



Lowther Estates

Lowther Whole Estate Plan

Final report
Prepared by LUC
January 2020





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Lowther Whole Estate Plan

Project Number 10480

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Chapter 1

Foreword

Eight hundred and fifty years ago, the earliest known member of the Lowther family established himself in the corner of Cumbria that is now known as the Lowther Estate. Three principal dwellings have come and gone since that first settlement and today, the Estate is presided over by the ruined Lowther Castle – a Gothic building completed in 1812, de-roofed in 1957 and today, a thriving and prize-winning visitor attraction.

While the Estate has grown and fluctuated, Lowther has been guided over the past centuries by an abiding will to stay ahead of the times. The benefits of forestry were foreseen during the reign of Edward I. Vegetarianism was embraced by Viscount Lonsdale in the late 17th century. Lowther Castle may have been de-roofed in the 1950s but in the long-term, its de-roofing ensured the future security of the Estate at large. Today the Castle's success as a visitor attraction is based around its virtues as a ruin. It has not been restored but conserved, with layers of new history added to those already in place.

Looking forward, Lowther continues to be ambitious - with access and education at the centre of the agenda for the Castle and a regenerative agricultural strategy driving the machine of the Estate. Access across the Estate is being opened up for walkers and cyclists. The medieval Deer Park may still be as it was hundreds of years ago but its management, along with the husbandry of much of the park, is being substantially de-intensified. A project to complete the stabilisation of the Castle ruins and create a learning space is underway. From here, students of all shapes and sizes will learn not just practical land skills but will explore and be challenged by the leading edge of contemporary ecological thinking. Estate-wide, the emphasis in the past may have been on productivity – now it is on biodiversity as well.

The success of Lowther Estate lies with its ability to adapt. For the coming years, the plan is no different. The challenges of the coming decades are to be faced up to, not ducked away from. Turning to enlightened methods of land management, Lowther Estate intends to take a lead in the northwest and blaze a few trails as it goes.

Jim Lowther

Chapter 2

Executive summary

Creating the Whole Estate Plan

2.1 The Lowther Whole Estate Plan has been developed by the Lowther Estate in partnership with the Lake District National Park Authority and is intended to assist the National Park Authority in the delivery of its vision. The Lowther Estate is a microcosm for the Lake District, embodying all 13 of the Lake District's special qualities and therefore its future management is of great importance to not only the Estate but to the wider National Park.

2.2 This plan has also been developed through engagement with the local community. The Estate has for many years met regularly with tenants, Commoners Associations, Parish Councils, local interest groups and the Lake District National Park Authority to discuss management on the Estate. These discussions have without doubt directly informed management decisions and have been the catalyst for many of the projects presented in this Whole Estate Plan. In addition to this regular engagement, the Estate held the following meetings which focussed on sharing the Whole Estate Plan and its proposals:

Date	Location	Attendees	Number of Attendees
28 th June 2019	Lowther Estate Office	Local Residents, local business owners, local landowners, local councillors, representatives from Bampton Valley Estate and Penrith & District Red Squirrel Group	49
22 nd July 2019	Askham Parish Council	Parish Councillors and members of the local community	8
23 rd July 2019	Bampton Parish Council	Parish Councillors and members of the local community	80

Chapter 2

Executive summary

Lowther Whole Estate Plan
January 2020

2.3 Each event was advertised through posters in the local Parish noticeboards and online. The proposals outlined were discussed and attendees given further opportunity to comment following the meetings by either completing feedback forms, or by an open invitation to meet with the Estate Manager at Lowther Castle. The response to the Whole Estate Plan from the local community has been overwhelmingly supportive with no major concerns raised.

The Estate

2.4 This Whole Estate Plan focuses on an area of the Lowther Estate measuring approximately 4,222ha which straddles the boundary of the National Park and World Heritage Site just south of Penrith in Cumbria.

2.5 The Estate has a rich historical heritage with 37 Scheduled Monuments which together demonstrate a relict medieval landscape of considerable importance. There are 40 listed buildings which centre on Lowther Castle and its Grade II registered park and garden. The deer park is thought to date back 800 years and has a herd of deer of similar lineage.

2.6 The Estate comprises 33 farm tenancies, with 40% of the agricultural land holding managed under agri-environment schemes.

2.7 Environmental designations protect 100.8ha of the Estate and include, most notably, the River Eden Special Area of Conservation (SAC) and the River Eden and Tributaries Site of Special Scientific Interest (SSSI) which encompass the Rivers Lowther, Eamont and Leith which cross or border the Estate. Ancient Semi-Natural Woodland (ASNW) covers 128.8ha of the Estate, although 85% of this has been planted with conifer. Since 2017, the Estate has planted 165.5ha of new woodland reducing surface water run-off and flood risk in the valley.

2.8 The Lowther Estate forms an important economic focus for the region, directly employing 138 local people across the Castle and Gardens, Lowther Estate Trust (which oversees the management of the quarries, commercial and residential properties on the Estate), Lowther Forestry Group and Lowther Park Farm, alongside hosting 13 local businesses.

2.9 Visitors can explore 38.7 km of rights of way, with an additional 7.3 km of permissive routes and 483.9ha of open access land. The outstanding cultural heritage and public events hosted by the Estate draw in an estimated 140,000¹ visitors a year.



¹ Figures based on ticketed events and do not include visitors using the publicly accessible areas of the Estate.

Chapter 2

Executive summary

Lowther Whole Estate Plan
January 2020

By 2050 Lowther Estate aims to be...

1. A place where communities can grow and thrive; living, working and relaxing in a landscape which is accessible and has a strong sense of identity. A place that offers opportunities for rural employment for local people, where an active farming community has a good quality of life, and where the cultural heritage of farming continues to be embraced and celebrated.
2. A destination for the Lake District where visitors come to stay to enjoy everything the area has to offer, engaging with the landscape, its history and cultural heritage, and the natural world. Where people can explore, discover and become inspired by the landscape.
3. A place where the natural world is managed sensitively and with a keen eye on environmental concerns; resilient in the face of climate change, where carbon is stored, flooding is reduced, and biodiversity thrives. Where progressive land management is undertaken in partnership with tenants and leading environmental bodies, shining a light on best practice for the farming and conservation movement.
4. A place where people can engage with cultural heritage and learn about the past. Where heritage is preserved, celebrated and safeguarded for future generations.

This will be achieved through:

- Conserving and enhancing the historic landscape to preserve the special characteristics of the landscape at Lowther. This will be underpinned by the principal of conserving and enhancing biodiversity wherever possible.
- Fostering enlightened agricultural management by working with tenants on the Estate to identify potential joint approaches to regenerative agriculture and encouraging and supporting young farmers.
- Managing the land in a way that maximises the quality and quantity of the natural capital the ecosystems provide; reducing carbon emissions, improving soil health, preparing for climate change, planning ahead to mitigate the impact of pests and disease, identifying opportunities to reduce the impact of severe weather events on the community and wildlife, and monitoring change to enable informed decision-making.
- Increasing Lowther's tourism offer to improve engagement with cultural heritage alongside the viability of the Estate in a way that is beneficial to the environment.
- Supporting vibrant communities where local businesses and skills are celebrated, where young people aspire to have careers in land-based vocations and access to the training that they need, and where the local community value and protect a landscape which is accessible to all.

Chapter 3

Introduction

3.1 This Whole Estate Plan presents a review of the Lowther Estate, its history, its assets, its contribution to the Lake District National Park and the local economy, culture and environment. This Plan focuses on an area of the Lowther Estate measuring approximately 4,222ha, shown in **Figure 3.1**. For the purposes of this Whole Estate Plan, from here any references to the Lowther Estate will refer to this study area.

