and Shropshire Hills. The purpose of the comparative assessment is to identify forces for change which may be applicable to the wider AoS, but which were not identified for the Clwydian Range and Dee Valley National Landscape. The identification of forces for change by other protected areas is quite varied in its approach, and the number of forces for change and detail provided is extensive in some cases. Therefore, the forces for change from other protected areas have been summarised for the purpose of the comparison.
- Review of evidence reports (referenced within the text).
- Review of mapped information, including:

Appendix A Methodology

- Landscape designations (National Parks, National Landscapes, National Landscape Character Areas, Special Landscape Areas)
- Land cover, habitats and protected areas (National Forest Inventory, Ancient Woodland Inventory, NNRs, Ramsar sites, SPAs, SACs, SSSIs, RSPB reserves)
- Habitat networks (bog, fen, grass, heath)
- Habitats of Principle Importance
- Geology / soils (Regionally Important Geodiversity sites, geological conservation review sites, peatlands of Wales, Agricultural Land Classification)
- Land cover (Corine 2018)
- Water environment (communities at risk register, flood risk from rivers, flood risk from surface water and small watercourses, flood risk from the sea)
- Access routes (roads, national trails, national cycle network)
- Historic environment (listed buildings, schedules monuments, registered parks and gardens, conservation areas)
- People and economy (NATPAN public transport nodes, built up areas, Welsh Index of Multiple Deprivation, population density)
- Renewable energy (renewable energy planning database, large scale wind energy)
- Noise (road and rail)
- Tranquillity

A.9 Chapter 2 of this report has outlined the main framework documents which inform the background to the current proposal and the context for the sustainable management of natural resources.

A.10 The following documents were used to inform the drivers and trends to identify forces for change.

Appendix A Methodology

- Future Wales 2040 [\[See reference 107\]](#)
- Planning Policy Wales 12 [\[See reference 108\]](#)
- Welsh Government (2021) Future Trends Report 2021 Evidence pack [\[See reference 109\]](#)
- Wales visitor survey [\[See reference 110\]](#)
- Climate trends and climate risks including: climate change risks for Wales [\[See reference 111\]](#)
- Prosperity for All: A Climate Conscious Wales 2020-2025 [\[See reference 112\]](#)
- Mid Wales Area statement [\[See reference 113\]](#)
- North East Wales Area statement [\[See reference 114\]](#)
- Mid Wales Area Statement [\[See reference 115\]](#)
- Clwydian Range and Dee Valley AONB Management Plan, 'Landscape and nature recovery in a changing climate' [\[See reference 116\]](#)
- Clwydian Range and Dee Valley AONB State of the AONB report [\[See reference 117\]](#)
- NRW's Area of Search report [\[See reference 118\]](#)
- Local Development Plans and associated monitoring information – Flintshire, Denbighshire, Wrexham, Powys. The AoS also includes a very small area of Gwynedd.
- LANDMAP
- Conwy and Denbighshire Well-being Plan 2023 to 2028 [\[See reference 119\]](#)
- Denbighshire Well-being Impact Assessment Reports [\[See reference 120\]](#)
- Flintshire and Wrexham Well-being Plan 2023 to 2028 [\[See reference 121\]](#)
- 'An assessment of well-being in Flintshire' report [\[See reference 122\]](#)

Appendix A Methodology

- Powys Well-being Plan [See reference 123]
- Powys Well-being assessment [See reference 124]
- Tranquillity and Dark Skies mapping
- Protected areas and sites and future management priorities for these (main SPA, SAC and NNR within AoS)
- Flood risk management plans.

Stakeholder meetings

A.11 The identification of forces for change was also informed by stakeholder meetings. These meetings aimed to explore the forces for change identified and the views of stakeholders on the relative weight and significance of these forces for change, based upon their interests, wider policy and evolving trends. The findings from these meetings have been used to inform identification of forces for change and enhance their understanding.

A.12 The first stakeholder meeting was held on 6th December 2023, with key stakeholder representatives from the AoS. 17 stakeholders attended the meeting, including nine people from Local Authorities within the AoS and one representative from the North Wales Corporate Joint Committee. Others who attended included stakeholders associated with recreation, farming, renewables and historic environment, such as representatives from Ramblers Flintshire, Offa's Dyke Association, Wales Environmental Link, NFU, RenewableUK Cymru and Cadw.

A.13 The first workshop:

- explained the background and context of the work, and the purpose of the workshop
- illustrated the area of search
- briefly explained the approach to identifying the forces for change

Appendix A Methodology

- described the special qualities
- explored which forces for change currently have the greatest impact on management of the special qualities (including recent trends)
- provided an opportunity for stakeholders to identify any additional forces for change not identified.
- explored stakeholders views as to which forces for change (direct or indirect) are anticipated to be the greatest impacts in the future and why.

A.14 The second stakeholder meeting was on 15th January 2024 with members of the Local Access Forum.

A.15 The third stakeholder meeting was on 17th January 2024 with Welsh Government policy leads. Similar to the first workshop, this sought views on the relative weight and significance of these forces for change, but within a national policy perspective.

A.16 A full description of the stakeholder engagement findings is provided in Appendix C, and information from this has been integrated into the identification of forces for change, as outlined in Chapter 4.

A.17 Following the initial identification of potential forces for change for protected landscapes, these were then reviewed against characteristics and features that contribute to the Special Qualities of the AoS.

Appendix B

List and summary description of areas within the Area of Search

B.1 This appendix includes the landscape descriptions of the areas identified to be included the Area of Search, as set out in Sumner, R. (2023) Area of Search for a potential National Park in North-East Wales. NRW. Descriptions for the existing Clwydian Range and Dee Valley National Landscape (formerly known as the AONB) are taken from the 2016 Management Plan. These descriptions form a reference point for the forces for change.

B.2 The existing area of the Clwydian Range and Dee Valley National Landscape (formerly AONB): The Clwydian Range and Dee Valley Area of Outstanding Natural Beauty is the dramatic upland frontier to North Wales embracing some of the country's most wonderful countryside. The Clwydian Range is an unmistakable chain of heather clad summits topped by Britain's most strikingly situated hillforts. Beyond the windswept Horseshoe Pass, over Llantysilio Mountain, lies the glorious Dee Valley with historic Llangollen, a famous market town rich in cultural and industrial heritage, including the Pontcysyllte Aqueduct and Llangollen Canal, a designated World Heritage Site. The Offa's Dyke Trail traverses this specially protected area.

B.3 The Vale of Clwyd central and east has strong visual and geographical relationship with the Clwydian Range. Frequent mature oak trees and woodland within fields defined by intact hedgerows and occasional historic parks create distinctive character and perceptions of time depth. Settlement is very infrequent and tends to nestle in the landscape.

B.4 Pwll Glas Limestone country with a distinctive combination of rolling hills, deciduous woodland, parkland trees and limestone outcrops. An attractive and tranquil landscape with some long views to the Clwyd hills. This area includes

Appendix B List and summary description of areas within the Area of Search

the rural edges along the southern edge of Ruthin, where Castle Park with Ruthin castle forms an attractive gateway to the town.

B.5 The Berwyn: The western flanks of the Berwyn form an upland ridgeline to the Dee Valley and villages of Llandrillo and Cynwyd. The Berwyn forms a southern continuation of a chain of uplands that define the eastern edge of north Wales – Llantysillio/ Ruabon Mountain and the Clwydian hills lying to the north. The Berwyn extends eastwards into Wrexham and southwards into Powys. The area is notable for its extensive upland moorland character with remote, wild, tranquil and spiritual qualities.

B.6 Dee Valley: This area includes part of Cefn Coch – one of the hills that lines the southern edge of the Dee Valley - with upland characteristics in common with the adjacent landscapes of Eryri National Park to the west and the Berwyn to the east. The authority boundary between Gwynedd and Denbighshire follows the skyline of Cefn Coch, subdividing this topographical unit of landscape.

B.7 Gronant Dunes: The dune systems, marram grass, wetlands and native wildflowers create a wild semi-natural area with at times strong remoteness (when within the dunes) and sense of space and freedom (when on top of the dunes). The shoreline, tides and beach add to the natural dynamics. The area is a protected site for terns. Talacre light house creates a strong point of visual interest. Prestatyn and Gronant hillside within the AONB form a backdrop the area to the south. Caravan parks and Point of Ayre influence elevated views from the National Landscape, but have little influence when on the shoreline or within the dunes.

B.8 Halkyn Mountain: This a rare (within North Wales) area of open common land with protected sites for grasslands and a Registered Historic Landscape. It has a semi-upland character given the extent of heath, grassland, gorse and rugged land with limestone outcrops and hummocks from historical small-scale quarrying. Scattered worker settlement is present in places. Limekilns and hillfort (Scheduled Monument) contribute to heritage. There are some major limestone quarries - some now disused and naturalising and some still active

Appendix B List and summary description of areas within the Area of Search

with local detracting effects. The scale of the quarries is however not immediately apparent within landscape views. Open scenic views to the Clwydian hills creates a strong sense of place. The landscape between Halkyn mountain and the Clwyds includes much tree cover and appears intact.

B.9 Northop Parklands: This area comprises a wooded valley, parkland and pastoral farmland with attractive and sheltered perceptual qualities. Deciduous woodland is frequent with both irregular blocks and linear patterns. There are four sites on the Register of Historic Parks and Gardens within relatively close proximity to each other (Halkyn Castle, Soughton Hall, Gwysaney, and Rhual) and a section of Watts Dyke (scheduled monument).

B.10 Hope Mountain: This hill and ridgeline rises above the Cheshire Plain and marks the first line of upland hills in NE Wales. The east facing scarp has an attractive mosaic of deciduous woodland and fieldscapes. The wooded hillside and wooded castle mound form a notable valley 'gateway' at Caergwrle. Waun y Llyn Country Park includes a disused naturalised quarry with heathland and provides expansive distant views to the AONB. The wooded Ffridd Valley draws the eye towards Ruabon Mountain and Llandegla forest within the AONB. The Clwyds along the skyline and sense of space is notable. Landscape to the immediate west and northwest is however less distinctive. Development affects integrity. Landscape here has limited topographical variety or points of visual interest.

B.11 Ceiriog Valley: This is a steep-sided valley in three parts. The upper valley is open, with views to the Berwyns; the middle section is narrow with a gorge at Pandy, then steeply sloping and wooded with a relatively small and intimate field pattern; while between Glyn Ceiriog and Chirk there is a mosaic of farms and woodland, containing the majority of the settlements in the area. The area contains the typical characteristics of a Welsh valley - relatively unspoilt, feeling remote and strongly enclosed. The area has attractive, tranquil, remote qualities and a strong sense of place.

Appendix B List and summary description of areas within the Area of Search

B.12 The Berwyn (Wrexham): The eastern facing aspect of the Berwyn include glaciated cwms and a striking skyline, within views from the Ceiriog Valley. The area has outstanding scenic quality, remote and wild qualities (LANDMAP).

B.13 The Berwyn (Powys): This section of the Berwyn comprises a very broad extensive area of upland moorland plateau on the edge of the Eryri National Park (ENP). The aspect is very strongly linked topographically ENP with the moorland plateau taking on the characteristic of upland peak hinterland. Open, exposure and wide-open skies dominate with heather/bilberry and rough grazing predominant and bracken growth to lower plateau sides. The area has attractive, tranquil, remote, wild and spiritual qualities. To the east, valleys and cwms cut into these uplands and form the mountain settings to Pystyll Rhaeadr, the Tanat valley, Cwm Pennant and Llyn Vyrnwy. The Berwyn also forms a distinctive upland moorland backdrop within views from the hills around Llanfyllin, Meifod and Dolangog.

B.14 Llansilin valley and hills: The area sits below the rolling hills/plateau that separates the Tanat and Ceiriog Valleys and comprises a network of small and in places intimate valleys, with some notable hills/ scarps at Gyrn Moelfre and Graig Orllwyn. Wooded hillslopes and small irregular field patterns follow the contours. The area has attractive, sheltered and settled qualities. Llansilin is an attractive roadside village. The Motte and Bailey at Sycharth to the south of Llansilin was the birthplace of Owain Glyndwr.

B.15 The Tanat Valley: This is a valley of three parts - with a steep side U shaped valley with some dramatic peaks (Craig Rhiwarth) and ridges to the east of Pen y Bont Fawr; with a broader valley in the area of Llanrhaedr Y Mochnant; before the valley narrows again, lined by wooded valley slopes (south) and the Llansilin Hills (north). Pen y Bont Llanerch Emyrs sits on the Welsh/ English boarder to the east and justifiably proclaims itself the gateway to the Tanat Valley. Views here are focused west wards along the valley to distant upland peaks. The valley lies within the Tanat Valley Register of Historic Landscapes.

B.16 The Rhaeadr Valley: This is a steep sided U-shaped valley of the Afon Rhaeadr which cuts into the Berwyn uplands and made particularly striking by

Appendix B List and summary description of areas within the Area of Search

the cascade of Pistyll Rhaeadr – the highest waterfall in Wales and one of the 'Seven Wonders' of North Wales. The area has distinctive landform created by the steep valley sides headed/sided in several cases by waterfalls and stream courses tumbling from the upland moorland above. The valley side slopes are a mosaic of rock exposure/rough moorland vegetation, isolated trees and patches of semi improved grazed land making a highly aesthetic overall composition. The area has attractive, remote, wild, tranquil and spiritual perceptual qualities and is of Outstanding scenic quality (LANDMAP).

B.17 Cwm Pennant: This upper section of the River Tanat, with remote and secluded character is given a separate reference here in recognition of Pennant Melangell Church – a shrine to Saint Melangell dating from the early 12th century and its Outstanding scenic quality. The valley lies within the Tanat Valley Register of Historic Landscapes. Pistyll Blaen-y-cwm lies at the head of the valley. It is Outstanding for its distinctive landform created by the steep valley sides headed/sided in several cases by waterfalls and stream courses tumbling from the upland moorland above. The valley side slopes are a mosaic of rock exposure/rough moorland vegetation, isolated trees and patches of semi improved grazed land making a highly aesthetic overall composition (LANDMAP).

B.18 Llyn Vyrnwy: The reservoir (whilst manmade) in combination with its steep side afforested valley has strong aesthetic, attractive, tranquil and remote perceptual qualities – creating Outstanding scenic quality (LANDMAP). The Victorian stone dam and gothic straining tower are ornate structures and create strong points of visual interest.

B.19 Llanfyllin valley and hills: This area includes narrow winding valleys enclosed by small, rounded hills with occasional scarp edges. A mosaic of woodland - both deciduous and mixed and irregular field patterns complement the landform. The area has attractive, sheltered and settled perceptual qualities. (LANDMAP high evaluation). Views from the hills are wide ranging, with the expansive scale of the Berwyn uplands drawing attention. Llanfyllin is a distinctive market town that still retains much of its original compact and attractive rural community nature (LANDMAP high evaluation).

B.20 The Vyrnwy, Banwy and Cain valleys and hills: These are significant valleys / vales and contain the strategic road network across this corner of Wales. The wooded valley sides and hilltops and irregular field patterns of the Meifod Valley are of high scenic value (LANDMAP). Sections of the Banwy Valley are of Outstanding scenic quality (LANDMAP) for their high aesthetic qualities and limited intrusion by modern development. The valleys mark a notable break between the hill and scarp farmland with geographical proximity and visual connection to the Berwyn to the northwest; the Cambrian Mountains to the south west; and the rolling farmlands and parklands of the Welsh/ English borderlands to the south east.

Appendix C

Comparative assessment

C.1 Comparative assessment of forces for change in AoS against the Clwydian Range and Dee Valley National Landscape are based on an evaluation of the following protected areas:

- Brecon Beacons [\[See reference 125\]](#)
- Eryri [\[See reference 126\]](#)
- Pembrokeshire National Landscape [\[See reference 127\]](#)
- Anglesey National Landscape [\[See reference 128\]](#)
- Gower National Landscape [\[See reference 129\]](#)
- Llŷn Peninsula National Landscape [\[See reference 130\]](#)
- Wye Valley National Landscape [\[See reference 131\]](#)
- Peak District National Park [\[See reference 132\]](#)
- Yorkshire Dales National Park [\[See reference 133\]](#)
- Exmoor National Park [\[See reference 134\]](#)
- Dartmoor National Park [\[See reference 135\]](#)
- Howardian Hills National Landscape [\[See reference 136\]](#)
- Forest of Bowland National Landscape [\[See reference 137\]](#)
- Shropshire Hills National Landscape [\[See reference 138\]](#)

C.2 The following tables summarise the forces for change from other protected areas both within Wales and from a selection of examples from England. This is used to provide the comparison of the main topics identified under each category against the forces for change identified for the Clwydian Range and Dee Valley National Landscape.