3.2 This Plan has been created with the Estate's owners and managers in conjunction with the Lake District National Park Authority to ensure that future management of and investment in the Estate remains aligned with the vision and objectives of the National Park. In addition, the Estate has held a series of consultation sessions with staff, District, Town and Parish Councils, and the Lake District National Park Authority to ensure this plan is understood and supported by the local community. The Estate also attends regular meetings with the local community to discuss projects, including local parish council meetings, Commoners' meetings, and engaging with local interest groups which have also influenced the development of this Whole Estate Plan.

3.3 Once endorsed by the National Park Authority, this Plan will form a material consideration in any planning applications and provide a solid contextual background to any development proposals. The Plan should also act as a useful guide for decision-makers at the Lowther Estate.

3.4 The Plan closely aligns with the thirteen special qualities of the National Park, and the associated attributes of the Outstanding Universal Values of the World Heritage Site. These are explored in more detail in **Chapter 8 Relationship with the Lake District National Park**.

Location

3.5 The Lowther Estate is located in central Cumbria. The study area for this Whole Estate Plan lies south of Penrith, largely within the National Park and World Heritage Site (**Figure 3.1**). It stretches from Penrith (just south of the River Eamont) in the north, to Shap Beck Quarry in the south, and from Barton Fell in the west to the River Leith in the east.

3.6 The study area is intersected from north to south by the M6 motorway and the West Coast Main Line railway from London to Carlisle on the eastern side, and by the River Lowther on the western side.

3.7 There are no major towns within the study area, but the villages of Lowther, Hackthorpe, Askham, Yanwath, Clifton, Helton, and Whale all fall within the vicinity.

3.8 The study area lies within the limestone uplands of the Orton Fells, which are characterised by rolling upland farmland with limestone outcrops, scars and pavements and isolated Ash trees. Open moorland and commons on the highest ground give way to rough pasture, where limestone walls create a strong field pattern. This open landscape feels remote, and is large-scale with long distance views, although these are interrupted by man-made features such as recent farm buildings, power lines, quarries or the M6 motorway.

3.9 Ancient villages are restricted to lower land and built of local stone with narrow lanes bounded by limestone walls. Historic field patterns surrounding these villages are irregular and small-scale with walls enclosing hay meadows, pastures and small copses of trees. These villages are often located near to rivers, which have low flows due to the permeable bedrock. Woodland cover is scarce in this landscape, limited to sheltering clumps around villages and farmsteads.

3.10 Lowther Park lies on the transition between the higher limestone farmland and improved undulating pasture on the margins of the Eden Valley. The rolling topography consists of improved pasture bounded by limestone walls or fences with occasional hedgerows. Lowther contains a rich concentration of visible archaeological remains including burial mounds, Anglian settlements, farmsteads and field patterns. Native broadleaved tree cover is sparse but substantial geometric blocks of coniferous woodland have been planted, at odds with the local landform and landscape character.

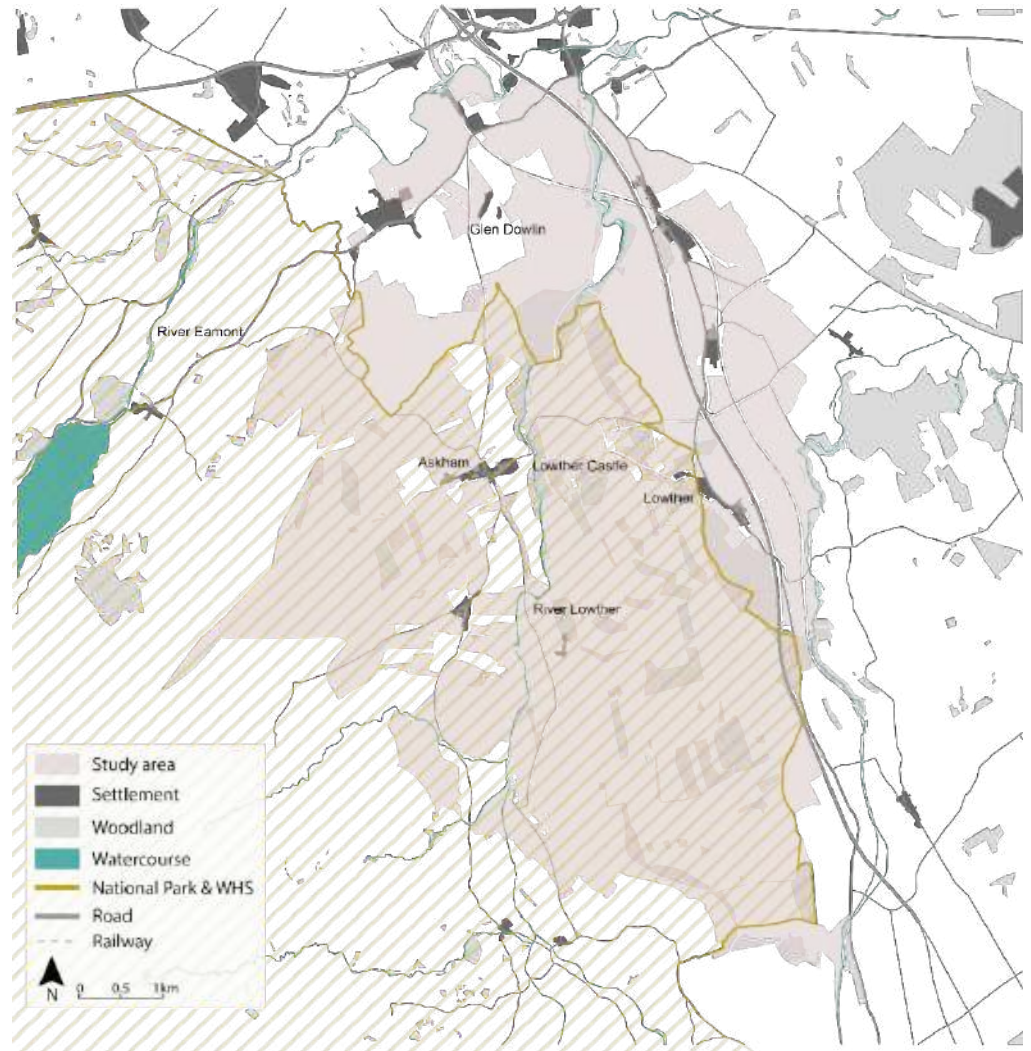


Figure 3.1. Study Area

Based on information supplied by the Forestry Commission. © Historic England copyright 2020. © Natural England copyright 2020. Contains Ordnance Survey data © Crown copyright and database right 2020

Chapter 4

Estate Vision

4.1 The Lowther Estate today is the result of careful management of many generations of a single family for nearly 900 years. The family is passionate about the land and the people who are supported by the Estate. Over the next 30 years through careful stewardship the family intend to conserve and enhance the Estate for the enjoyment of future generations.

2050 Lowther Estate aims to be...

1. A place where communities can grow and thrive; living, working and relaxing in a landscape which is accessible and has a strong sense of identity. A place that offers opportunities for rural employment for local people, where an active farming community has a good quality of life, and where the cultural heritage of farming continues to be embraced and celebrated.
2. A destination for the Lake District where visitors come to stay to enjoy everything the area has to offer, engaging with the landscape, its history and cultural heritage, and the natural world. Where people can explore, discover and become inspired by the landscape.
3. A place where the natural world is managed sensitively and with a keen eye on environmental concerns; resilient in the face of climate change, where carbon is stored, flooding is reduced, and biodiversity thrives. Where progressive land management is undertaken in partnership with tenants and leading environmental bodies, shining a light on best practice for the farming and conservation movement.
4. A place where people can engage with cultural heritage and learn about the past. Where heritage is preserved, celebrated and safeguarded for future generations.