Climate change

C.3 Under the topic of climate change the forces for change are grouped by the following main themes. It should be noted that there is some overlap between how forces for change may be categorised, as a climate change impact can lead to a land management response.

- Water shortage/scarcity
- Flood risk
- Extreme weather events
- Natural flood management
- Rising sea levels and coastal erosion
- Impacts on habitats and species, including loss, change and invasive non-native and native species (e.g., gorse and bracken)
- Increased prevalence of pests and diseases
- Changes to agricultural productivity
- Changes in woodland and tree species
- Direct and indirect impacts on the historic environment.

Table C.1: Climate change forces for change

Category	Force for change	Source
Habitats and species	Loss of and changes in habitats	Brecon Beacons, Exmoor
Habitats and species	Drying of wetland and bog habitats, moorland fires and erosion, damage to ecological sites	Eryri

Appendix C Comparative assessment

Category	Force for change	Source
Habitats and species	Loss of and changes in species	Brecon Beacons, Exmoor, Howardian Hills
Habitats and species	Loss of native species	Anglesey, Howardian Hills
Habitats and species	Spread of INNS	Eryri, Howardian Hills
Habitats and species	Increased prevalence of pests and diseases	Eryri, Anglesey
Habitats and species	Direct impacts on peatland	Exmoor
Infrastructure	Direct impacts on infrastructure	Wye Valley
Productivity	Longer growing season and enhanced growth rates of vegetation	Eryri
Productivity	Potential change to cropping patterns and types of crops, in response to climate change, altering the character of the landscape	Forest of Bowland, Llŷn
Productivity	Loss of agricultural land and crops during flood events	Anglesey
Productivity	More frequent and severe flooding of farmland in winter	Howardian Hills
Productivity	Reduced grass and cereal yields in summer	Howardian Hills
Productivity	Reduced food security	Brecon Beacons
Productivity	Change in woodland / tree species in response to new pests/diseases	Eryri

Appendix C Comparative assessment

Category	Force for change	Source
Sea and coast	Rising sea levels and more storm events	Anglesey, Llŷn
Sea and coast	Sea level rise	Gower
Sea and coast	Sea level rise and increased storm conditions, leading to coastal erosion and coastal squeeze	Eryri
Sea and coast	Erosion of coasts, sedimentation and flooding, sea level rise and changing weather patterns	Pembrokeshire
Sea and coast	Impacts on coastal communities and infrastructure	Anglesey
Sea and coast	impact of severe or prolonged localised weather conditions	Howardian Hills
Sea and coast	Development of coastal protection schemes	Llŷn
Soil	Soil erosion, land slip	Wye Valley
Water	Water shortages/scarcity	Brecon Beacons, Anglesey, Wye Valley
Water	Flood risk/Flooding	Brecon Beacons, Anglesey
Water	Increased autumn and winter precipitation, higher water levels and downstream flooding	Eryri
Water	Potential for more intense rainfall events causing flooding within- and downstream of the National Landscape	Forest of Bowland

Category	Force for change	Source
Water	Natural flood management within river catchments increasingly seen as a tool for mitigation of flood risk for downstream communities	Forest of Bowland
Wildfire	Potential for more hot, dry summers leading to reduced ground water and drying out of moorland habitats, increasing fire risk and release of carbon into the atmosphere	Forest of Bowland, Wye Valley
Wildfire	Moorland wildfires	Exmoor, Yorkshire Dales, Llŷn

Built development

C.4 Under the topic of built development the forces for change are grouped by the following main themes.

- Built development – housing and employment, location, cumulative effects
- Built development associated with land management and agriculture
- Communications
- Energy
- Military activity
- Minerals including restoration and unconventional oil and gas extraction
- Transport development
- Visitor accommodation

Table C.2: Built development

Category	Force for change	Source
Affordable housing	Increased demand for locally, affordable homes	Forest of Bowland
Affordable housing	Need for affordable/local housing for key local workers providing services to communities	Howardian Hills
Built development	New development in locations in response to coastal squeeze	Eryri
Built development	Pressure for housing tourist development and associated commercial enterprises	Pembrokeshire
Built development	Rise in pressure for housing, particularly amongst those of retirement age	Eryri
Built development	Refineries, storage facilities and power station	Pembrokeshire
Built development	Development and road improvement impacting on tranquillity and sense of wilderness	Eryri
Built development	Pressure for housing tourist development and associated commercial enterprises	Pembrokeshire
Built development	Small scale and gradual changes that may lead to cumulative effects	Gower
Built development	Development pressure from housing, roads, industry and infrastructure,	Brecon Beacons, Wye Valley
Built development	Development on periphery of the National Park	Yorkshire Dales
Built development	Development unsympathetic to local vernacular	Eryri

Appendix C Comparative assessment

Category	Force for change	Source
Built development	Ribbon development along coastal settlements	Eryri
Built development	Dominance of utility and energy plants, including water treatment and waste management sites	Eryri
Built development	Housing and employment development	Shropshire Hills
Built development	Redevelopment of large former industrial sites	Shropshire Hills
Built development	Pressure for economic development and growth	Shropshire Hills
Built development	More major development proposals as a result of national policy	Forest of Bowland
Built development	Impacts on periphery of NP	Exmoor
Built development	Pressure for new development and building conversion in open or exposed landscapes,	Forest of Bowland
Built development	Alterations to buildings	Llŷn
Built development	Small-scale, cumulative development (e.g. Building extensions, residential boundary treatment, roadside concrete curbing and signage) resulting in erosion of integrity and quality of the landscape	Forest of Bowland
Communications	Communications infrastructure including more larger mobile phone masts	Yorkshire Dales, Exmoor, Llŷn
Development	Development related to main infrastructure corridors associated with motorways, railways, electricity transmission and high-pressure gas pipelines, including infrastructure replacement	Yorkshire Dales

Appendix C Comparative assessment

Category	Force for change	Source
Energy	Power lines	Eryri
Energy	Hydro power energy production	Eryri
Energy	Increased demand for wind turbines on the fringes of National Park and offshore	Eryri
Energy	Expansion of solar-thermal, hydro-electric, wood-fuel, heat pumps and wind	Brecon Beacons
Energy	Commercial renewable energy proposals for wind and solar farms	Exmoor
Energy	Onshore wind energy	Pembrokeshire
Energy	Oil and gas exploration, offshore renewables	Pembrokeshire
Energy	Offshore wind	Gower
Housing	Demand for new housing	Howardian Hills
Land management/agriculture	Traditional agricultural buildings becoming redundant and replaced with large, modern buildings	Forest of Bowland
Land management/agriculture	Increase in agricultural barns	Exmoor
Land management/agriculture	Construction of new tracks in open countryside for farming, forestry and moorland management purposes	Forest of Bowland
Land management/agriculture	Large scale poultry farming	Shropshire Hills
Military activity	Past military activity	Eryri
Military activity	Military training activities	Pembrokeshire
Minerals	Restoration of former minerals sites	Yorkshire Dales

Category	Force for change	Source
Minerals	Fracking	Forest of Bowland, Howardian Hills
Transport	Development, traffic and lighting within- and beyond the boundary of the National Landscape increasingly affecting its tranquillity	Forest of Bowland
Transport	Increased levels of traffic	Howardian Hills
Transport	Road improvements	Eryri, Yorkshire Dales, Llŷn

Land management

C.5 Under the topic of land management, the forces for change are grouped by the following main themes.

- Agricultural change
- Biodiversity
- Birds of prey
- Disease risk
- Energy (biomass)
- Forestry and woodland planting, management and felling
- Impact of invasive non-native species
- Changes in military strategy
- Changes in moorland management
- Nature restoration activities including rewetting, river and floodplain restoration, rewilding, catchment management
- Policy impacts on agricultural support and future nature restoration

Appendix C Comparative assessment

- Impacts on soil
- Visitor impacts on land management
- Water pollution

Table C.3: Land management forces for change

Category	Force for change	Source
Agricultural change	Loss of farmers	Brecon Beacons
Agricultural change	Loss of skills	Brecon Beacons
Agricultural change	Increased costs	Brecon Beacons
Agricultural change	Reduced productivity	Brecon Beacons
Agricultural change	Spread of gorse and bracken	Eryri
Agricultural change	Lower numbers of livestock on uplands	Eryri
Agricultural change	Increased production costs and aging population	Eryri
Agricultural change	Changes to agri-environment support schemes	Eryri, Llŷn
Agricultural change	Decline in traditional upland farming and commoning resulting in changes to livestock levels	Eryri
Agricultural change	Higher demand for UK food production and increased stocking levels and overgrazing	Eryri
Agricultural change	Change in agricultural crops on most productive land	Eryri, Wye Valley

Appendix C Comparative assessment

Category	Force for change	Source
Agricultural change	Decline and loss of traditional farming practices. Increased farm size and loss of field patterns	Eryri, Llŷn
Agricultural change	Catchment sensitive farming schemes	Eryri
Agricultural change	Loss of hedgerows, changes to intensity of land management, abandonment of fields, intensification from unimproved to arable	Pembrokeshire, Llŷn, Wye Valley
Agricultural change	Sustainable Farming Scheme delivering environmental gains	Anglesey
Agricultural change	Changes in farming in terms of crop suitability, growing seasons, availability of drinking water and shade, and effects on livestock breeding.	Brecon Beacons
Agricultural change	Improvement of grassland for grazing (through drainage and fertilizer use)	Brecon Beacons, Llŷn
Agricultural change	General decline in mixed livestock grazing (by cattle, sheep and ponies) in favour of sheep has led to replacement of heather moorland with mono species grass swards and an increase in bracken	Brecon Beacons

Appendix C Comparative assessment

Category	Force for change	Source
Agricultural change	Decline in common grazing and scrubbing up of hillsides with invasive species such as gorse and bracken	Brecon Beacons
Agricultural change	Changes in stocking patterns impacting on moorland vegetation patterns	Brecon Beacons
Agricultural change	Amalgamation of farms, with greater infrastructure requirements and larger buildings	Brecon Beacons
Agricultural change	Impacts on viability of farms, including rising fuel costs and changing markets	Brecon Beacons
Agricultural change	Agri-environmental schemes	Yorkshire Dales
Agricultural change	Drought driving increased development of farm reservoirs	Yorkshire Dales
Agricultural change	Uncertainty over the future of upland farming and forestry particularly in the light of Brexit and what changes to markets, policy and funding will follow.	Dartmoor, Howardian Hills
Agricultural change	Agricultural specialisation, intensification and farm amalgamation resulting in a loss of seminatural habitats and historic features, poor soil management and loss of traditional boundaries	Forest of Bowland

Appendix C Comparative assessment

Category	Force for change	Source
Agricultural change	Farm diversification	Shropshire Hills
Agricultural change	Intensification of farming	Shropshire Hills
Biodiversity	Roadside verge management regimes adversely affecting verges with special biodiversity interest	Forest of Bowland
Biodiversity	Lack of public funding for nature	Llŷn
Biodiversity	Changes in species distribution	Wye Valley
Birds of prey	Continued persecution and disturbance affecting birds of prey populations	Forest of Bowland
Disease	Vulnerability to disease - ash dieback and heather beetle	Yorkshire Dales, Gower (ash dieback)
Deer	Increasing deer numbers	Wye Valley
Energy	Wood fuel biomass demand and change in forestry management	Eryri, Yorkshire Dales
Forestry and woodland	Thinning and felling of plantation forestry	Eryri
Forestry and woodland	Inappropriate planting, management and felling regimes	Eryri
Forestry and woodland	Felling and replanting	Llŷn
Forestry and woodland	Restoration of former conifer plantations with native woodland	Eryri
Forestry and woodland	Expansion of commercial forestry	Yorkshire Dales

Appendix C Comparative assessment

Category	Force for change	Source
Forestry and woodland	Windblow of mature trees	Howardian Hills
Forestry and woodland	New diseases affecting tree species (no more larch being planted)	Howardian Hills
Forestry and woodland	Increased woodland planting, especially for flood management	Eryri
Forestry and woodland	Decline in traditional management of woodland	Brecon Beacons
Forestry and woodland	Woodland expansion	Yorkshire Dales
Forestry and woodland	Improved woodland management	Llŷn
Historic environment	Lack of investment in landscape elements and the historic environment	Yorkshire Dales
INNS	Invasive non-native species	Yorkshire Dales, Forest of Bowland (e.g. Signal crayfish in rivers; Himalayan balsam threatening bluebell woodland), Llŷn
Military	Changes in military strategy leading to changes in the military ranges	Yorkshire Dales
Moorland	Moorland management changes leading to decline in heather, more gorse, bracken and purple moor grass. Mosaics of vegetation have been replaced by one dominant species	Exmoor

Appendix C Comparative assessment

Category	Force for change	Source
Moorland	Changing attitudes to grouse shooting and potential impacts on moorland management	Yorkshire Dales
Moorland	Changes in economic viability of grouse shooting	Yorkshire Dales
Moorland	Heathland fires	Llŷn
Nature restoration	Land drains now being blocked to restore peat, restoration of wetland and bog habitats	Eryri
Nature restoration	Improved habitat connectivity and linear landscape features	Eryri
Nature restoration	Rewetting moorland / peatland restoration	Peak District, Exmoor
Nature restoration	Reconnecting rivers to more natural flood plains	Peak District
Nature restoration	Rewilding of some landscapes	Peak District, Yorkshire Dales
Nature restoration	Biodiversity net gain and/or biodiversity offsetting	Yorkshire Dales
Nature restoration	Catchment management to improve water storage e.g. Blanket bog restoration, and creation of washlands and wetlands on river floodplains	Yorkshire Dales
Nature restoration	Development of river catchment-based partnerships	Howardian Hills

Appendix C Comparative assessment

Category	Force for change	Source
Nature restoration	Riparian habitat management	Shropshire Hills
Nature restoration	Landscape scale habitat restoration and recovery	Yorkshire Dales
Policy	International conventions and obligations such as the European Landscape Convention, the Convention on Biodiversity and Climate Change Agreements	Forest of Bowland
Policy	New agricultural policy and support (e.g. 'public money for public goods'), as a result of the UK's exit from the European Union	Forest of Bowland, Howardian Hills,
Policy	Government ambitions to improve the environment, expressed in 'A Green Future: Our 25 Year Environment Plan for the Future', including the development of a 'Nature Recovery Network'	Forest of Bowland
Policy	Increased awareness and recognition of the value of natural capital and the associated ecosystem services that flow from these assets, such as carbon storage and sequestration, water quality, flood alleviation, recreation and people's health and well-being	Forest of Bowland

Appendix C Comparative assessment

Category	Force for change	Source
Policy	Uncertainty over future policy for agriculture and forestry	Dartmoor
Policy	New UK policy and funding for land management	Shropshire Hills
Soil	Nutrient enrichment and siltation of streams from soil erosion	Gower
Soil	Groundwater contamination with nitrate	Gower
Soil	Soil erosion along footpaths or from burnt areas	Gower
Soil	Loss of fertile topsoil from fields	Howardian Hills
Soil	Overgrazing	Gower
Soil	Overland flow	Gower
Soil	Erosion of soil and ground cover due to livestock, animal burrowing, vehicles and or people, bracken and trees, agricultural machinery of rotational burning	Yorkshire Dales
Soil	Loss of fertile topsoil from fields	Howardian Hills
Visitor impacts on land management	Dogs not under control	Llŷn
Water	Diffuse and point-source pollution of watercourses from both agricultural and non-agricultural sources	Forest of Bowland

People, communities and cultural heritage

C.6 Under the topic of people, communities and cultural heritage the forces for change are grouped by the following main themes.