Chapter 5

Overview of the Estate

Lowther Estate through history

1150 - Dolfin, thought to be of Viking descent, built a church above the river Lowth-a (meaning foaming river). This is thought to be the origins of the family name.

13th Century – Sir Hugh de Lowther, a descendant of Dolfin, enclosed the park and is thought to have been granted the family crest.

14th-15th Century – the Lowther family were at the forefront of border rivalries with the Scots. The motte-and-bailey castle they first inhabited (site to the north-west of the Castle today) was exchanged for a pele tower on the current site which provided a greater vantage point over possible attacks.

16th Century – Sir Richard Lowther added a second pele tower with a central hall between, a Bakehouse and a Brewhouse.

17th Century – Sir John Lowther II (1606-1675) laid out much of the gardens including the Yew Avenue and Western Terrace seen today.

Sir John Lowther IV (1655 – 1700) rebuilt the house and created Lowther Hall (1691-2), a palace of its day complete with ceiling frescoes by Verrio, art treasures, mohair-lined bedroom, gilded walnut panelling. He was also a vegetarian and changed the focus of the gardens to growing produce.

1682 - Lowther Village demolished by Sir John Lowther IV to open up the prospect of Lowther Hall (the site of the present Castle).

1718 – The central wing and one of the pele towers of Lowther Hall were destroyed in a fire caused by not sweeping the chimneys.

1751 – Aged 15 James Lowther (known as 'Wicked Jimmy') inherited Lowther along with considerable holdings including sugar plantations in Barbados and collieries in West Cumbria.

He was a notable miser, and although he spent plenty of money on politics, he remained hugely wealthy. He refused to pay the Wordsworth family (John Wordsworth as his agent) and on his death, owed them £5,000.

1763 and 1771 - Lancelot Capability Brown produced plans for the parkland which were not executed.

1770 - Model village of Lowther built for Sir James Lowther. Inspired by the drawings and designs of Robert Adam (1728-1792), renowned Georgian architect. One of the best examples of the 'circus' form, designed as a single entity giving it an exceptional sense of place. All buildings are now Grade II*.²

1806 – William Lowther commissioned Robert Smirke to build a Castle (Smirke later built the British Museum). The Castle took 8 years to build and cost £77,000.

1882 – The Yellow Earl, Hugh Cecil Lowther, inherited the Estate. He was so called because he adopted the family colour seen in the crest, and applied it to carriages, cars and livery. He kept golden Labradors, chestnut horses and buff-coloured poultry. He spent much of the family fortune and in 1936 was forced by his trustees to leave the Castle.

1942 – The 49th tank regiment moved in and used the area for training and experiments with the highly secret Canal Defence Light.

1947 – Much of the Castle's treasures were sold off in one of the largest country house sales in England. The family had long since moved to Askham Hall.

1953 – James Hugh Lowther, the 7th Earl of Lonsdale, inherited the Castle as an empty building. Beset by death duties of £40million (in today's money), James had the roofs stripped and the Castle gutted. For half a century the immediate surrounding area was turned over to livestock and spruce plantation.

1999 – Lowther Castle was in poor and declining condition, and the gardens were largely lost beneath undergrowth and plantation (**Figure 5.1**). English Heritage (now Historic England) intervened and placed Lowther Castle on the Builds at Risk Register.

2006 – James Nicholas (Jim) Lowther inherited the Estate. In 2007, Lowther Castle and Gardens Trust was established as a registered charity to work in close partnership with the Lowther Estate to develop the Castle and gardens for public benefit and turn the grounds into a tourist destination. The pig and chicken sheds, which were within the grounds, were removed.

2009 - A programme of stabilisation to the ruin, rebuilding of the stable courtyard buildings and uncovering of the gardens began, led by teams of experts and funded by grants successfully won through the Lowther Castle and Gardens Trust (**Figure 5.2**).

2011 – Lowther Castle and Gardens opened to the public. The following year, Dan Pearson was commissioned to create a Garden Masterplan. While garden historian Dominic Cole oversaw the reinstatement of the south lawns, the Pearson studio masterminded the planting of part of the Castle ruin and development of the Parterre Tapestry Garden.

2012 - Over 106,000 daffodils were planted in the Patte d'Oie with the help of 600+ volunteers.

2017 – The Castle was relaunched with the installation of a historical exhibition *The Story of Lowther*, and the redesign of the café, shop and stable courtyard. The implementation of the design for a new Rose Garden by Dan Pearson got under way.

² <http://www.lakedistrict.gov.uk/planning/conservationareas/lowtherca>



Figure 5.1 Lowther Castle pre-restoration works



Figure 5.2 Lowther Castle post-restoration works

What makes Lowther special

Historic Environment and Cultural Landscape



- Within the Lake District UNESCO World Heritage Site and National Park
- 37 scheduled monuments
- 40 listed buildings: 2x Grade I, 7x Grade II*, 31x Grade II
- Parkland and Gardens are listed as Grade II on the Register of Parks and Gardens of Special Historic Interest
- 398 known non-designated historic environment assets
- Over 20 km of dry stone walling (within registered parkland)

Environment



- 100.8 ha environmental designations
- 109.3 ha Planted Ancient Woodland Sites (PAWS); 19.5 ha Ancient Semi Natural Woodland (ASNW)
- Over 65 ha limestone pavement
- 1.45 ha freshwater habitats

Forestry



- 165.5 ha of recently planted woodland (213,000 trees)
- 255.7 ha coniferous plantation, 70.1 ha mixed woodland
- 13 full time staff directly employed by Lowther Forestry

Agriculture



- 448.7 ha arable and horticulture land
- 3018.6 ha improved grassland
- 483.9 ha Common Land, on which 2 hefted flocks from Lowther's tenanted farms graze
- 1,622 ha agricultural land under stewardship schemes
- 33 farm tenancies
- 8 licensed game shoots
- 64 people employed in agriculture across the Estate

Property



- 48 residential properties, housing 112 residents
- 23 commercial units housing 13 different businesses
- 25 employed at Shap Beck Quarry, producing 750,000 tonnes for kilnstone production
- 12 hoggist barns currently vacant

Visitor Experience

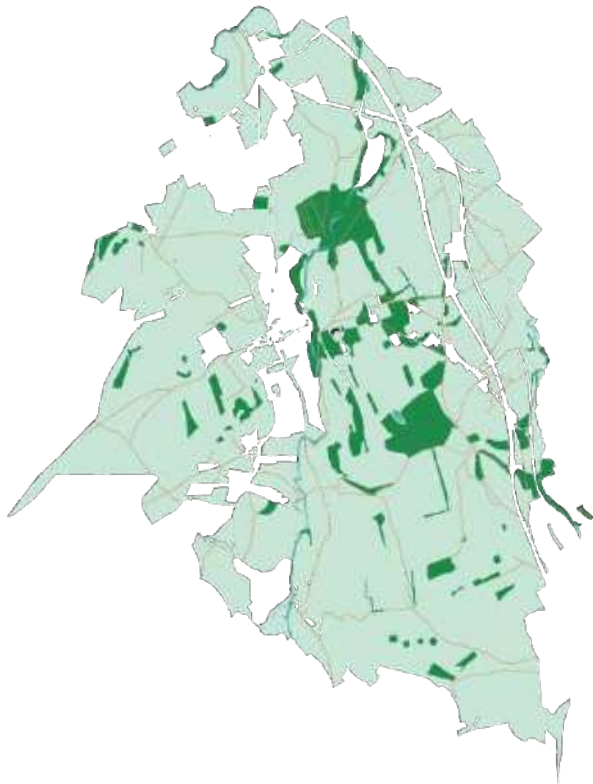


- 38.7 km public rights of way
- 7.3 km permissive paths
- 483.9 ha open access land
- Over 140,000 ticketed visitors annually
- 52 employees (within Lowther Castle & Gardens)

Tree cover and access progression

5.1 The figures below show changes in tree cover and access over the last 160 years (produced using mapping supplied by Groundsure).