- Built heritage and historic environment
- Culture
- Employment
- Historic environment
- Housing
- Land management and traditional skills
- Demographic trends
- Infrastructure and services
- Skills
- Transport
- Welsh language

Table C.4: People, communities and cultural heritage

Category	Force for change	Source
Built heritage and historic environment	Unoccupied buildings/ Under-use of traditional buildings	Exmoor, Yorkshire Dales, Llŷn
Built heritage and historic environment	Inappropriate development and utilities work	Gower
Built heritage and historic environment	Unsympathetic land management activities	Gower

Appendix C Comparative assessment

Category	Force for change	Source
Built heritage and historic environment	Recreational activities	Gower
Built heritage and historic environment	Scrub and vegetation encroachment	Gower
Built heritage and historic environment	Climate change	Gower, Exmoor, Wye Valley
Built heritage and historic environment	Agricultural and forestry works	Gower
Built heritage and historic environment	"Insect infestation and fungal growth in warmer, more humid conditions; structural problems, for example, caused by soils shrinkage in hotter, Drier summers; dilapidation to stonework caused by more frequent freezing/thawing; damage as a result of extreme weather; and the thermal movement of materials such as slate, lead, timber and Paintwork"	Gower
Built heritage and historic environment	Damage to archaeological remains by soil erosion and weathering	Howardian Hills
Built heritage and historic environment	Small but incremental changes to heritage assets due to amendments to PDR	Howardian Hills
Built heritage and historic environment	Unsympathetic modernisation work and fewer resources for planning enforcement	Howardian Hills

Appendix C Comparative assessment

Category	Force for change	Source
Built heritage and historic environment	Arable cultivation impacts on historic assets	Howardian Hills
Built heritage and historic environment	Climate change impacts on historic environment features	Gower
Built heritage and historic environment	Lack of care and maintenance	Llŷn
Built heritage and historic environment	Grants and projects bringing about positive change	Llŷn
Culture	The loss of local distinctiveness in cultures, traditions, economies and biodiversity	Brecon Beacons
Culture	Loss of local artefacts to collections outside of the area	Llŷn
Employment	Limited access to full time jobs locally	Forest of Bowland
Built heritage and historic environment	Damage from livestock, vehicles and vegetation encroachment remain the key risks for scheduled monuments	Exmoor
Built heritage and historic environment	Woodland planting and peatland restoration action risks to heritage assets	Exmoor
Housing	Decreasing demand for permanent residency housing	Yorkshire Dales
Housing	Housing costs	Brecon Beacons

Appendix C Comparative assessment

Category	Force for change	Source
Housing	Increased levels of commuting into the National Park	Yorkshire Dales
Housing	Increased risk and frequency of flooding in lowland areas/river valleys where most settlements are situated	Forest of Bowland
Housing	Lack of affordable housing for people working in the National Landscape	Shropshire hills, Forest of Bowland, Howardian Hills
Housing	Higher than average house prices	Exmoor
Land management and traditional skills	Loss of farming skills and traditions	Brecon Beacons
People	Limited employment opportunities	Llŷn
People	An ageing population and falling numbers of working age people living on Dartmoor; high house prices driven by the attractiveness of the National Park as a place to live; and low wage levels in key sectors such as agriculture, tourism and leisure	Dartmoor

Appendix C Comparative assessment

Category	Force for change	Source
People	Ageing farm workforce with fewer younger farmers to replace those that are retiring. This can lead to: i) fewer people to look after the land; ii) conversion of farm units into small gentrified hamlets; iii) increased commuting into neighbouring towns, resulting in more traffic on minor roads	Forest of Bowland
People	Aging population	Brecon Beacons, Exmoor
People	An aging farming population	Yorkshire Dales, Brecon Beacons
People	Increase in local population	Brecon Beacons
People	Decline in farming population	Brecon Beacons
People	Decline in the number of small family farms	Brecon Beacons
People	Increasing deprivation	Exmoor
People	Ageing population in general, leading to fewer young families and younger people living in the National Landscape, this in turn could result in a loss of skills, knowledge and engagement with the National Landscape	Forest of Bowland
Population change	In migration	Brecon Beacons, Llŷn

Appendix C Comparative assessment

Category	Force for change	Source
Services	Centralisation of processing facilities has reduced the ability of producers to supply local markets	Forest of Bowland
Services	Limited infrastructure	Brecon Beacons, Wye Valley
Services	Challenges to rural business from poor broadband	Forest of Bowland, Llŷn
Services	Loss of services in rural settlements due to economies of scale, changes in Government policy and reduced funding for public services, and changing purchasing habits leading to reduction in rural sustainability and negative impacts on those without a car	Forest of Bowland, Llŷn
Skills	Loss of traditional skills reducing the ability to effectively manage the traditional landscape features and buildings of the National Landscape	Forest of Bowland
Transport	Few public transport links and high cost of fuel	Exmoor
Transport	Lack of public transport and reliance on the private car	Forest of Bowland
Welsh language	Decline in Welsh speakers	Anglesey, Llŷn

Recreation, tourism and access

C.7 Under the topic of recreation, tourism and access the forces for change are grouped by the following main themes.

- Accommodation
- Levels of recreation and tourism
- Recreation facilities and types of recreation
- Traffic and travel

Table C.5: Recreation, tourism and access

Category	Force for change	Source
Accommodation	Increased demand for holiday lettings	Eryri, Llŷn
Accommodation	Increased demand for holiday homes	Llŷn
Accommodation	Increased demand for self-serviced accommodation	Llŷn
Accommodation	Campervan, caravan and camping sites	Anglesey, Gower
Accommodation	Increased accommodation and visitor facilities leading to increased pressure on car parks and recreational routes, sites used for shows and festivals	Yorkshire Dales
Levels of recreation and tourism	Increased recreation and tourism	Eryri, Shropshire Hills, Anglesey, Wye Valley

Appendix C Comparative assessment

Category	Force for change	Source
Levels of recreation and tourism	High levels of recreation pressure on key areas and infrastructure	Shropshire Hills, Eryri, Wye Valley
Levels of recreation and tourism	More use of footpaths resulting in erosion and scarring	Eryri
Levels of recreation and tourism	Increased popularity of Pembrokeshire Coast Path, now part of Wales Coastal path	Pembrokeshire
Levels of recreation and tourism	Pressures arising from increased visitor numbers, driven by new housing and development in surrounding areas leading to increased erosion; anti-social behaviour; traffic congestion; disturbance to wildlife and livestock; and resulting in conflicts with farmers and local communities.	Dartmoor
Recreation facilities and types of recreation	Increased provision for outdoor activities including sport and adventure	Eryri
Recreation facilities and types of recreation	Lack of maintenance of access routes, and coastal erosion, visitor pressure and climate change	Llŷn

Appendix C Comparative assessment

Category	Force for change	Source
Recreation facilities and types of recreation	Coastal activities such as coasteering and climbing, beach-based activities and access to the water put pressure on the coast, and associated infrastructure leads to disturbance, erosion, compaction and litter	Pembrokeshire
Recreation facilities and types of recreation	More visitors and wider range of activities and potential conflict between users	Gower, Llŷn
Recreation facilities and types of recreation	Changing expectations and visitor profiles - trend towards a wider range of visitors and visitor expectations, more participatory activities, large scale festivals and events, family friendly activities and educational trips, outdoor activities and environmental conservation activities	Yorkshire Dales
Traffic and travel	Traffic congestion	Anglesey, Llŷn
Traffic and travel	Growth in road traffic	Shropshire Hills
Traffic and travel	Increased promoted routes, connectivity and path improvement	Gower
Traffic and travel	Increased active travel provision	Gower
Traffic and travel	Increased levels of cycling, increase in electric cars, incremental changes in transport infrastructure	Wye Valley

Appendix D

Findings from stakeholder engagement

Event 1, 6th December 2023

10.4 The below text summarises the issues raised through the first stakeholder engagement event.

Discussion 1: Which forces for change were most relevant to each of the special qualities.

D.1 Development

- Development force for change is most relevant to; 'inspiring place' - accessibility and recreation; 'cohesive place' - settlement and development patterns/design; 'distinctive' - protection of key views; 'human interaction' - protection of features; 'species' - protective policies.
- Should the designation extend to include the majority of the AoS, the impact on renewable energy deployment potential could be significant and will become concentrated in other areas - similarly with grid infrastructure being directed to concentrated areas other regions can end up hosting a disproportionate burden.

D.2 Policy and funding

- Impact that policy has on land management - policy significant force for change for land management. No return on investment for farmers.
- Policy is an important force for change to consider - agri-environment schemes and governance structures, updated purposes. Strong duty of

Appendix D Findings from stakeholder engagement

regard in legislation for public bodies to work to the NP management plan vital as well.

- Responsibilities for public bodies- external forces coming into the National Parks- water cut across quite a few of the special quals.
- Similarly support the remark around the resourcing of the authority to support management of the park - pressures around planning decisions could also be intensified. Funds and resources available to both manage the park but also to fulfil their role as a consultee will be key.
- Sustainable management of natural resources in the area- impacts on wellbeing.

D.3 Access and recreational pressure

- lack of investment in PROW infrastructure - lack of funding in infrastructure- sustainable funding. - National Park designation brings in longer term funding and investment in the area. Opportunity to draw in other funding - maybe private.
- Need to take into account green infrastructure, support renewable development also accessibility,
- National Park has huge catchment area- more people, more recreational pressure- is area capable of handling more people?

D.4 Transport

- Need to mention public transport, in terms of inclusion, National Park may need to change approach to public transport- maybe can manage pressure via buses, Reward behaviour change.
- Sustainable transport infrastructure is a long way from becoming a reality, therefore more immediate impacts on the area from private transport.

D.5 Climate change

- Impact of climate change combined with recreation pressure - Soils are saturated, the carrying capacity of the soils reduced in winter- issue

Appendix D Findings from stakeholder engagement

relating to recreation- climate change will exacerbate this. Increased recreational pressure on historic features exacerbated by climate change

10.5 Forestry

- Forestry affecting landscape character.
- Forestry affecting underground archaeological remains - particularly damaging, especially where there are shallow deposits. It's easy to perceive all as static - but dynamic place. Historic environment is dynamic- data can get out of date quickly. Some FfC are also opportunities to discover more about historic environment. Need to recognise interlinkages between different activities and our response to them.

D.6 Minerals

- There is a very significant mineral extraction industry at Halkyn, Hendre and other sites. This will affect significant proportion of N Wales aggregate supply and mineral policy.

Discussion 2: Would you identify any additional forces for change for the area of search?

D.7 Land ownership

- The proportion in public/private hands.

D.8 Employment and economy

- Changes in the employment profile of the area -increase in environmental and tourism jobs? -lower pay and seasonal? Effects on the local economy? Possible loss of diversity in range of employment sectors -although they might be limited already?
- Game shooting would have an economic impact locally as well as it is a significant employer in some areas and brings in affluent customers.

Appendix D Findings from stakeholder engagement

D.9 Funding

- Post- Brexit funding for projects. (e.g. Horse Shoe Falls- improving infrastructure to help with pressures, public realm improvements, infrastructure improvements to attractions)
- Opportunity for new National Parks being part of just transition, supporting rural communities such as the example of levelling up funding in Denbighshire [\[See reference 139\]](#)

D.10 Renewable energy

- Reflecting that flexibility of approach for a "new " National Park - onshore wind and other types of renewable generation which contribute towards net zero could be afforded 'special infrastructure status.' i.e. any new National Park should be able to support renewables both within and adjacent to a Park's boundaries, particularly where there are existing sites, wind farm repowering and storage opportunities.

D.11 Biodiversity

- At risk species present in the area (red list species etc) - need to identify and protect.

D.12 Infrastructure

- Overarching connectivity is an issue - both in terms of broadband but also electricity (some houses are relatively off-grid in terms of heating and will need to decarbonise and move away from oil boilers etc.).

D.13 Historic environment and cultural heritage

- Historic environment and cultural heritage impacted by CC - more importantly impacted by CC mitigation measure - especially in regard to land management and forestry - in this area pressure is often in marginal areas which are more sensitive, upland landscapes and remote areas which haven't been developed - rich landscapes - areas sensitive to big

Appendix D Findings from stakeholder engagement

scale changes in land management and forestry - these areas have been relatively safe till now- policy pressure bring about larger scape change.

- World Heritage Site - promotion and management of tourism development is a key priority for LDPs, regeneration and the sites management plan.

Discussion 3: Which forces for change are priorities for North East Wales?

D.14 Energy:

- Net zero requires compromises.
- Transmission infrastructure (noted by three respondents).
- Renewable energy – the pre-assessed areas close to the AoS will mean a new National Park will need to adapt to this.

D.15 Transport:

- Transport network improvements- needs to be developed e.g. near Wrexham.
- There are issues with parking and infrastructure around parking.
- Increase use/availability of public transport.
- Old railways e.g. Wheeler Valley could be used as Greenways and encourage cycling and walking from nearby towns and villages.
- Transport network improvement.

D.16 Visitor pressure:

- Climate change combined with visitor pressure.
- Visitor Infrastructure and accommodation is already an issue in key areas now.

Appendix D Findings from stakeholder engagement

- Visitor infrastructure, development in the countryside and grid development.
- Important to recognise the link between development and people and communities. Local people must be able to undertake land management activities and meet their local needs in relation to travel, employment and access to services.

Events 2 and 3, Local Access Forum and Welsh Government, 15th and 17th January 2024

Discussion 1: Which forces for change were most relevant to each of the special qualities.

Energy development:

- Energy and electrical infrastructure was a widely discussed topic.
- It was noted that this is large issue for the Welsh Government going forward. Energy transmission will be hugely controversial issue and the National Park will change context of how planning works and have implications for energy plans.
- Electrical infrastructure in Wales is old and not fully fit for the future, therefore much of this will need to be replaced. This includes re-wiring the country for a clean energy system. There may be a preference for underground electrical infrastructure, however this will need to be considered carefully. Changes to the transmission grid, including from the UK government's strategic energy infrastructure plans, such as the energy security plan, will influence Wales' special qualities.

Appendix D Findings from stakeholder engagement

- It was identified that it may be useful to understand how the impact of renewable energy projects might lead to changes into other park authorities, as this area would have existing significant projects. In addition, that this could have implications on the interpretation of planning for other areas.

Cohesive communities:

- It was identified that a localism take is key for sustainable development in the AoS. Tourism and seasonal jobs don't aid in building cohesive communities, thus more important is the need for the AoS to provide well-paid, long term, secure and quality sustainable jobs that can offer development.
- There is also concern from communities they will lose planning powers. Local communities and local town councils also need to be engaged in the planning process. There was uncertainty regarding the need to develop a new planning authority.
- There was concern regarding the impact of National Parks on house prices.
- In addition, it was highlighted that the benefits (including economic wellbeing, employment, safeguarding and strengthening culture etc) for individuals and communities should be central to the proposal and that local ownership is critical. It was also highlighted that the benefits of local ownership could justify expenditure during a cost-of-living crisis. In addition, that lessons can be learnt from communities in National Parks during lockdown who were overwhelmed by increased numbers of visitors and associated issues.
- The importance of maintaining vibrancy of Welsh land communities was highlighted, in particular sustaining farming communities in North Powys.

Culture as a force for change:

- It was noted that culture is not explicit within the forces for change, though is relevant to many of the special qualities including inspiring spaces,

Appendix D Findings from stakeholder engagement

mental and spiritual wellbeing; cohesive communities, settlement patterns, human interaction with the landscape. There is therefore a need to make sure forces for change are linked to culture and show what's happening culturally in the AoS.

Access to and enjoyment of the landscape:

- Lack of maintenance of public rights of way is a barrier to the enjoyment of the AoS. There are currently approximately 10,000 outstanding reports regarding rights of way, Powys has the largest length of rights of way in Wales, and little money is spent on their maintenance.
- Public transport is also limited in N part of Powys which restricts access.
- There's an increasing desire for people to get out and enjoy countryside, that's not always easy in in Powys in the AoS, it's difficult to navigate outdoor recreation proposals.
- These challenges are exacerbated by funding being extremely limited. There is very little for ongoing maintenance, there is mainly only capital funding available which is project-based. In addition, the cost of living impacting on where people would like to go, which tends to be closer to home now. For funding challenges to be alleviated there needs to be either a change in foresight or community benefits from windfarms could help.

Diversification of farming:

- It was highlighted that it's important that farmers are able to diversify what they do, and that this may be impeded by the National Park designation. There are also concerns that planning problems have come through which restricts diversification in farming, in addition, the budget has been slashed for future of farming.

Discussion 2: Would you identify any additional forces for change for the area of search?