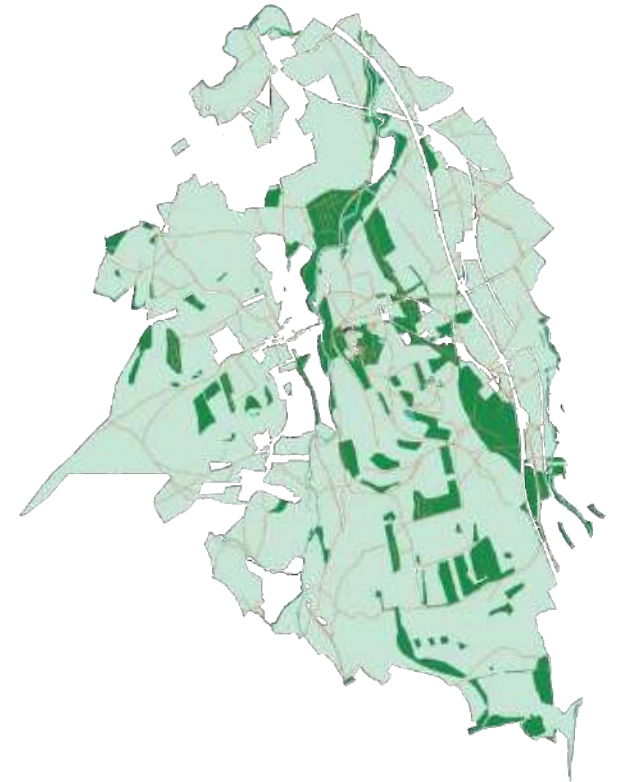
1859/60



1951/57



Current Day



Tree cover and access progression

1859/60

1951/57

Current Day

Lowther Castle



Whale



Financial Overview

5.2 The Lowther Estate forms an important economic focus for the region, directly employing 138 local people in a range of roles across the Castle and Gardens, Lowther Estate Trust (which oversees the management of the quarries, commercial and residential properties on the Estate), Lowther Forestry Group and Lowther Park Farm. In addition, the Estate hosts 33 farm tenancies and 13 local businesses.

5.3 Financially, Lowther Estate Trust and Lowther Forestry Group generate the greatest income for the Estate. The Estate has re-invested profit from these enterprises heavily in the restoration of Lowther Castle and its historic parkland. It is vital that the Estate remains commercially viable through its quarrying, forestry and property portfolio to continue to support long-term retention of its cultural heritage, both at the Castle and in supporting an active farming community.



5.4 The future of farming is uncertain due to the long-term structural changes in farming practices and the possible significant reduction in subsidy payments. Potential changes to subsidy could leave farming practices that contribute to the cultural landscape of the World Heritage Site (such as hefted sheep grazing) unsustainable.

5.5 The delivery of the Estate's vision (and indeed, the continued delivery of the special qualities and attributes of Outstanding Universal Value of the World Heritage Site) hinges on the continued viability of management of the Estate's cultural heritage; both the farmed landscape and the Castle.

5.6 The National Park Authority has predicted that there will be a rise in visitor numbers to the Lake District from 19 million to 23 million over the next 20 years. An increase in visitor numbers to the Castle will help with the Castle's viability, so attracting and retaining tourists in the area would be of benefit to both the National Park and to the Estate.

5.7 At the time of writing, the new Environmental Land Management System (ELMS) is still in the early stages of development. However, early indications have suggested that the new scheme is likely to focus on farming to generate wider environmental and societal benefits. The Estate is keen to embrace this approach by restoring ecosystem function through regenerative agricultural land management, alongside preserving the cultural landscape of the World Heritage Site. One such example is maintaining livestock on the fells at a level and of a type that is sensitive to the environment. The diversification of income streams through increasing Lowther's offer for tourists will be an integral part of ensuring economic viability long-term for the Estate. Opportunities to diversify the Estate's income are explored in more detail under **Chapter 9 Challenges and Opportunities**.

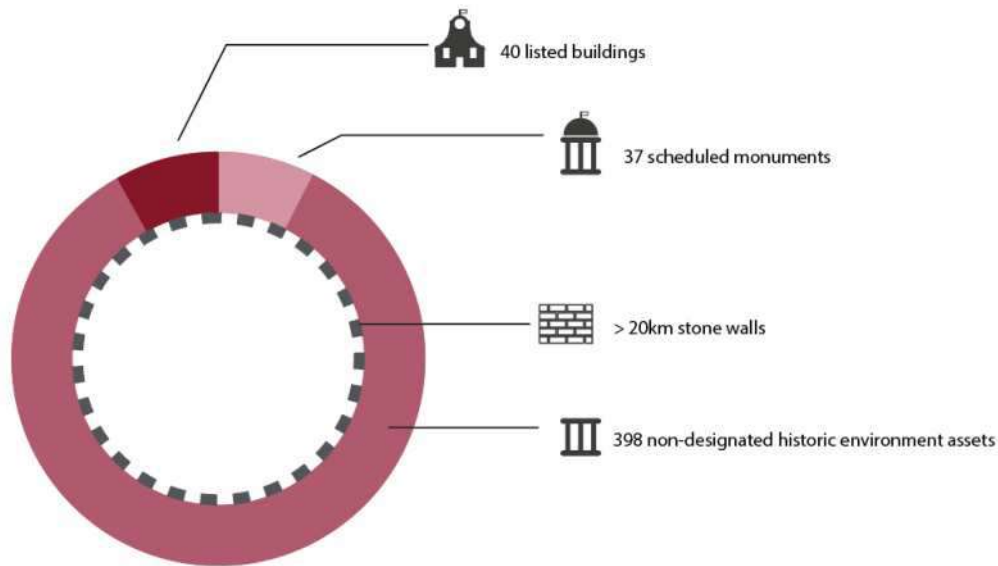
Chapter 6

Asset Review

Cultural Heritage



6.1 The Lowther Estate has a rich and diverse history of significant cultural heritage importance; it is a landscape that has inspired J. M. W. Turner to paint and William Wordsworth to write poetry. The Estate can be described as a microcosm of the Lake District with traditional farming, evidence of historic land use and areas of designed parkland reflecting the special qualities and attributes of Outstanding Universal Value of the **National Park and World Heritage Site**.



6.2 Lowther Park is included as **Grade II on Historic England’s Register of Parks and Gardens of Special Historic Interest**. The Park is therefore a landscape of national significance which extends over an area of some 558ha. Few other historic landscapes in the country combine such scale with longevity of ownership by a single family. The deer park dates back 800 years and is thought to be the largest deer park in the UK, covering an area of 1,093ha (2,700 acres).

6.3 The underlying geology, formed largely of limestone, is evident in the construction of local buildings including Lowther Castle and the field boundary walls which make up the traditional ‘patchwork’ of fields typical of this area. Disused Lime kilns are scattered across the Estate, indicating historic artisan industries which relied on the local landscape.

6.4 The Estate has **37 Scheduled Monuments** and a further **398 known non-designated historic environment assets** which together indicate this was a landscape of considerable importance during the prehistoric period. Many of the Scheduled Monuments are around

Askham Fell, most of which relate to the prehistoric period and a univallate hillfort. There are four Roman period Scheduled Monuments which includes three settlements and one road; these are rare features in Cumbria due to the county’s location at the north-western limits of the Roman Empire. Non-designated assets such as cairns, barrows, lynchets, and areas of ridge and furrow contribute to the setting of the landscape and understanding of its history and highlight a relict medieval agricultural landscape highly susceptible to change.