Development:

- Regarding the development force for change, the importance of considering embedding the Welsh language in development is key, ensuring it is visible and valued in how developments are taken forward, and balanced with the commitment to protect and promote Welsh place names.
- Another issue identified was regarding the quality of development in peripheral areas to the National Park (which is also an issue elsewhere, for example in the Brecon Beacons National Park). There could be displacement of different types of development, for example development outside the National Park can still have impacts inside, though this can potentially be resolved via planning policy.

Recreation, tourism, access and associated development:

- It was noted that, particularly since lockdown, increases in motorhomes have been placing significant pressure on local road infrastructure. This has become a very significant issue in places such as in the Pembrokeshire Coast National Park.
- It was noted that because of the Roads Review, WG will not be looking to build new roads.
- It was noted that developments to increase access need to ensure they are not further encouraging car use and therefore undermining the move to sustainable travel- for example via expansions of car parks.
- In the LAF workshop, it was highlighted that there are a number of honey pot sites in Powys e.g. Elan Valley, waterfalls in South Powys and Lake Vyrnwy, and there have always been high visitor numbers to these sites. Project funding being invested in these areas in response to visitor

Appendix D Findings from stakeholder engagement

pressures. There were spike changes in recreation during covid, this has not been an ongoing trend, though there is currently a trend of increased desire towards more local recreation opportunities such as local circular walks.

- Others did not agree that trends in honeypot visitor pressure have stayed the same, and that recreational investment should not be focused on specific sites, that people should be persuaded there are other places to go. It was noted that a National Park may not necessarily help this issue. In addition, it was highlighted that some sites can only be improved so much, and that these sites would therefore not be sustainable if a National Park designation were to result in increased visitor numbers. In addition, required improvements to recreational sites under pressure from visitors results in an economic impact. Therefore long-term benefits need to be considered, particularly in relation to the value to the local community, not only to tourists.

People, communities and culture:

- Health and wellbeing was identified as important, especially regarding increased social prescribing and its potential in supporting communities and engagement with nature.
- Forms of deprivation, access to services, health, income, housing were also identified for consideration.
- It was noted that economic wellbeing should be included alongside the need for quality long-term well-paid jobs in the AoS.
- It was noted that culture and Welsh language needs to be considered. It was questioned whether a national park would benefit these.

Land management:

- Many farmers will be thinking about changing enterprises in light of the current climate, in particular changing from traditional beef/sheep to dairy production which has significance for planning, air and water quality.

Recreation and tourism:

- Currently the quality of tourism-related development in the AoS, e.g. accommodation such as static caravans and glamping pods, is increasing quickly without the infrastructure to support it, which is unsustainable.

Discussion 3: Which forces for change are priorities for North East Wales?

Climate change:

- It was highlighted that climate change must come out as a main priority, and that this is a priority for and a significant issue for many Local Authorities.

Development:

- Limited transport infrastructure for access and broadband connectivity.

Recreation and tourism:

- Increasing pressure related to holiday homes and subsequent pricing out of locals. National Park would restrict development to meet demand.

Population and communities:

- Lack of employment opportunity of young people and maintenance of local employment. Better connectivity would help this.

Appendix E

Policy review information

Climate change

Future Wales

Summary description

- This is a 20-year national development plan that covers the whole of Wales. It has been produced by Welsh Government and covers the period up to 2040.
- Regarding Mid Wales the policy outlines:
 - To ensure the enhancement of biodiversity, the resilience of ecosystems and the provision of green infrastructure, the Welsh Government will work with key partners to:
 - identify areas which should be safeguarded and created as ecological networks for their importance for adaptation to climate change, for habitat protection, restoration or creation, to protect species, or which provide key ecosystems services, to ensure they are not unduly compromised by future development; and
 - identify opportunities where existing and potential green infrastructure could be maximised as part of placemaking, requiring the use of nature based solutions as a key mechanism for securing sustainable growth, ecological connectivity, social equality and well being.
 - The Welsh Government also is committed to developing a national forest through the identification of appropriate sites and mechanisms.

Low carbon delivery plan (2019)

Summary description

- The plan sets out the action that will be taken to cut emissions and support the growth of a low carbon economy through policy and how Wales is leading on the international stage with other States and Regions.
- Part 1: Vision
 - target to reduce emissions by at least 80% against the 1990 baseline.
 - communities will be more resilient to major environmental problems
 - low carbon economy
 - greater energy efficiency
 - capitalised on the opportunities for carbon storage
 - active travel more common
- Part 2 - Leadership, Integration, Collaboration and Involvement
- Part 3 - Sector Emissions Pathways targets
 - **Power:** take forward policies that will drive the low carbon transition, aiming for Power sector emissions will reduce by 37% from baseline levels [1990s] by the year 2030.
 - **Buildings:** zero emissions by 2050 will require changes to behaviours and the adoption and effective use of smart energy technologies, Buildings sector emissions will reduce by 40% from baseline levels by the year 2030 as a result of energy efficiency, low carbon heating and behavioural change measures.
 - **Transport:** Transport sector emissions will reduce by 43% from baseline levels by the year 2030 through behavioural change, uptake EV and reducing road and rail emissions.
 - **Industry:** emissions will reduce by 43% from baseline levels by the year 2030 by improving energy efficiency measures of material, energy

and processes, innovation and waste heat and increase of low carbon heat and industrial process measures.

- **Land use:** increase the land use sink in Wales by the year 2030 by increasing tree cover; and reducing carbon loss from peatlands and building carbon stores within biomass.
- **Agriculture:** emissions will reduce by 28% from baseline levels by the year 2030 through improved efficiency of livestock production, improved crop and nutrient management; and improved on farm fuel & energy efficiency.
- **Waste management:** Waste sector emissions will reduce by 92% from baseline levels by the year 2030 through reducing waste emissions from landfill, increasing measures to reduce emissions from water treatment.
- **F-gas sector:** emissions will reduce by 36% from baseline levels by the year 2030 through demand reduction for existing equipment, a ban on using the most carbon-intensive HFCs for the maintenance and servicing of existing refrigeration equipment from 2020.

Natural Resources Policy

Summary description

- The focus of the NRP is on improving the way natural resources are managed and sets out how the policies will be used to achieve this.
- Recognises the key challenge of tackling climate change and the role of ecosystem services and low-carbon material, food and energy resources and water efficient systems to reduce carbon footprint
- The NRP will set interim targets to reduce emissions for 2020, 2030, 2040 and five-year carbon budgets for 2016-2020 and 2021-2025

Net zero carbon status by 2030: public sector route map

Summary description

- Provides a strategic overview of the key priority areas for action and milestones needed for the Welsh public sector to reach net zero greenhouse gas emissions by 2030.
- 2022-2026 priority areas of action:
 - **Buildings:** firm proposals & business cases are in place for hard to decarbonise. Transition to all new schools, colleges and offices built to net zero, remaining buildings energy efficient.
 - **Mobility and transport:** Continued reduction car commutes and business travel, all new cars and light goods vehicles in the public sector fleet are ultra-low emission by 2025.
 - **Procurement:** reducing the carbon impact of goods and services, Targeted support and skills development within the supply chain to increase the proportion of Welsh suppliers who can deliver the required goods and services, purchasing activities have a robust carbon reduction phase built.
 - **Land use:** natural habitats for carbon sequestration and citizen well-being is integrated into planning public spaces and service delivery, acquisition of additional land to connect existing habitats, create woodland and manage natural regeneration and roll-out of woodland creation and habitat restoration projects.
 - **Governance and energy planning:** renewable deployment is now part of a wider energy and decarbonisation strategy, deliver the first phase of local area energy plans, the public sector is delivering its first tranche of emissions reduction based on the emissions baseline.

Planning Policy Wales 12

Summary description

- Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government, providing the policy framework for the effective preparation of local planning authorities' development plans.
- National sustainable placemaking outcomes:
 - Creating and sustaining communities
 - Growing our economy in a sustainable manner
 - Making best use of resources
 - Maximising environmental protection and limiting environmental impact
 - Facilitating accessible and healthy environments
- Focuses the planning system's role in tackling the climate emergency on the decarbonisation of the energy system and the sustainable management of natural resources.
- Places will be maintained which are resilient to the effects of social and economic change and are resilient in the light of the impacts of climate change.

Welsh Government Net Zero strategic plan (2022)

Summary description

- Aims of the Plan:
 - achieve net zero as an organisation by 2030, in doing so contributing to the collective 2030 Welsh Public Sector net zero target.

Appendix E Policy review information

- bring evidence from across the Welsh Government to outline priority decarbonisation initiatives.
- Sets out their carbon footprint: 156,545 tCO₂e.
- Strategic plan to reach net zero:
 - Integrate combatting climate change and the ecological emergency into every role.
 - Develop an internal communication and dissemination plan.
 - Promote the establishment of employee led sustainability groups.
 - Provide resources and tools that inform and quantify the carbon emissions impact of business choices.
 - Continue to roll out carbon literacy training across all staff.
 - Provide specialised training.
 - Include carbon emissions implications into business cases for investment and development of corporate policy.
- 54 initiatives that provide the foundation for the Welsh Government to progress towards net zero. These are surrounding:
 - Buildings and infrastructure
 - Corporate fleet
 - Business travel
 - Smart working
 - Supply chain – purchased goods and services
 - Land use:
- Review the Welsh Government's land holdings and green infrastructure assets.
- Identify and prioritise key strategic opportunities.
- Maintain and enhance the resilience of ecosystems and carbon sinks.
- Target environmental net gain for developments

Appendix E Policy review information

- Require an energy report for all major development activities (by Welsh Government or third-party developers) on owned land.
 - Residual emissions and offsetting

Built development and infrastructure

Future Wales

Summary description

- This is a 20-year national development plan that covers the whole of Wales. It has been produced by Welsh Government and covers the period up to 2040.
- Regarding Mid Wales the policy outlines:
 - 1800 new homes to be delivered over the plan period including affordable housing (61%).
 - Sustainable growth and development in a series of Regional Growth Areas.
 - Regional Growth Areas should meet the regional housing, employment and social needs of Mid Wales.
 - The Regional Growth Areas are: The Teifi Valley, (including Cardigan, Newcastle Emlyn, Llandysul and Lampeter), Brecon and the Border, The Heart of Wales (including Llandrindod Wells and Builth Wells), Bro Hafren, (including Welshpool and Newtown) and Aberystwyth.
 - Development across the regions to meet local needs.
 - Support for the growth and development of existing and new economic opportunities.
 - Strategic and Local Development Plans must develop policies that support agricultural and land based traditional rural enterprises.

Appendix E Policy review information

- Providing a flexible framework to support the development of new, innovative and emerging technologies and sectors.
- Joint working to ensure transport investments improve accessibility across Mid Wales and strengthen cross border transport links.
- Plan growth and regeneration to maximise the potential opportunities arising from better regional connectivity.
- Regarding North Wales the policy outlines:
 - National Growth Areas of Wrexham and Deeside
 - Regional Growth Area of North Wales Coastal Settlements
 - Plans for the North Wales Metro

Planning Policy Wales 12

Summary description

- Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government, providing the policy framework for the effective preparation of local planning authorities' development plans
- The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales.
- Focuses on strategic placemaking by focussing on active and social places, productive and enterprising places, distinctive and natural places.
- The PPW seeks to meet diverse and evolving needs of communities by creating diverse spaces that cater to various housing requirements, promoting accessibility and connectivity of sustainable transport networks and community engagement.
- It underscores the importance of safeguarding natural resources, biodiversity and ecosystems through climate change adaptation and mitigation, water resource protection and green space preservation.

Wales Infrastructure Investment Strategy

Summary description

- The Wales infrastructure investment strategy 2021 (WIIS) sets out the Welsh Government's 10-year vision of the outcomes that investment in infrastructure should enable.
 - The intended outcomes of this strategy include:
 - Decarbonisation and greenhouse gas reduction
 - Investment in Biodiversity and Natural Capital
 - Improvements in air and water quality
 - Reduction in unsustainable consumption of natural resources
 - Improving and protecting the mental and physical health, safety and well-being of the people of Wales
 - Reducing social inequalities
 - Improving access to key public services
 - Increase real household incomes
 - Improve access to and increase use of the Welsh Language
 - Encourage access to and participation in cultural activities, including the arts and heritage
 - Improve participation level in sport and recreation
 - Improve investment in communities across all parts of Wales
- Key relevant actions include:
 - supporting modal shift based on the transport hierarchy and supporting ultra-low emissions vehicles over other private motor vehicles

- in the enabling infrastructure, including designated landscapes, to allow access to green and blue spaces, and maximise the usage of environmental assets
- Where critical infrastructure investments have an unavoidable impact on biodiversity and our natural environment, we will invest in offsetting measures to minimise and mitigate those impacts
- improving the fabric of town centres, creating the environment needed for accessible public services

Wales Transport Strategy 2021

Summary description

- The priorities and aims of the Wales Transport Strategy 2021 are to:
- Bring services to people in order to reduce the need to travel.
 - support remote working, in line with our wider Welsh Government target of 30% of the workforce to work remotely on a regular basis.
 - locate new public services such as education, health and leisure facilities close to where people live, and to existing public transport routes, adopting a Town Centre First approach.
 - design new developments to be walk- and cycle-friendly from the outset
- Allow people and goods to move easily from door to door by accessible, sustainable and efficient transport services and infrastructure.
 - extend the geographical 'reach' of public transport into every community, especially in rural Wales.
 - review our mandatory and voluntary concessionary fares schemes to encourage shift to public transport from cars.
 - make it easier to switch between different types of transport including public transport, active travel, taxis and options such as community

Appendix E Policy review information

transport so people can be more confident about leaving the car behind.

- adapt existing infrastructure to climate change by addressing issues such as flooding.
- adapt infrastructure to support modal shift.
- use the Sustainable Transport Hierarchy to give priority to interventions that support walking and cycling, public transport and ultra-low emissions vehicles over other private motor vehicles.
- explore future infrastructure improvements that reduce carbon emissions, including infrastructure for new fuels such as hydrogen, technology that facilitates more sustainable aviation and cargo operations, and materials innovation that improves service life, speed of construction and maintenance and reduces environmental impacts.
- Encourage people to make the change to more sustainable transport.
 - move away from individual vehicle ownership to shared solutions, including car-sharing, car clubs, bike sharing and mobility as a service.
 - develop a framework for fair and equitable road-user charging in Wales and explore other disincentives to car use, taking into account equality issues including needs of people in rural areas, people who share protected characteristics and people on low incomes.
 - use new revenue sources to fund large improvements in public transport services and active travel facilities.
 - reduce the cost of sustainable travel.

Renewable energy

Future bill to be introduced to introduce Welsh Infrastructure Consent

Summary description

- Simplification of the consenting process for decarbonisation, sustainable journeys and innovation in renewable energy.

Future Wales

Summary description

- Supports a low carbon economy and the decarbonisation of industry, and the growth of sustainable and renewable energy.
- Identifies Pre-Assessed Areas where the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. There is a presumption in favour of large-scale wind energy development (including repowering) in these areas, subject to other criteria contained within the policy.
- Makes clear that in determining planning applications for renewable and low carbon energy development, decision makers must give significant weight to the need to meet Wales' international commitments and our target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency.

Net Zero Wales

Summary description

- All future public sector properties being built or undergoing major refurbishment must achieve a net zero standard by 2030, building on existing funding, such as the £29m invested with the support of the Energy Service in 2020-21, in insulation, control systems, lighting, ventilation, low carbon heating, building integrated renewables and roof mounted solar projects within the public sector estate.
- Qualitative target to directly contribute to renewable electricity generation capacity to meet the 1GW local ownership target for Wales by 2030.
- To achieve net zero, the Welsh Government aims to:
 - Install on-site renewable energy capacity to a maximised scale.
 - Optimise operational performance across the heritage estate through the continued roll-out of energy efficiency measures and meeting energy demand from low carbon sources wherever practically feasible (including low carbon heat and renewable power generation)
 - Assess feasibility and, wherever viable, install on-site renewable energy generation to maximise the proportion of zero-carbon electricity consumed at their sites
 - Identify and prioritise key strategic opportunities where maintenance and/or adaptation of owned land holdings could deliver the most significant environmental benefit, including land suited to renewable energy development (e.g., brownfield sites).
 - Require an energy report for all major development activities on their owned land, which will set out how energy efficiency and renewable energy opportunities will be maximised in the development.