6.5 In addition, the Estate contains **40 Listed buildings**, mostly post-medieval and of agricultural function, which contribute to the aesthetic beauty of the World Heritage Site and character of the immediate local area. Four of these buildings are included on Historic England’s **Heritage at Risk Register**; Lowther Castle, the inner Terraces of Lowther Castle, the outer Terraces of Lowther Castle and the Church of St Michael. The Castle and its associated terraces are considered category F ‘repair scheme in progress and end use identified’. The Church of St Michael has recently come back in hand (2019). It is currently considered category C ‘slow decay with no solution agreed’. The Estate will be addressing this as a matter of priority.

6.6 A full gazetteer of all historic environment assets and associated maps can be found in **Appendix B. Figures 6.1 and 6.2** locates these designated assets within the study area.

6.7 The historic planned village of Lowther is an important feature for consideration within the landscape. Whilst it does not form part of this WEP as it is no longer within the Estate’s ownership, its presence is an important consideration regarding management of the Estate.

6.8 Restoration schemes around Lowther Castle in recent decades have promoted a renewed interest in the history and significance of the site, highlighting the importance of its cultural assets and associations to tourism and the local economy.

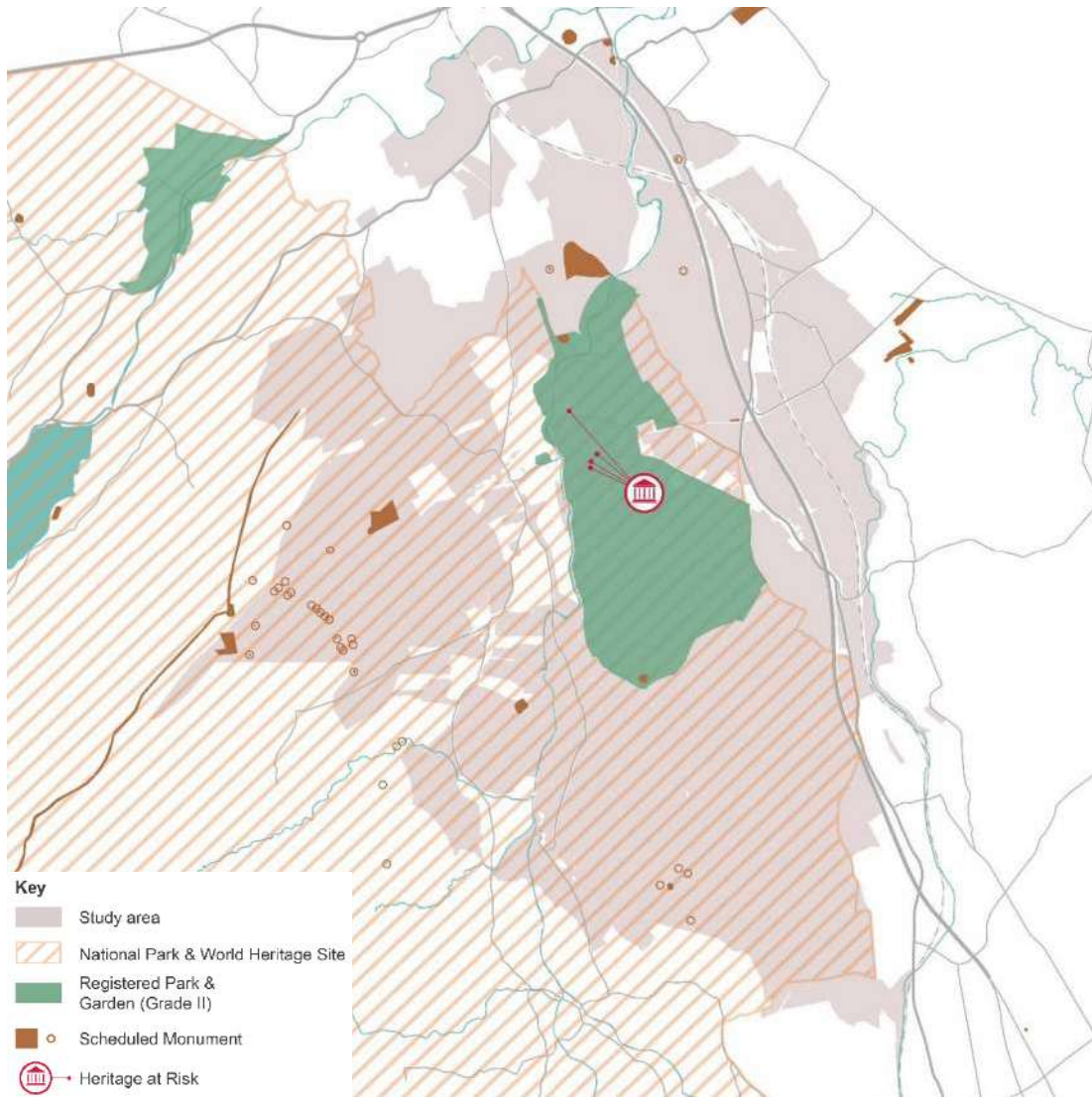
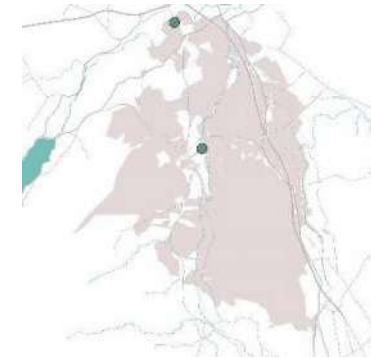
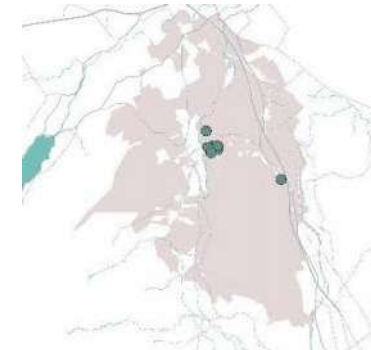


Figure 6.1. Cultural assets

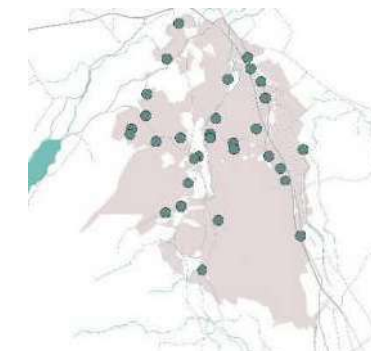
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Grade I



Grade II*



Grade II

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Figure 6.2. Listed Buildings

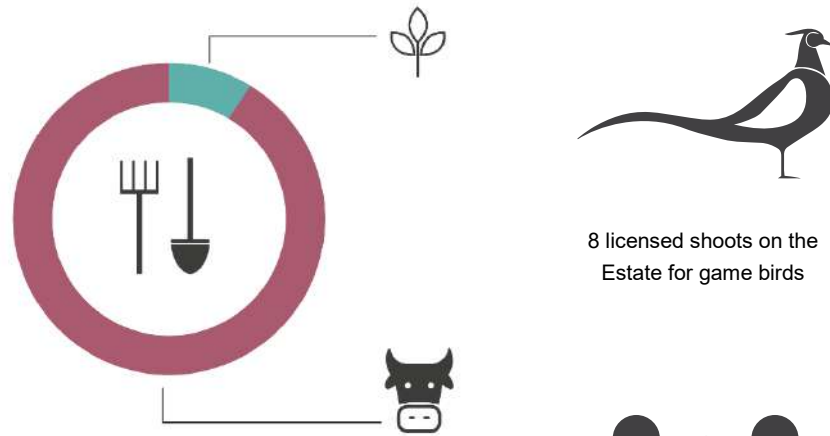
Agriculture



6.9 Agriculture is the primary land use across the Estate, managed by 25 farm businesses across the 33 tenancies. The majority of land is managed as pasture, with arable crops in 2018 including barley, wheat, oilseed rape, borage and fodder beet.