Planning Policy Wales 12

Summary description

- Increased renewable energy generation: The Welsh Government has set targets for the generation of renewable energy including for Wales to generate 70% of its electricity consumption from renewable energy by 2030.
- New grid infrastructure: The Welsh Government's preferred position on new power lines is that, where possible, they should be laid underground. However, it is recognised that a balanced view must be taken.
- Local authorities should facilitate all forms of renewable and low carbon energy development and seek to ensure their area's full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved.
- Development plans should support identified opportunities for heat networks, local renewable and low carbon energy generation schemes, and the co-location of new proposals and land allocations with existing developments, heat suppliers and heat users.
- Planning authorities should also identify and require suitable ways to avoid, mitigate or compensate adverse impacts of renewable and low carbon energy development.
- All new developments are expected to mitigate the causes of climate change in accordance with the planning energy hierarchy. This hierarchy places a priority on reducing demand and ensuring energy efficiency in developments, alongside increasing renewable energy generation.

Wales Infrastructure Investment Strategy

Summary description

- Welsh Government is working with networks to take a long-term view of the grid Wales will need for 2050. New grid infrastructure will be required to support new renewable energy development.
- Grid and port development will be required to support offshore renewable energy.
- The strategy aims to support innovation in new renewable energy technology and continue to develop community and publicly owned energy generation capacity in Wales, building on published policy to increase the amount of locally owned energy generation in Wales.
- The strategy aims to work towards introducing a Bill in the near future which realises the ambition of a Welsh Infrastructure Consent, to help deliver our goals in relation to decarbonisation, sustainable journeys and supporting innovation in renewable energy.

Minerals, quarrying and waste

Future Wales

Summary description

- In Powys a number of sandstone and igneous rock quarries supply High Specification Aggregate material to England, particularly to adjoining parts of the West Midlands.

Natural Resources Policy (2019)

Summary description

- The focus of the NRP is on improving the way we manage our natural resources and sets out how the policies will be used to achieve this.
- To build resilience into Wales' ecosystems, the policy aims to:
 - to increase waste prevention and promote reuse, recycling and recovery.
 - ensure the sustainable extraction of minerals, maximise the use of recycled aggregates.
 - promote the efficient use of aggregate material while avoiding adverse effects on Wales' other natural resource assets.
 - support a more resource efficient economy waste management to become a lower carbon, circular economy.

Planning Policy Wales 12

Summary description

- Future changes to nature and type of infrastructure required to support a transition towards circularity of materials and management of waste
- Mineral resources should be safeguarded
- Presumption against minerals development in National Parks and National Landscape.

Wales Infrastructure Investment Strategy

Summary description

- Waste reduction and embedding circular economy principles
- Appropriate re-use of materials and recycling of waste in our local communities
- [no minerals references]

Land management and natural environment

Agriculture (Wales) Act 2023 (Agriculture (Wales) White Paper (2020), Sustainable Farming and our Land (2019), Brexit and our land: Securing the future of Welsh farming (2019)).

Summary description

- The main source of future Government support for farmers in Wales underpinned by the Act will come through the proposed Sustainable Farming Scheme.
- Paves the way for the banning of snares and glue traps
- Provides tenant farmers with a route to dispute resolution to ensure they are not unfairly restricted from accessing financial assistance.

Appendix E Policy review information

- Alters the Forestry Act 1967 to give Natural Resources Wales the power to add conditions to amend, suspend or revoke felling licenses to prevent felling that would contradict other environmental legislation.
- Establishes four Sustainable Land Management (SLM) objectives:
 - to produce food and other goods in a sustainable manner;
 - to mitigate and adapt to climate change;
 - to maintain and enhance the resilience of ecosystems and the benefits they provide; and
 - to conserve and enhance the countryside and cultural resources and promote public access to and engagement with them, and to sustain the Welsh language and promote and facilitate its use
 - More trees, more hedgerows, improving animal health

Brexit and our land: Securing the future of Welsh farming (2019)

Summary description

- Proposed a new sustainable farming scheme, split into two flexible schemes – public goods and economic resilience.
- Five key principles to support the proposed land management programme:
 - keep farmers, foresters and other land managers on the land
 - continuing to support the economic activities of farmers where it is sustainable and financially viable
 - builds a prosperous and resilient Welsh land management industry
 - future support will encompass the provision of additional public goods from land
 - all land managers should be able to access new schemes

Future Wales 2040

Summary description

- The plan outlines the Wales must continue to value and protect our agricultural land and ensure it can feed and support Welsh people.
- It outlines that agriculture relies on healthy functioning ecosystems and the response to the climate emergency needs to align with the need to address the twin challenge for biodiversity.
- Sets out policies that support the agricultural sector including:
 - Supporting the rural economy – via supporting the sustainable, appropriate and proportionate economic growth in rural towns that is planned and managed through Strategic and Local Development Plans.
 - Growing the Mid Wales Economy - Strategic and Local Development Plans must develop policies that support agricultural and land based traditional rural enterprises

Natural Resources Policy

Summary description

- The focus of the NRP is on improving the way Wales manages its natural resources and sets out how the policies will be used to achieve this.
- To deliver the NRP, we must align our policies to the delivery of the national priorities we have identified. The actions for the ‘agriculture and food’ key policy area includes to:
 - support work to improve the resilience of supply chains across agriculture and food

Appendix E Policy review information

- support businesses to diversify and take advantage of existing and emerging markets
- maintain and enhance farmland biodiversity, habitats and historic features
- support development of resilient supply chains across agriculture and food
- support opportunities for anaerobic digestion of food waste as an opportunity for diversification
- continue to co-ordinate and embed best practice for the sustainable management of soil resources

Sustainable Farming Scheme Outline Proposals for 2025 (2022)

Summary description

- This document sets out more detail on proposals for the Sustainable Farming Scheme (the Scheme). The Scheme will be the main source of future Government support for farmers in Wales.
- Establishes four sustainable land management objectives:
 - produce food in a sustainable manner
 - mitigate and adapt to climate change
 - maintain and enhance the resilience of ecosystems and the benefits they provide
 - conserve and enhance the countryside and cultural resources, promoting public access and engagement with them.
- Series of proposed actions to achieve objectives/ outcomes:
 - Resilient and productive farms

- Reduce, reuse and recycle inputs, nutrients and waste
- Reduce on farm emissions and maximise carbon sequestration
- Protect and enhance the farm ecosystem
- Benefit people, animals and places

Forestry and woodland

Grey squirrel management action plan for Wales

Summary description

- This plan sets out actions for the management of grey squirrel populations to:
 - reduce the impact on red squirrel populations
 - reduce the impact on trees and woodland ecosystems, and
 - reduce the impact on the services they provide, such as timber production
- The plan does not aim to eradicate grey squirrels from Wales. It:
 - aims to encourage the management of grey squirrel populations. This is where it is feasible to do so, and where the benefits are greatest.
 - recognises the need for a collaborative partnership approach to the grey squirrel management
 - supports the Red Squirrel Conservation Plan for Wales. This maximises the benefit to red squirrel populations. It also promotes existing best practice developed for grey squirrel management.

National Forest for Wales

Summary description

- A national forest will help achieve woodland creation targets and improve well-being for people and communities.
- The national forest will comprise of three strands:
 - Quality environment which comprises connected ecosystems, biodiversity and habitats, restoration of undermanaged woodland and ancient woodland;
 - Productive woodland; and
 - Community woodland.
- The forest will be a national asset which could provide jobs in productive forestry, leisure, tourism and other sectors. The forest or woodland sites will be dispersed across a number of locations and will act as a catalyst for improving land in need of regeneration. Infrastructure or development proposals which require planning permission and forming part of this project will be supported.
- There is an opportunity for the national forest to be linked by green infrastructure incorporating active travel facilities and to become an important asset for local people and tourists.

Natural Resources Policy

Summary description

- The focus of the NRP is on improving the way we manage our natural resources.

Appendix E Policy review information

- Developing nature-based solutions: Increased canopy cover and well located woodland, for example close to towns and cities where it will have the greatest recreational and ecosystem service value.
- To deliver the NRP, the plan sets out to align policies to the delivery of the national priorities we have identified. The actions for the ‘trees and woodland’ key policy area include to:
 - encourage good forest design and sustainable management
 - improve the climate resilience of the forest resource and its capacity to resist pests and diseases
 - Increase and improve the connectivity between our hedgerows
 - promote increased community ownership or management of woodlands as a local resource.
 - work across government to support the higher value use of our timber resources, in particular in the construction of high-quality housing.
 - carefully manage trees and woodland that have high environmental values

Phytophthora ramorum: disease management strategy (2019)

Summary description

- This Phytophthora ramorum Strategy for Wales aims to:
 - Minimise the social, economic, environmental and cultural impacts of P. ramorum
 - Use a scientific and evidence-based approach to manage P. ramorum
 - Use a risk-based approach for decision making
 - Engage with stakeholders on significant changes in the management and understanding of the pathogen in woodlands

Appendix E Policy review information

- Monitor the spread of the disease, publish the findings and raise awareness of the disease
- Ensure the management response to infected larch is fit for purpose
- Encourage the management of larch woodlands in Wales

Science and innovation strategy for forestry in Great Britain (2020)

Summary description

- This strategy provides a framework for forestry-related scientific research. It also aims to support the management of our forests, woodlands and trees in England, Scotland and Wales.
- This framework recognises the key role the sector has in:
 - addressing the challenges of reversing the decline in biodiversity, climate change, and
 - supporting the green recovery from COVID-19, and science and innovation's contribution in this
- The strategy sets out high level outcomes, themes and areas of research interest. These have been identified by the Welsh, UK and Scottish Governments and forestry stakeholders. This includes research on the following themes:
 - sustainable forest management in light of environmental change
 - markets for forest products and services
 - societal benefits from trees, woods and forests
 - resource assessment and sector monitoring
 - achieving multiple ecosystem benefits
 - woodland creation and expansion

- tree health and biosecurity

Woodlands for Wales (2018)

Summary description

- 50-year strategy for woodlands and trees in Wales. It outlines Welsh Government's vision and targets for Wales' trees, woodlands and forest.
- Commitment to bring more woodlands into management, expand woodland cover in Wales and increase the resilience of woodlands and trees to deliver more benefits for the public.
- Some of the main aims include:
 - at least the minimum planting rate of 2,000ha each year from 2020 and over time to increase planting to levels that enable Wales to deliver the legal obligation we entered into with the Environment (Wales) Act 2016 to reduce emissions by 80% from their pre-1990 levels by 2050.
 - The Welsh Government's own woodlands are managed using the principles of the sustainable management of natural resources and in line with the UKFS by NRW and are independently certified through the UKWAS.
 - There is appropriate diversification of the age structure and tree species and the genetic base of woodlands
 - Woodlands and individual trees in Wales are valued by their owners and society for the whole range of goods and services provided
 - Farmers have better support for managing their woodlands and trees
 - Woodlands and trees are used more creatively in the green infrastructure

People, communities and cultural heritage

A healthier Wales: long term plan for health and social care

Summary description

- The plan's vision: everyone in Wales should have longer healthier and happier lives, able to remain active and independent, in their own homes, for as long as possible
 - A whole system, accessible approach to healthcare
 - Services which are seamless, delivered as close to home as possible
 - Using technology to support services
- Published national design principles and actions for delivering vision (to be achieved by 2019-2021):
 - New Models of Seamless Local Health and Social Care - The national primary care contracts will be reformed to enable the delivery of seamless local care and support
 - Transformation programme - Existing programme boards, networks, delivery mechanisms, and initiatives supporting strategic change will be reviewed
 - Improving Quality and Value - A small number of priority areas which offer opportunities to drive higher value health and social care will be invested in.
 - Digital and Data - A national data resource which allows large scale information to be shared securely and appropriately will be established.

Appendix E Policy review information

- Sustainable health and social care funding - A review of capital and estates investment will be undertaken.
- Continuous Engagement - “Future Health and Social care” engagement programme will be jointly delivered by all partners.
- The Health and Social Care workforce - Intensive learning academies focussed on the professional capability and system leadership will be established.
- National and regionally integrated planning - A national clinical plan for specialist health services setting out our strategic approach to delivering safe and high-quality health services will be developed.
- Integrated performance management and accountability - Joint inspection, to include partnership working, pooled budgets and joint commissioning to be introduced.
- National Executive Function - Specialist advisory functions, hosted national functions and other national delivery programmes, will be reviewed with the aim of consolidating national activity and clarifying governance and accountability.

Community Cohesion National Delivery Plan (2016)

Summary description

- The new Plan builds upon progress made from 2014-16 and outlines goals with actions and current performance upon seven outcome areas:
- Hate crime:
 - Sustainable local / regional structures to take forward proposed framework.
 - Departments, organisations and people have clear and accurate information to signpost and increase hate crime reporting.

Appendix E Policy review information

- Inclusion of Gypsies and Travellers:
 - Social tension is managed through accurate and timely information for all parties.
 - The needs of Gypsy and Traveller people are promoted, including through the Site Selection process and the Health Needs Assessment.
- Immigration:
 - Partners and Departments understand local migration patterns and their implications.
 - Support of Local Authorities through implementation of the Syrian Resettlement Programme and Afghan Relocation Scheme.
- Tackling poverty:
 - Tackling Poverty Programmes are considering the impacts of the programmes on those with relevant Protected Characteristics.
 - Staff within tackling poverty programmes receive support on community cohesion priorities.
- Mainstreaming cohesion:
 - Local Authorities are supported to deliver against the national goal of 'more cohesive communities'.
 - Local and regional Strategic Equality Plans are supported to focus on links between equality and cohesion.
- Tension monitoring:
 - Local Authorities recognise and respond at an early stage to address community tensions.
 - Support Local Authority Single Point of Contacts to manage delivery and work through Prevent and emergent legislation and policies.

Cymraeg 2050: Welsh language strategy and action plan

Summary description

- 'Cymraeg 2050' includes two main targets:
 - The number of Welsh speakers to reach one million by 2050.
 - The percentage of the population that speak Welsh daily and can speak more than just a few words of Welsh to increase from 10% (in 2013 to 2015) to 20% by 2050.
- Based on three strategic themes, outlining aims and areas of focus:
 - Increasing the number of Welsh speakers.
 - Next target of opening 60 groups during this Senedd term, to reach the goal of 150 new early years groups by 2026.
 - Focuses include apprenticeships, funding, language programmes, education
- Increasing the use of Welsh.
 - Aims to reach one million speakers and then double the numbers who use Welsh every day.
 - Focuses include communities, language transmission, language spaces, young people
- Creating favourable conditions – infrastructure and context.
 - Focuses include affordability of housing for Welsh speakers, linguistic infrastructure, digital technology, Welsh place names, promoting Welsh in an international context, broadcasting and culture.

Historic Environment Strategy for Wales (2013)

Summary description

- This strategy summarises the areas which the Welsh Government will prioritise for action during the next three and a half years.
- It sets out the actions of valuing and using historic environment assets:
 - Published Conservation Principles which both advocate sustainable management of the historic environment and provide a coherent framework for articulating the values of heritage sites
 - committed to sustaining and developing the knowledge, records and information on which all our conservation, public interpretation and enjoyment of our historic environment is founded.
 - propose developing an all-Wales collaborative framework that will facilitate the delivery of actions supporting three inter-related areas of activity relating to the historic environment: conservation and sustainable management; the advancement of our knowledge and understanding; and the promotion, interpretation and provision of public access.
- The actions set out for heritage protection and sustainable development:
 - Action is already under way to establish a Register of Historic Battlefields and the possibility of introducing a formal status for registered battlefields and historic parks and gardens is now under active consideration.
 - need to move with the times with regard to policy guidance for the conversion and modification of religious buildings
 - encourage the work already begun on heritage-led or heritage informed regeneration.
 - engaging with Natural Resources Wales to take forward the 'Living Wales' agenda

Appendix E Policy review information

- The actions set out for public participation, understanding and enjoyment:
 - We want to ensure that heritage sites are accessible and enjoyable places both for visitors to Wales and for people who live in Wales.
 - Developing new and broader audiences for the historic environment, for example through events, using creativity as a principle of deliver.
- The actions set out for economy:
 - need now to maximise the impact and visibility of Wales's heritage icons, including its World Heritage Sites
 - Heritage service providers, including private owners and public organisations, need to generate income both to maintain and conserve historic fabric and to reinvest in the product and the core purpose of the service

Light Springs through the Dark: A Vision for Culture in Wales (2016)

Summary description

- Aims of the document:
 - Remind people how important culture is to protect and enhance our quality of life.
 - Promote more debate within Welsh politics and society about the value of culture, and how best we can work together to nurture and promote it.
 - Encourage bright ideas and initiatives, from whatever source.
 - Set out ambitions for culture for this Assembly term, and TO unite efforts across Government to extract maximum value from investment in Culture.

Appendix E Policy review information

- The document identifies contributors to the Welsh culture and opportunities for enhancement for the following areas: Economy, tourism, regeneration, international, health and social care, education, tackling poverty & disadvantage, equalities, the Welsh language, volunteering, digital, media and broadcasting
- Seeks support from local government, sponsored bodies and lottery distributors and cultural organisations

Priorities for the Historic Environment of Wales (2018)

Summary description

- Builds on the Historic Environment (Wales) Act 2016 with main themes of ambition for the historic environment of Wales:
 - build on progress made in caring for historic sites and to ensure that we have the skills across the sector to support their conservation
 - To help people enjoy and appreciate our historic sites, and to encourage greater and more active participation in looking after our heritage.
 - to realise fully the contribution that the historic environment can make to our economic well-being.
- Sets out the challenges, opportunities and actions for the priorities identified:
- Caring for our historic environment – guidance published to support the act
 - Making skills matter - At least a third of all the buildings in Wales have been built using traditional construction methods. It is vital that we have the right skills in place to conserve, repair and maintain them.

Appendix E Policy review information

- Cherishing and enjoying our historic environment: free access, encourage younger visitors, increase accessibility, use volunteer potential
- Making our historic environment work for our economic well-being - in 2016 it was estimated that it contributes £963 million per annum to the Welsh economy and supports over 40,500 jobs. Welsh Government will be spending £9.4 million over the next three years to further enhance the visitor experience at Cadw sites
- Delivering through partnership – issue with local authority funding, at national level new strategic partnership between Cadw and the other three national heritage organisations in Wales.

Town centres: position statement (2023)

Summary description

- This statement sets out the challenges faced by towns as well as the actions the Welsh Government will take through policy to set the foundations for change and enable local delivery to develop town centres as locations for a range of services, economic enterprise, employment and to be connected communities.
- Challenges:
 - Movement of services from town centres to out of town
 - Business model issues
 - Out of town locations reinforced by private car dependency
 - Climate and nature emergencies
 - Local capacity to deliver
- Town centre first policies actions:
 - develop a long-term plan for the location and/or relocation of public services into town centres, supported by the appropriate asset

Appendix E Policy review information

- management strategies and associated governance structures of public service bodies.
- understand the revenue and capital spending and procurement frameworks of key public sector institutions.
 - establish consortia of social landlords and private developers to enable housing developments in appropriate locations.
 - Actions for out of town and their connectivity to town centres policies:
 - strengthen the implementation of the Town Centre First policy in planning and to propose new plans for the reuse of out of town developments.
 - guidance for the preparation of Regional Transport Policies will require Corporate Joint Committees to consider wider policies including Town Centre First
 - explore a fair and equitable ‘benefits and charges packages’ approach to introducing any new demand management schemes, looking at ways to improve services before charges or introduce lower fares when charging starts.
 - Joined up Delivery actions:
 - the Transforming Towns programme funding must be targeted at the places where it can support transformational opportunities and under a placemaking plan which has been developed locally across all sectors.
 - consider options to support the capacity for delivery and the provision of specialist support.
 - analyse the barriers and identify opportunities to ensure Green Infrastructure and nature-based solutions, using circular economy principles, are embedded.

Wales Infrastructure Investment Strategy

Summary description

- Infrastructure investment programmes must embody the value of social justice and move to eliminate inequality in Wales
- Aims to improve and protect the physical and mental health, safety and well-being of the people of Wales via:
 - investing in innovative housing and accommodation to meet care needs.
 - designing flood defence infrastructure to prioritise protection to those communities most at risk, whilst also ensuring that we prevent more people becoming exposed to risk
 - prioritising new active travel infrastructure through investment
 - ensuring that our strategic infrastructure investments protect the safety and lives of the people of Wales.
 - investing in sports infrastructure that provides the opportunity for the associated health and well-being benefits to be recognised.
 - ensuring investment in infrastructure that supports cultural activities reflects the benefits to mental well-being which those activities can deliver.
 - investing in community owned infrastructure to deliver improved mental health and well-being outcomes alongside improvements in community cohesion.
- Aim to reduce social inequalities via:
 - ensuring that investment in housing provides people in Wales access to good quality, suitable, and affordable homes
 - prioritising infrastructure investments to ensure that there are appropriate and accessible places for these services to operate from

- Aim to improve access to key public services via:
 - Investing in infrastructure that enables a stable and coherent network of public transport services, fully integrated with other modes of transport, which are reliable, affordable and adapted to people's needs
 - Ensuring that strategic regeneration investments are targeted at improving the fabric of town centres, creating the environment needed for accessible public services.
 - Aligning investments to activity that drives the development of community infrastructure which helps citizens to reduce waste.
 - Investing in utilising and adapting our existing network of public infrastructure to enhance and improve access to public services.

Recreation, tourism and access

An Active Travel Action Plan for Wales (2016)

Summary description

- The purpose of the plan is to set out:
 - the Welsh Government's vision for active travel and how it relates to the plan's wider aims
 - how the Welsh Government will work with others to achieve the changes required
 - how the Government will embed consideration of active travel across different portfolios including legislation, infrastructure and promotion and behaviour change.
 - how the Government will monitor progress against these actions and the rates of active travel across Wales

- The vision is that for walking and cycling to become the preferred ways of getting around over shorter distances.

Facilities for Future Generations: A blueprint for sport and active recreation in Wales (2016)

Summary description

- The aim of the blueprint is to achieve a landscape of modern, fit for purpose, and sustainable sports and leisure facilities that deliver increased levels of participation and support sporting success.
- Has a series of local actions surrounding improving the provision of facilities, government support, community engagement and securing appropriate future management models
- The document sets out a future facilities framework with three levels, with the third level achieving large, strategic, specialist sport and/or leisure/tourist attractions – nationally or regionally significant – most commonly provided by Local Authorities, Universities, the Private Sector and some National Governing Bodies.

Outdoor Recreation and Access Enabling Plan 2015 – 2020

Summary description

- Presents objectives for outdoor recreation and access.
- The overarching aim of this Enabling Plan is that Wales has more people participating in and benefitting from outdoor recreation more often.
- This is in order to:

Appendix E Policy review information

- Increase people's appreciation of and care for the environment
- Improve social equity and cohesion of people and communities
- Increase the economic benefits of recreation to Wales
- Improve people's health and wellbeing
- This is hoped to be achieved through ensuring that:
 - Access opportunities are provided and improved that best meet people's needs for recreational enjoyment of the outdoors
 - Promotional information and engagement about recreational access opportunities are widely available in appropriate formats
 - Recreational users have an increased understanding of how to act responsibly in the natural environment
 - Effective planning for the sustainable recreational use and management of natural resources is embedded in NRW's work
 - Effective mechanisms for the delivery of the benefits of outdoor recreational activity are developed and embedded in NRW's work

Sport and physical activity strategy (Climbing Higher) (2005)

Summary description

- The Welsh Assembly Government's long-term strategy for sport and physical activity, setting out its strategic direction in Wales for the next twenty years. The purpose of this strategy is that within 20 years sport and physical activity will be at the heart of Welsh life and at the heart of Government policy.
- The priorities for sport and physical activity are identified and can be summarised as:

Appendix E Policy review information

- Wales needs to be more physically active in order to be a healthier nation;
- Wales needs healthy citizens to deliver long-term prosperity;
- Wales needs to maximise the synergy between sport, physical activity and the natural environment;
- Wales needs its people to be more 'physically literate';
- Wales needs more physically active communities and;
- As well as the success of individuals, Wales needs systematic and sustainable success in priority sports

Welcome to Wales: Priorities for the visitor economy 2020 – 2025.

Summary description

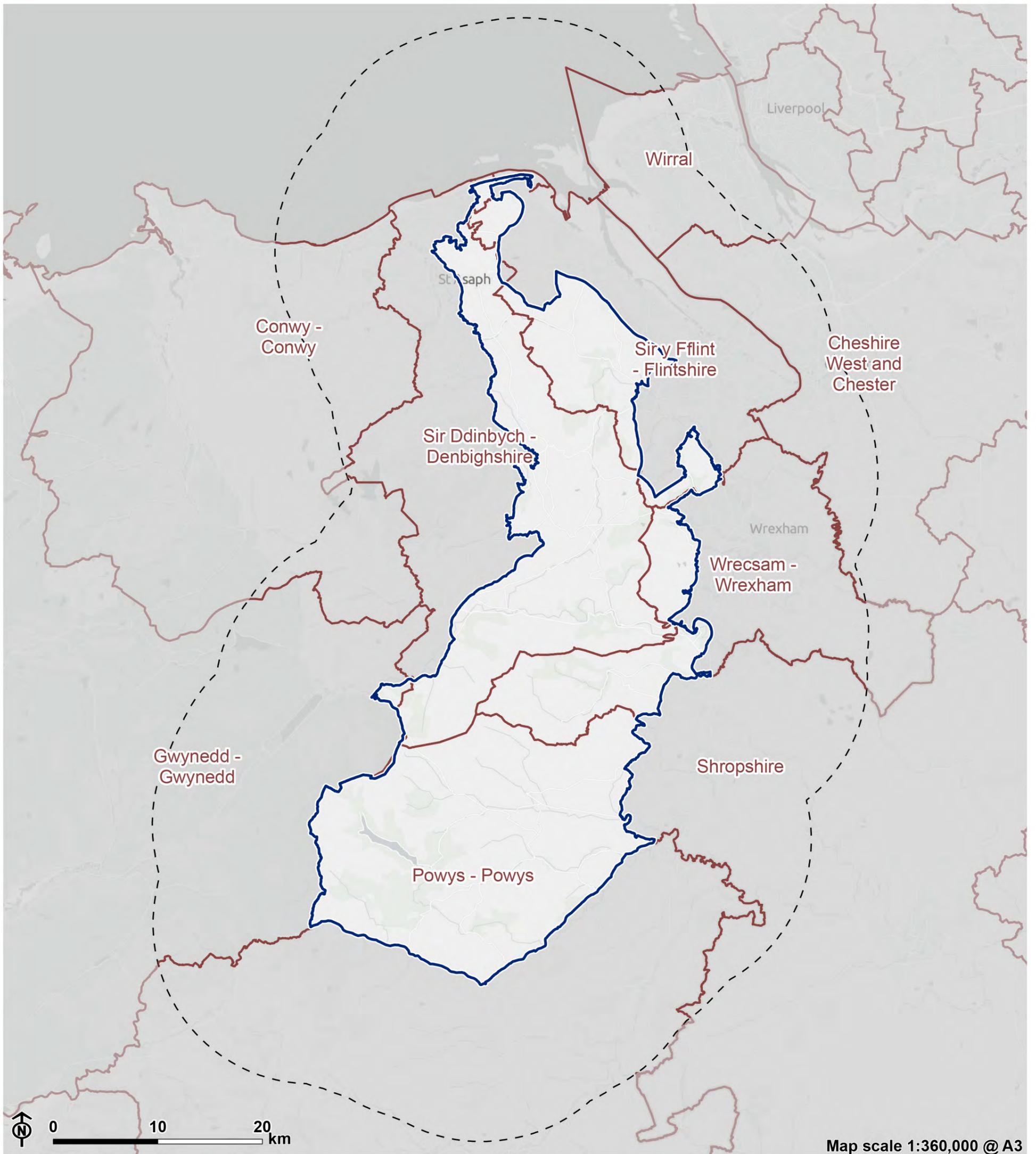
- The strategy sets out priorities for developing and promoting the visitor economy in Wales over the next five years.
- The ambition is to grow tourism for the good of Wales, aiming for skills development, equitable economic growth, environmental sustainability, social and cultural enrichment and health benefits.
- The strategy highlights that Visit Wales will continue to work with the industry and take a more prominent role in promoting skills for tourism, hospitality and events. By the spring of 2020, a Tourism Skills Partnership is to be established to bring together the sector, Regional Skills Partnerships, Further Education, Higher Education and others.
- The goal of environmental sustainability will be achieved by sustaining natural resources, improving environmental performance and encouraging sustainable transport.

Appendix E Policy review information

- Social and cultural enrichment will be achieved by giving a warm welcome for everyone, providing opportunities for young people and promoting a thriving Welsh language and culture.
- There is an emphasis on inclusive tourism and the need for more access improvements for disabled visitors. A Brilliant Basics fund will deliver small-scale tourism infrastructure improvements, for example, accessible changing places on the beach.
- A key priority is an innovative Cymru Wales brand delivered by a digital-first industry and the development of a Visit Wales 'Centre of Excellence' for digital innovation. The Centre will act as a physical hub for the brand, a creative space for professionals in the sector to work together as well as running webinars for businesses.

Appendix F

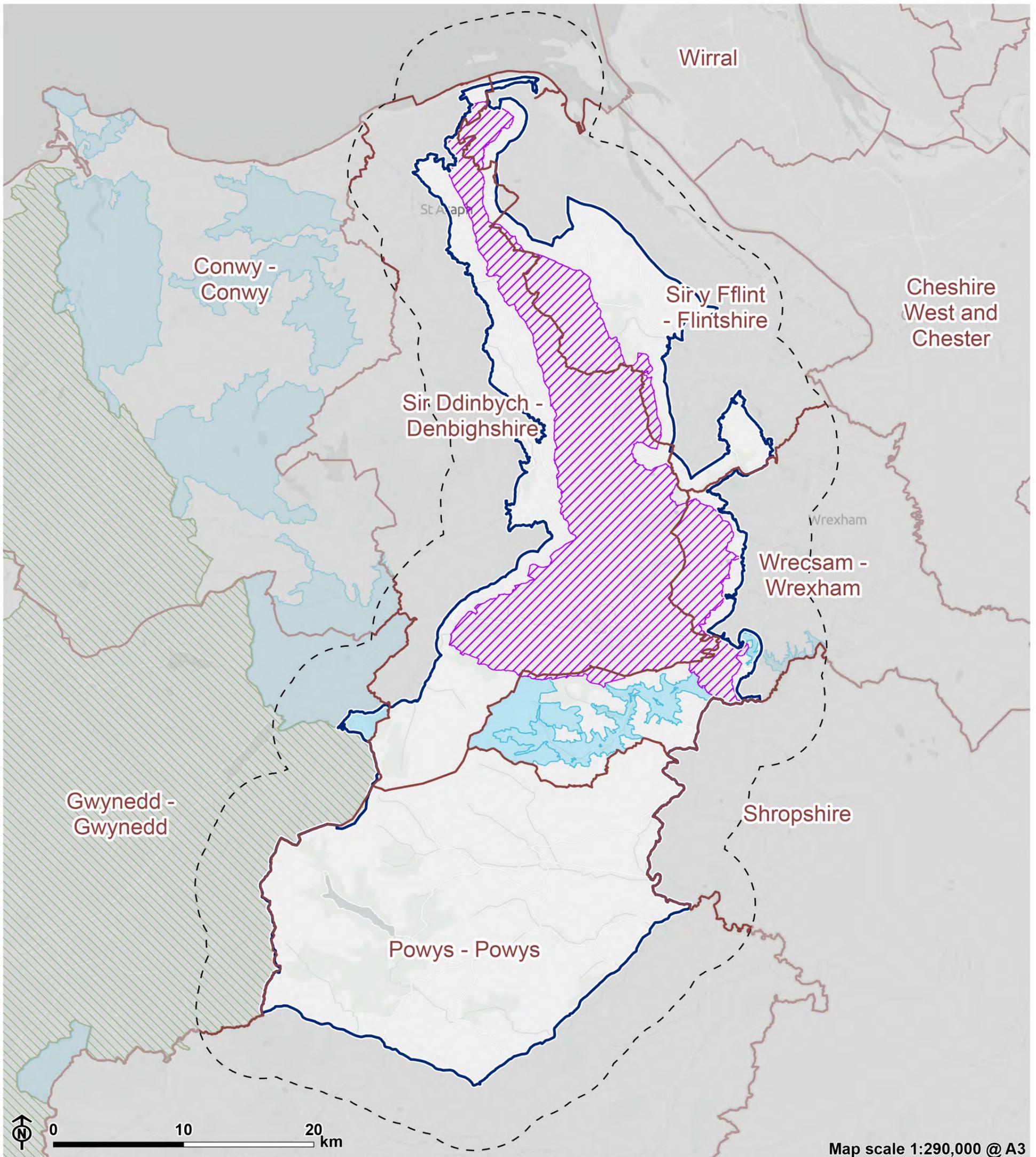
Figures



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Figure 1: Area of search and wider context