6.10 Land within the Estate ranges in quality between Grade 2 to Grade 5³, with the best land found to the north, bordering the River Eamont, and the lowest grade land found in the west and south, on the high ground at Askham Fell and Knipe Scar. The majority of the Estate is Grade 3 - good to moderate quality agricultural land (see **Figure 6.3**).

³ Agricultural Land Classification Map North West Region (ALC002)
<http://publications.naturalengland.org.uk/publication/144015?category=5954148537204736> [Accessed on 31 November 2018]



8 licensed shoots on the Estate for game birds



64 people are employed across agriculture, with Lowther Park Farm supporting 9 employees



Lowther Estate has 33 farm tenancies

Produce	Tonnes
Arable	
Oilseed rape	250
Barley	500
Wheat	400
Honey	5
Pastoral	
Lamb	196 (5000 lambs)
Beef	157 (200 cattle)
Dairy herds	10.8 million litres milk

Produce totals for 2018

6.11 Forty percent of the Estate is managed under environmental stewardship with **358ha under Entry Level Stewardship (ELS)** and **1,263ha under Higher Level Stewardship (HLS)** (Figure 6.4). A number of these schemes are due to expire in the near future and further subsidy might wish to be sought to help stabilise farm incomes. Lowther Park Farm manages the majority of this area in-hand (1,217ha) with a further 125ha at Setterah Park Farm returned in 2019.

6.12 Common Land at Askham and Bampton is managed by the Askham and Helton Commoners Association, and the Bampton Commoners Group respectively. Both of these areas are in HLS schemes which expire in 2019 and 2020. Common Land at Knipe Moor is not currently under any stewardship scheme.

6.13 Lowther Park Farm is currently supported by an HLS Agreement which is due to expire in 2023. A new Countryside Stewardship Higher Tier Woodland Pasture scheme at Lowther Park Farms is being developed with Natural England (2019) which will see an area of 200ha of the historic parkland restored (Figure 6.4). This will include experimenting with different methods of grassland establishment.

6.14 The Estate is keen to maintain **an active farming operation** on the Core Estate at Lowther. Due to the degeneration of land husbandry since the Second World War, the Estate is changing its farming methods to favour **regenerative practices**. These will include the removal of all sheep from directly farmed enclosed land in favour of native breed cattle that will graze outside all year and feed off pasture and cover crops. Arable operations will be undertaken with no disturbance of the land through tillage and chemicals.

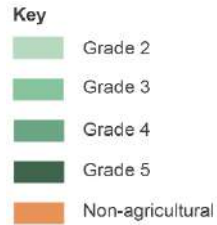
6.15 The Estate has fostered a good working relationship with its tenants and is keen to maintain an active farming business model. Where possible, the Estate will encourage regenerative methods of agriculture amongst its tenants to reverse the degeneration of soil health due to decades of over-intensive farming.

6.16 The tenanted farms at High Knipe and Outgang currently graze **hefted flocks** across Bampton Common, Helton Fell and Askham Fell (Figure 6.5). It is the Estate's intention to maintain these flocks at sustainable levels on these areas thereby retaining this key cultural asset.

6.17 A number of farms are naturally coming into a transition period and are looking to either surrender the tenancy or transition to the next generation. The Estate has a good number of farmers of the next generation who are in line to take over from their parents which the Estate is keen to support.



Figure 6.3. Agricultural land classification



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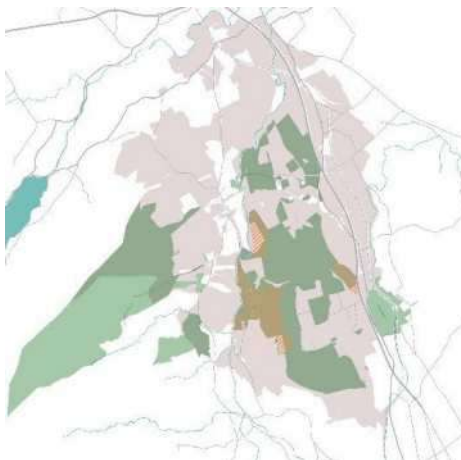
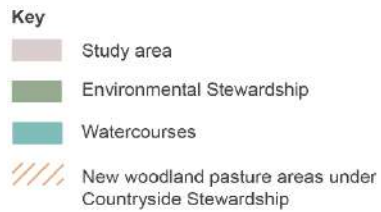


Figure 6.4. Land under agri-environment schemes (Environmental Stewardship and proposed Countryside Stewardship)



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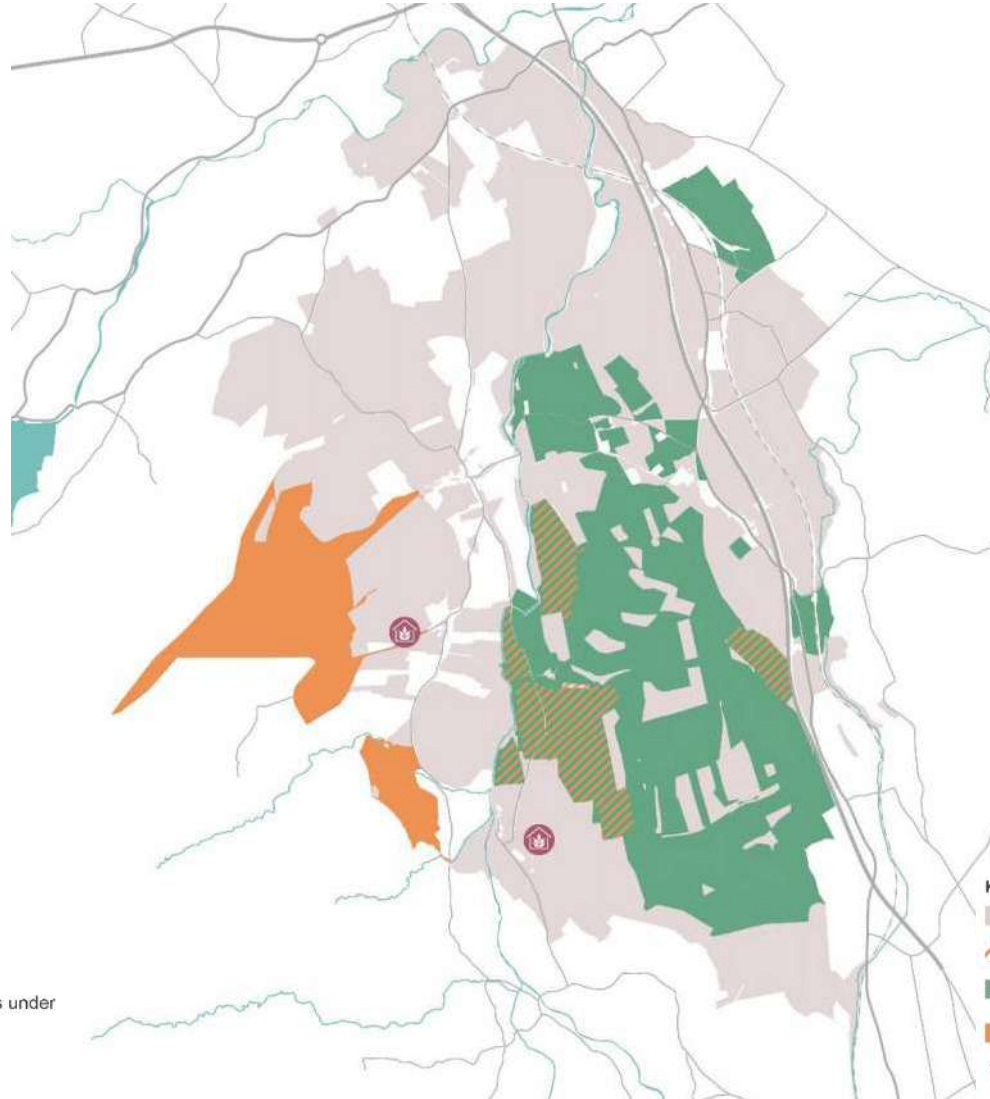