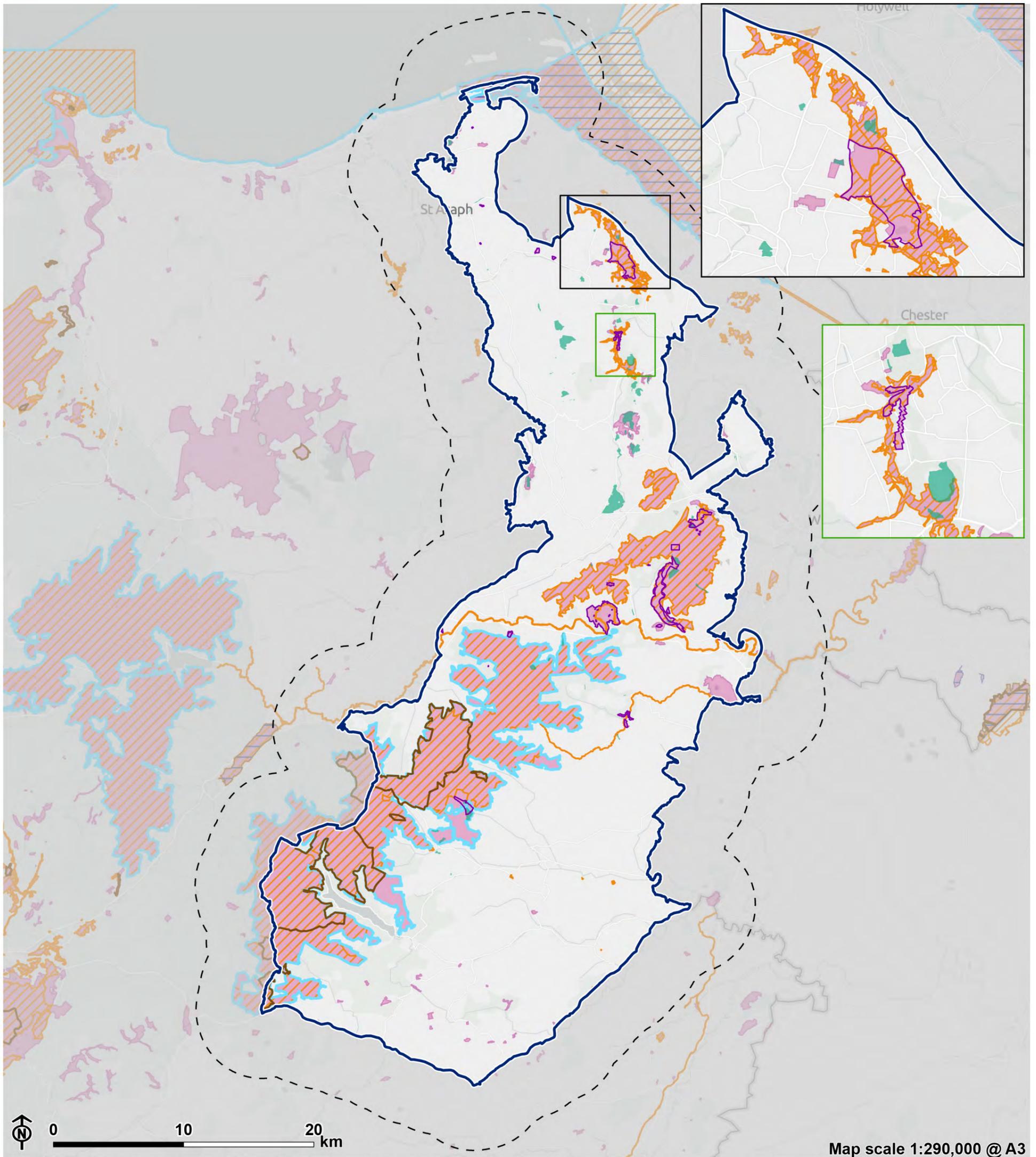
- Area of search
- Area of search 15km buffer
- Local authority boundary



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Figure 2: Landscape designations

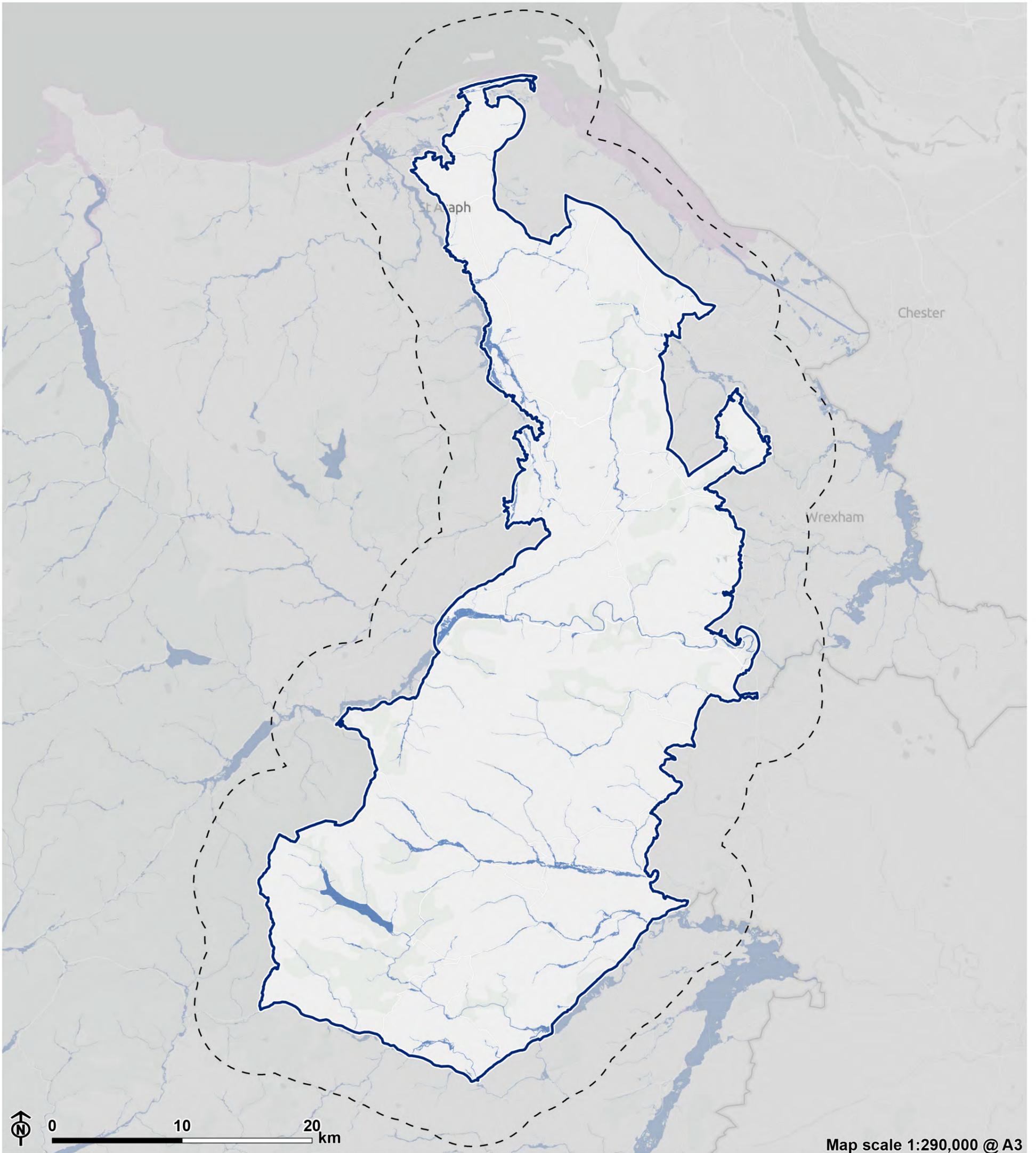
- Area of search
- Area of search 5km buffer
- Local authority boundary
- National Park: Eryri / Snowdonia
- Special Landscape Area
- National Landscape: Bryniau Clwyd A Dyffryn Dyfrdwy / Clwydian Range and Dee Valley



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Figure 3: Nature and geological conservation designations

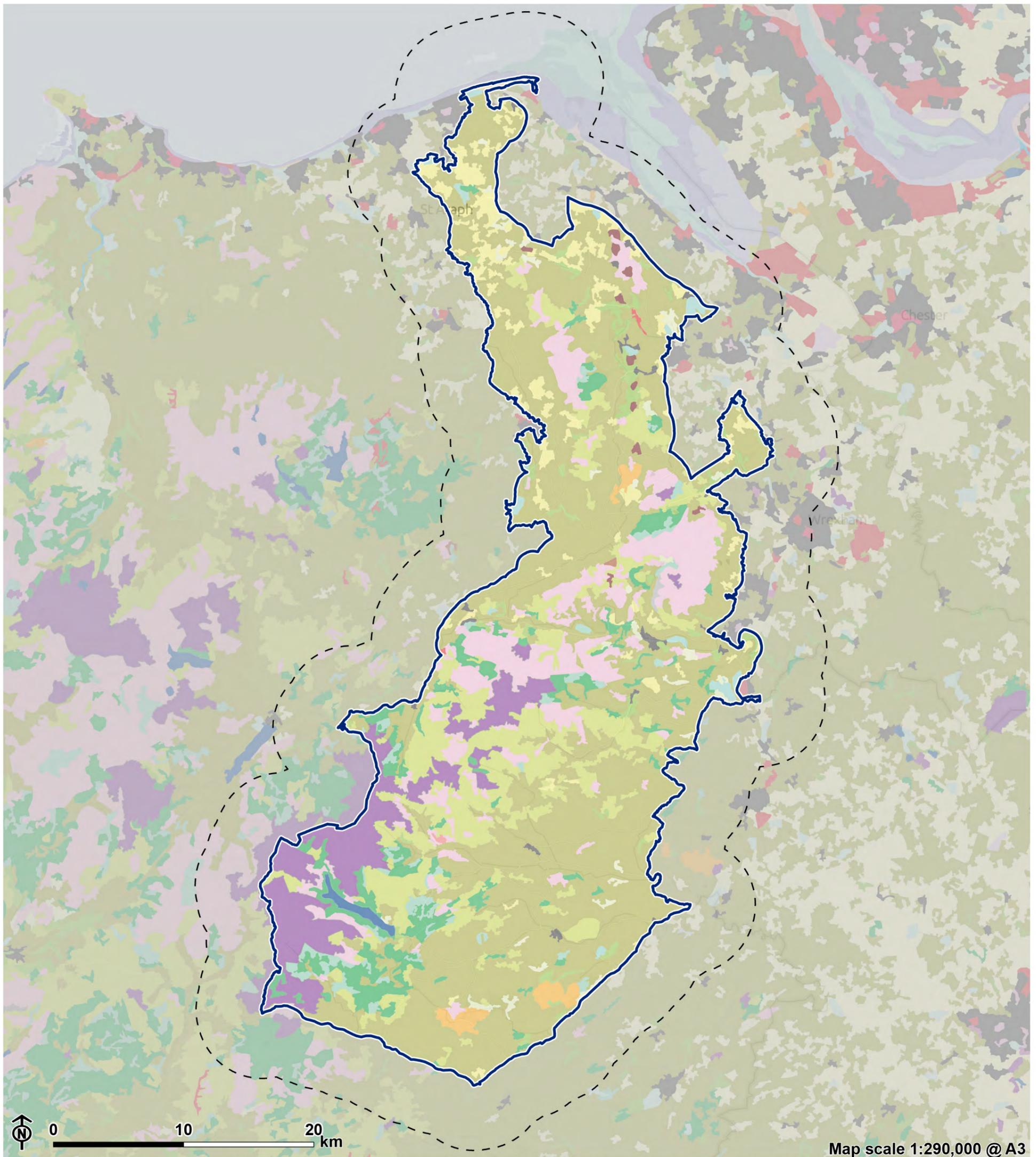
- | | |
|-------------------------------|--|
| Area of search | Site of Special Scientific Interest |
| Area of search 5km buffer | Regionally Important Geodiversity site |
| National Nature Reserve | Geological conservation review site |
| Special Protection Area | |
| Special Areas of Conservation | |
| Ramsar | |



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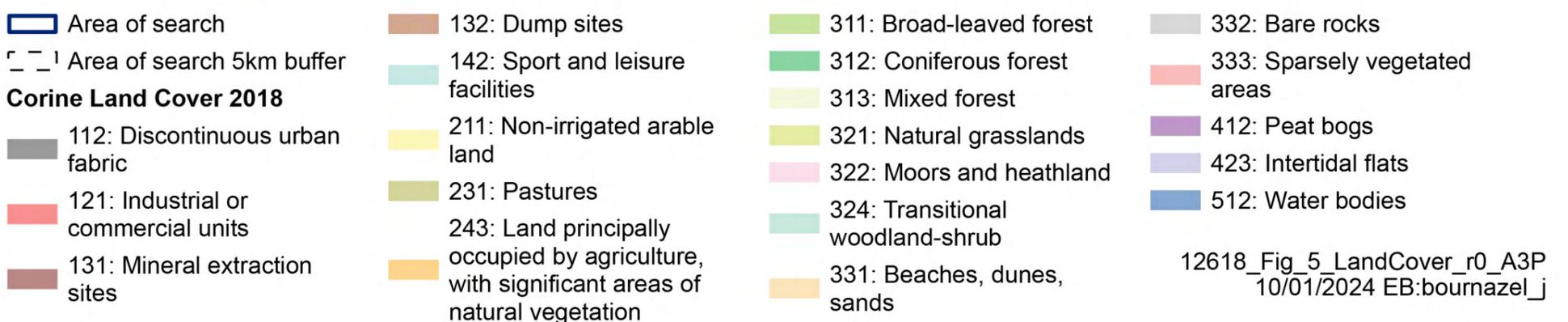
Figure 4: Flood risk from rivers and the sea

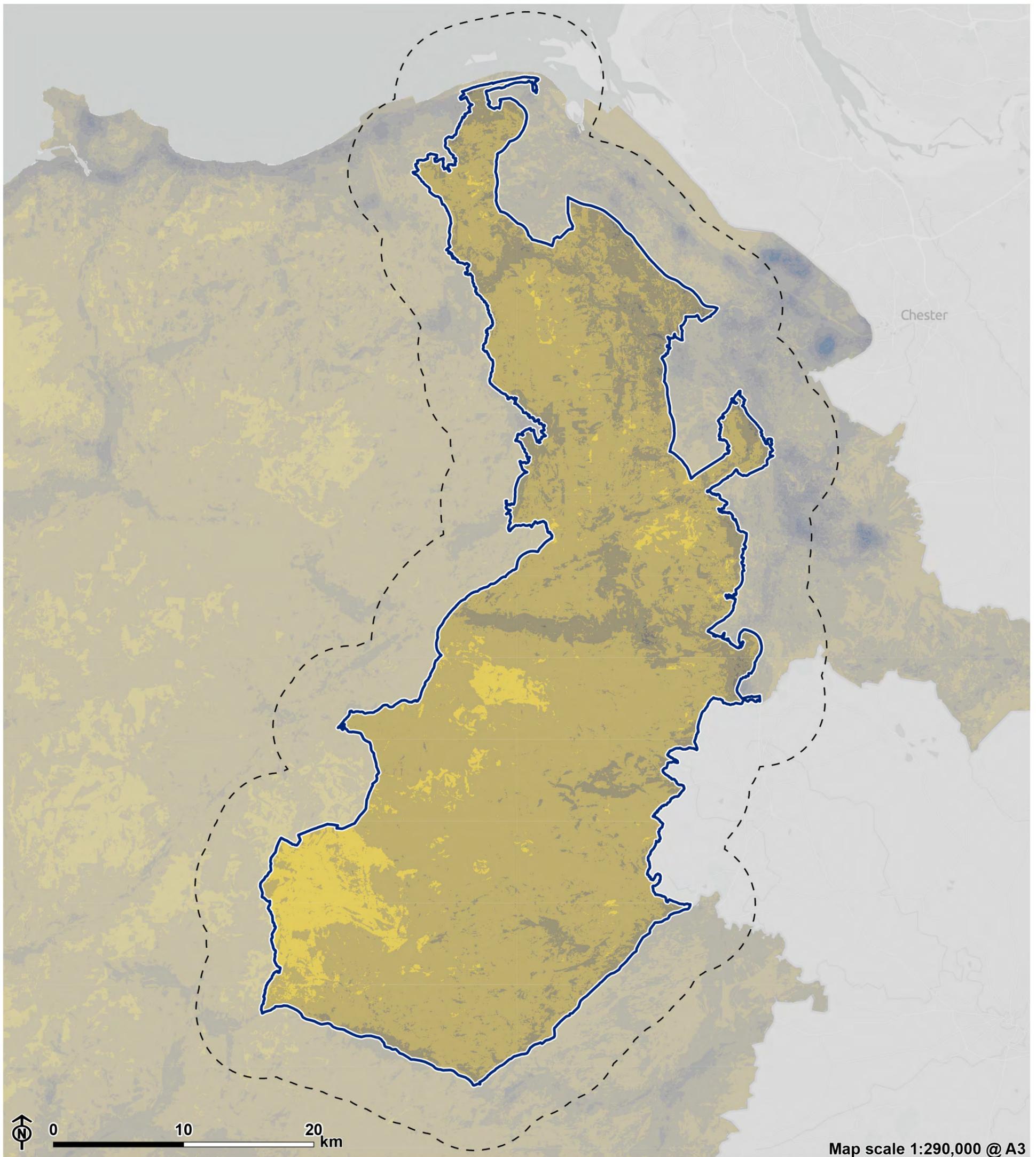
-  Area of search
-  Area of search 5km buffer
-  High flood risk from rivers
-  High flood risk from the sea