Figure 6.5. Agricultural land

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Forestry

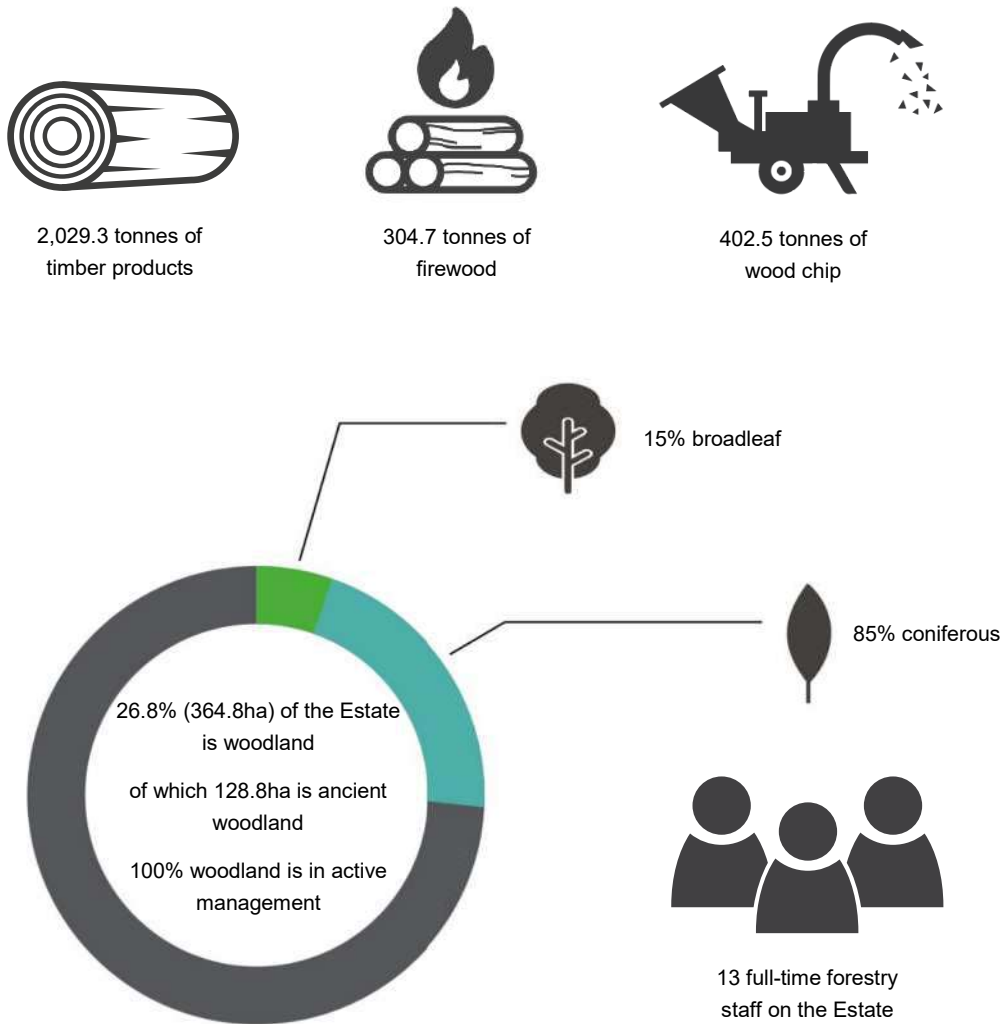


View from escarpment.

6.18 Forestry operations at Lowther are a major contributor to the Estate's annual income. The operations are overseen by Lowther Forestry Group, a national company based across seven regional offices throughout England and Scotland. On the Estate, Lowther Forestry employs 13 full-time members of staff and three apprentices.

6.19 Woodland covers 26.8% of the Estate, comprising 15% broadleaf and 85% conifer. Many of the woodlands were planted as part of the designed landscape. Today, the woodlands within the study area receive management grants through the Forestry Commission and are managed in accordance with two plans:

- Lowther Park, 2013 – 2023, (639.6ha)
- Lowther Castle, 2016 – 2026, (24.6ha)



6.20 Forestry operations are focussed on continual cover thinning, preserving the existing woodland cover and re-stocking following clear fell at the end of the thinning rotation. At this point, considerations over species selection are made taking into account the longevity of the species with regards to climate change and the impact of pests and diseases.

6.21 Woodlands within the registered parkland and core Estate are managed with a focus on continuous broadleaf for landscape features, looking to increase woodland where possible and in a manner that is sympathetic to the landscape character. The condition of the woodlands was assessed in 2016. This revealed that woodlands vary in age, size, shape, topography and species composition (**Figure 6.7**). All the woodlands are considered to have some commercial value ranging from provision of timber to secondary uses such as supporting pheasant shoots. Therefore, long-term management aims to ensure that commercial viability is preserved whilst maintaining the landscape character and nature conservation value of the woodlands.

6.22 Restoration of areas of Planted Ancient Woodland (PAWS) has focused on woodlands in Yanwath and Buckholme (**Figure 6.6**). PAWS which are not currently under active restoration are managed to protect any remnant ancient woodland features.

6.23 Woodland cover within Lowther Park has increased significantly since 2017 with the **planting of an additional 165.5ha of woodland (213,000 trees)** aided by a grant from the Forestry Commission. Some areas of planting have been undertaken as part of a project to re-meander Bessie Gill in partnership with the Eden Rivers Trust. This has helped to control surface water run-off and reduce pollution in the water course.

6.24 This new woodland has generated income for the Estate under the Forestry Commission's Woodland Carbon Code. The predicted carbon capture is estimated to be just over **60,000 tonnes** over the next 100 years. An additional 70ha is to be planted in the winter of 2019-2020, capturing an additional **30,000 tonnes** of carbon.