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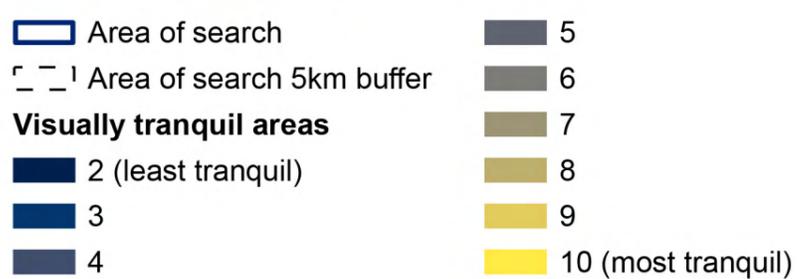
Figure 5: Land cover

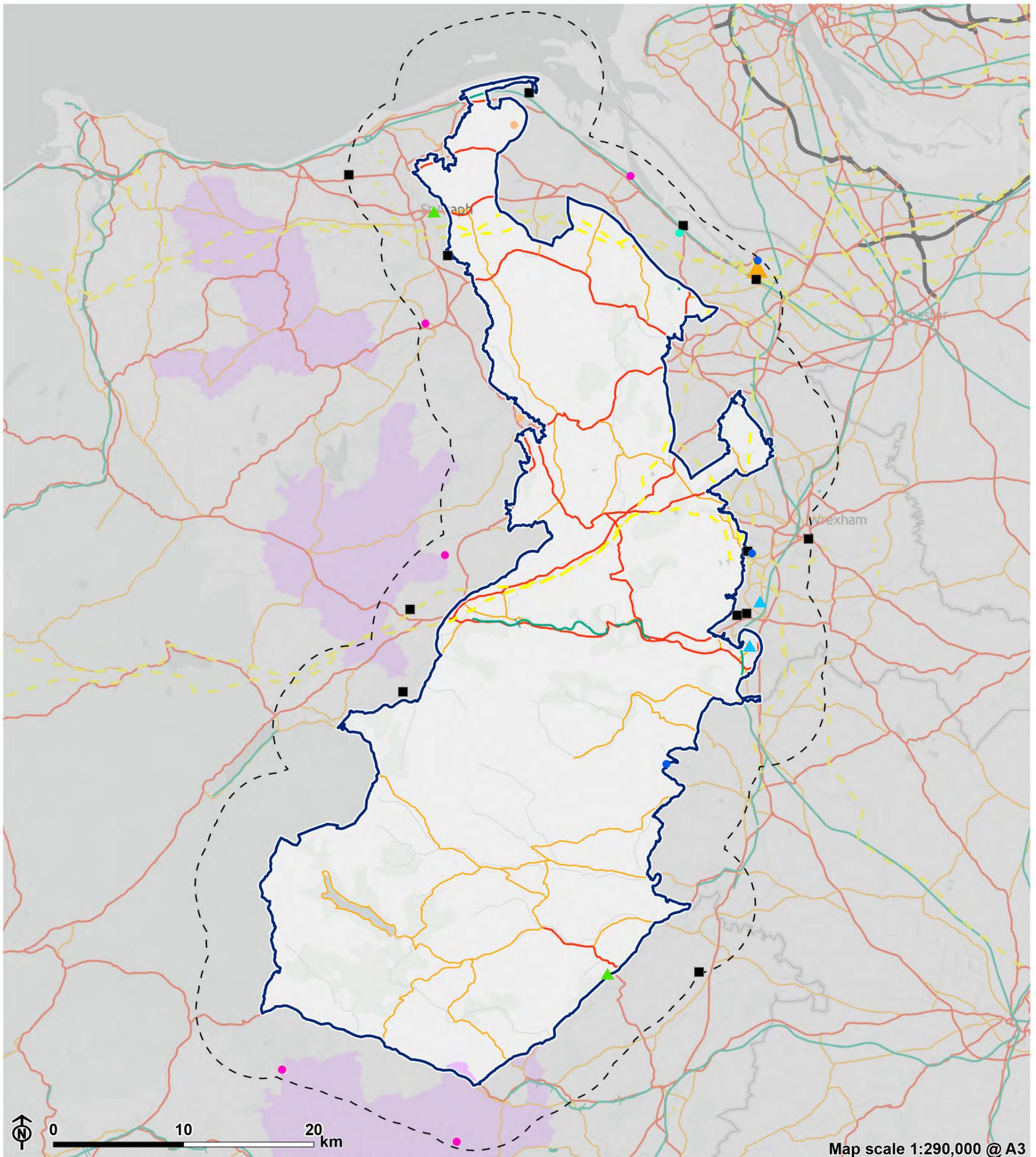




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Figure 6: Tranquillity

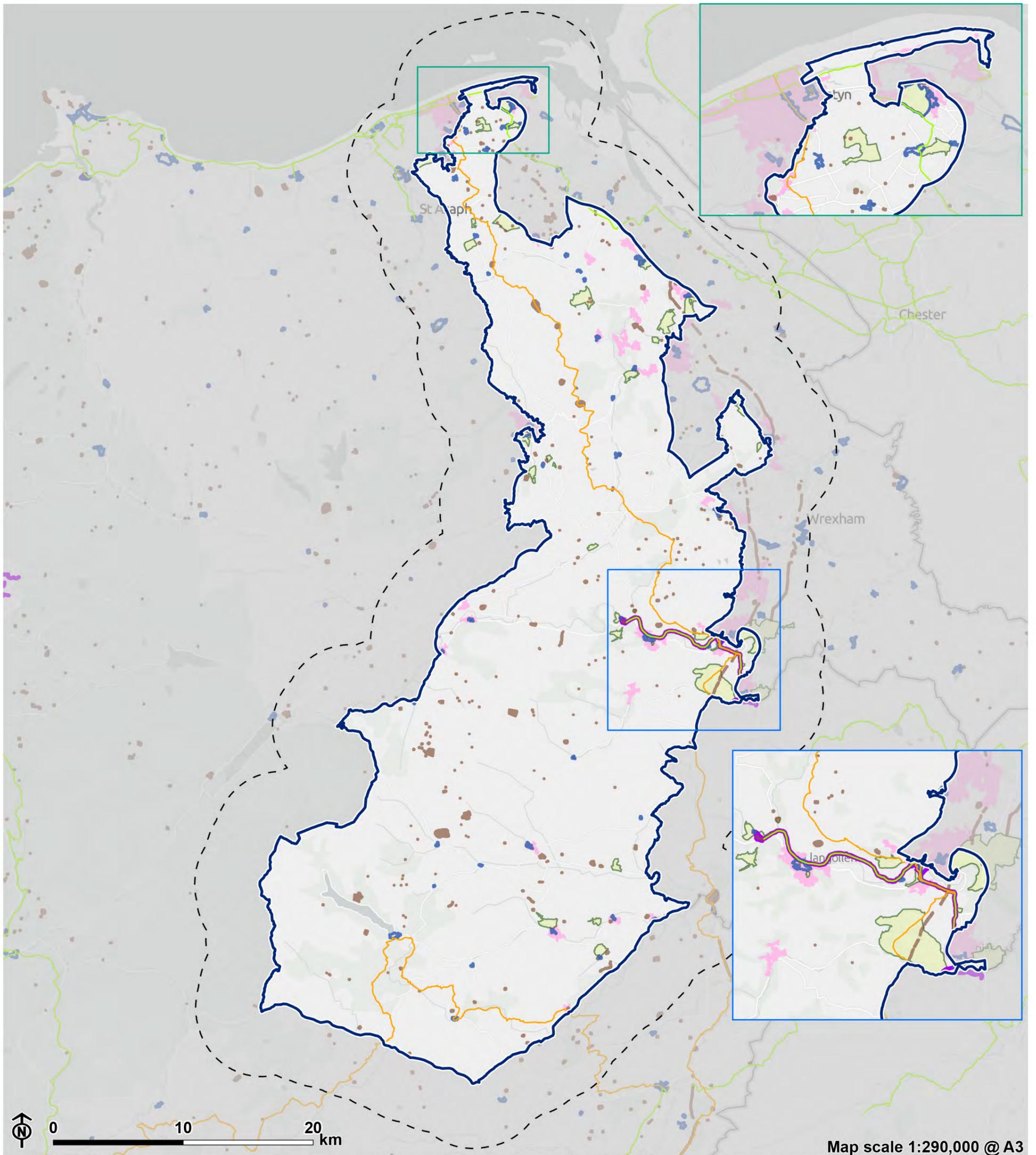




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Figure 7: Infrastructure

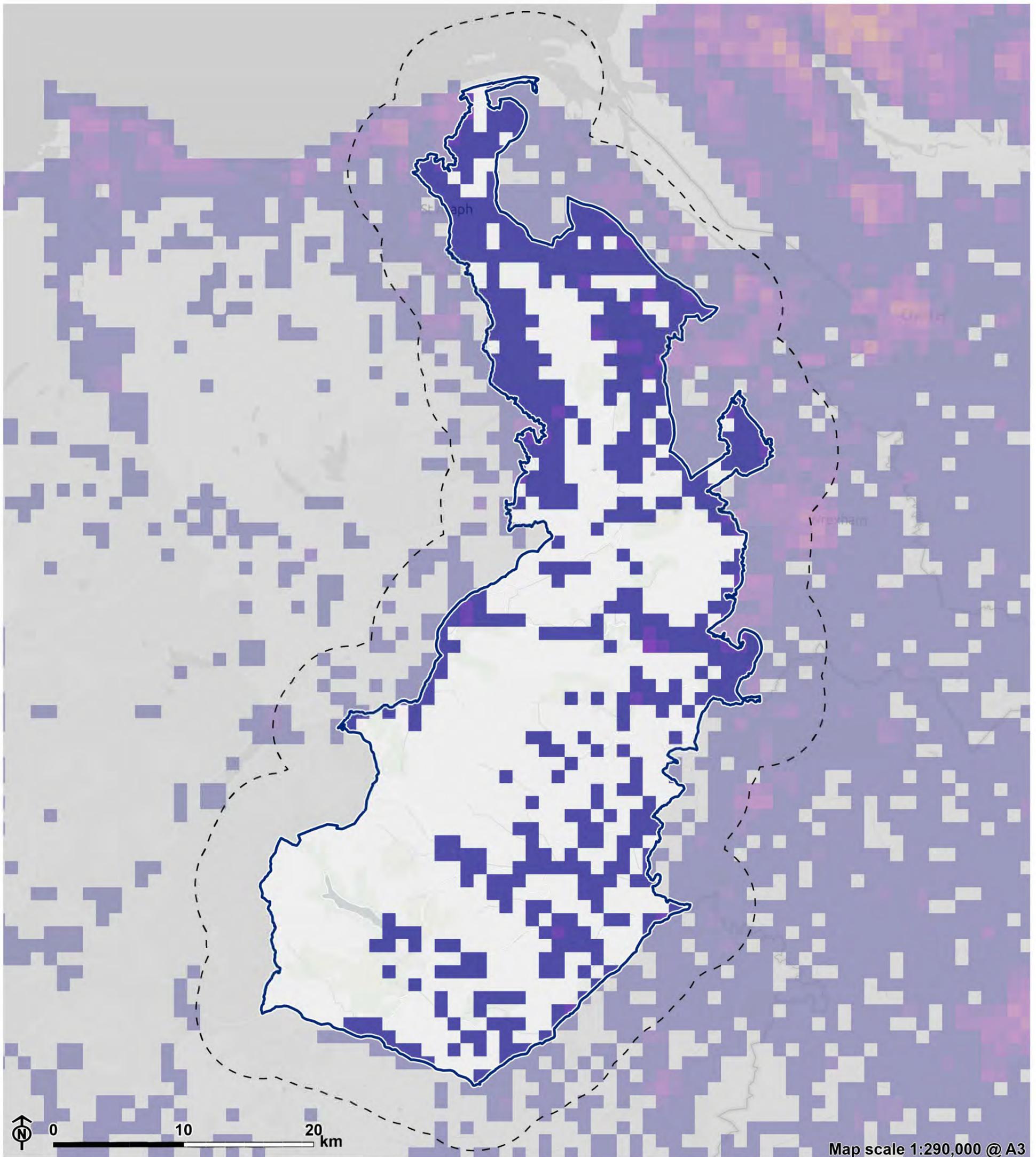
- | | | | |
|-----------------------------------|-------------------------------|--|---------------------|
| Area of search | Electricity transmission line | Renewable Energy Planning Database (not showing abandoned and application refused status) | EfW Incineration |
| Area of search 5km buffer | OS Open Roads | | Hydrogen |
| Large scale wind energy policy 17 | A road | Battery | Landfill Gas |
| Railway track | B road | Anaerobic Digestion | Solar Photovoltaics |
| | Motorway | Biomass (dedicated) | Wind Onshore |



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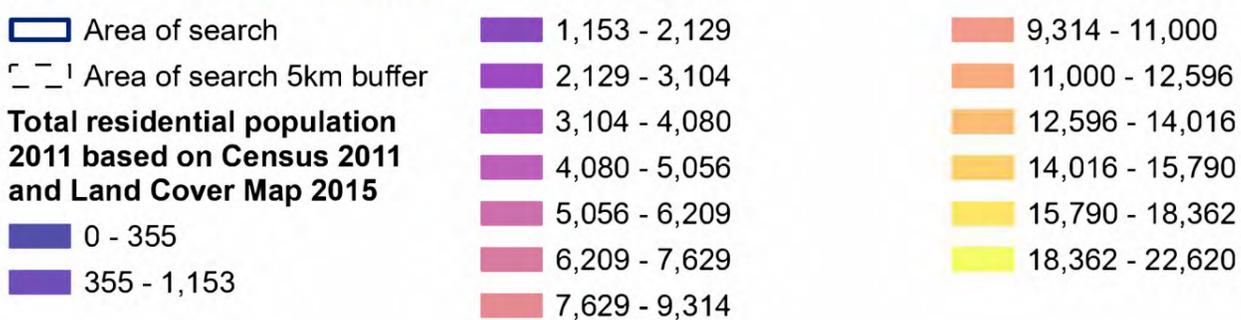
Figure 8: Historic environment assets, access routes and built-up areas

- | | |
|------------------------------|---------------------------------|
| Area of search | World Heritage Site: |
| Area of search 5km buffer | Pontcysyllte Aqueduct and Canal |
| Scheduled monument | National Trail |
| Registered Parks and Gardens | National Cycle Network |
| Conservation Area | Built-up area |



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Figure 9: Total population



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