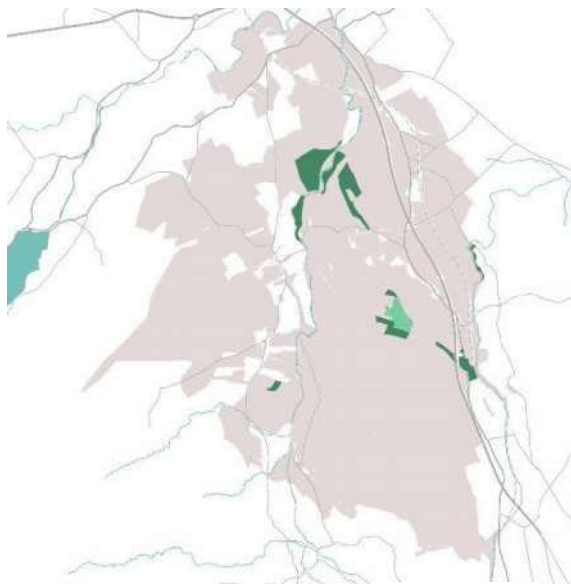


Figure 6.6. Ancient woodland

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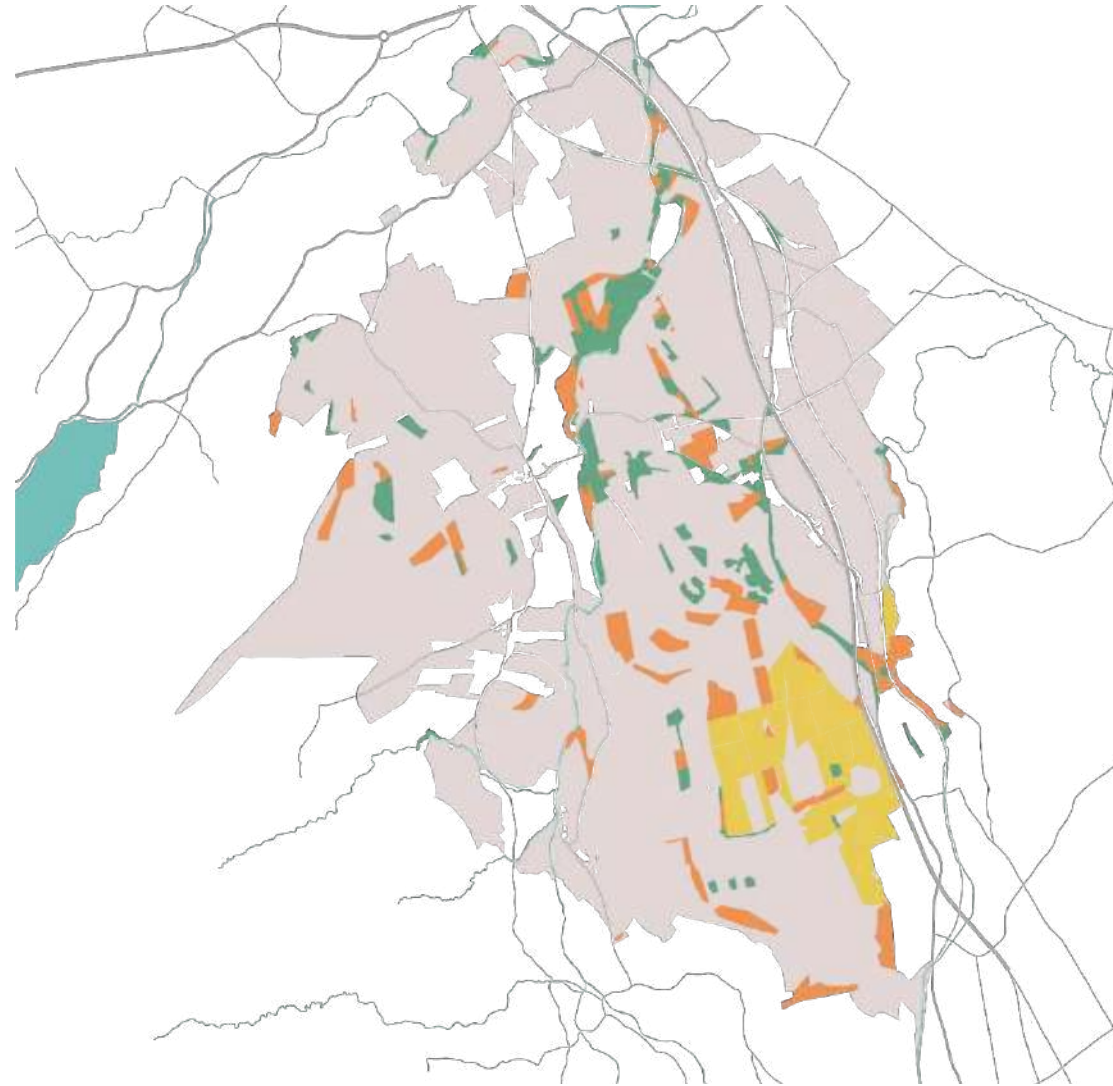


Figure 6.7. Distribution and type of woodland

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Environment



River Lowther

6.25 The environmental importance of the Estate and its constituent habitats is highlighted through international, regional and local designations (**Figure 6.10**), the most significant being the recently designated Lake District **UNESCO World Heritage Site** and **National Park** (**Figure 6.8**). This section of the Estate includes several areas of land which are protected by **Limestone Pavement Orders** (**Figure 6.10**). Other habitats of note include scattered areas of species rich grassland together with areas of moorland and heathland (**Figure 6.11**). All of these landscape features combine to add to the special character of the National Park.

6.26 The Rivers Lowther, Leith and Eamont flow through the Estate and are all tributaries of the River Eden. These waterways provide habitats for several protected species and an ecological link to the surrounding landscape. The rivers make up part of the **River Eden Special Area of Conservation** (SAC) and the **River Eden and Tributaries Site of Special Scientific Interest** (SSSI), within which more plant species have been recorded than within any other river in the UK.

6.27 However, the River Lowther, Leith and Eamont are all considered to be in an unfavourable to recovering condition, with SSSI units for The River Lowther and Eamont considered 'at risk'⁴. Measures have been taken across several areas of the Estate to promote appropriate management where agricultural areas adjoin the river's edge. The Estate is seeking to naturalise the River Lowther between Crookwath Bridge and Butterwick Common in partnership with Natural England, the Environment Agency and the Eden Rivers Trust.

⁴<https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S2000215&ReportTitle=River%20Eden%20and%20Tributaries%20SSSI>

6.28 Limestone that underlies the majority of the Estate filters the water that feeds into the rivers. Where the soil is thin and unimproved, this bedrock has given rise to pockets of species-rich calcareous grassland, with outcrops providing geological interest. Richer soils across the Estate support a range of land uses and commercial activities including forestry and agriculture.

6.29 Woodland covers approximately 26.8% of the total area of the Estate. Areas of ancient woodland are considered to have high landscape value and are diverse in age, structure and species. The designed Grade II registered Lowther Park contains ancient and veteran trees of high ecological value.

6.30 Biological records indicate that a diverse range of species are supported by or benefit from habitats provided by the Estate (**Appendix C**). Many of these species are protected or are of conservation concern. This includes at least six species of bat, Adder, Great Crested Newt, Atlantic Salmon, European Otter and at least 29 species of birds included on the UK Red List of Birds of Conservation Concern. The north-eastern section of the Estate is included within the **Red Squirrel Reserve Buffer Zone (Figure 6.9)**, which extends 5km from Whinfell Red Squirrel Reserve. Grey Squirrel control is in operation within the buffer zone.

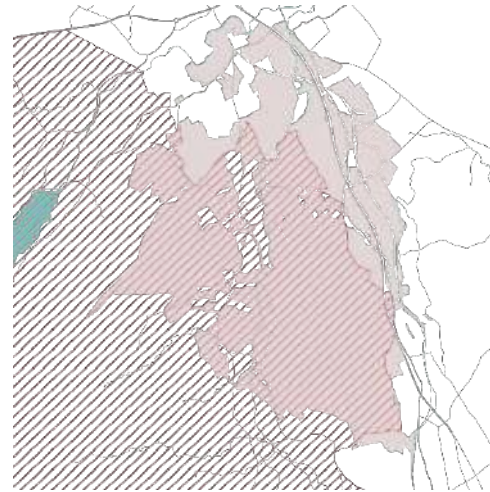


Figure 6.8. World Heritage Site and National Park

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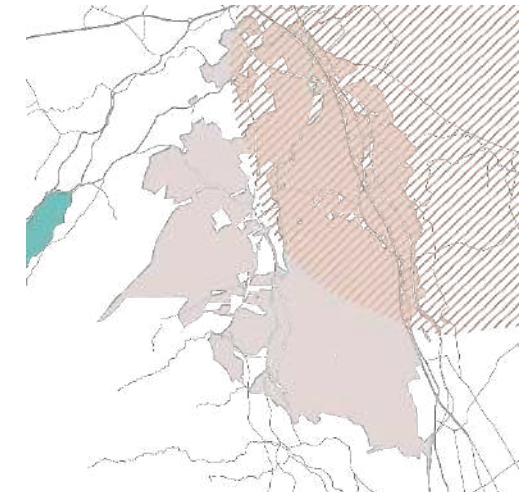


Figure 6.9. Red Squirrel Reserve buffer zone

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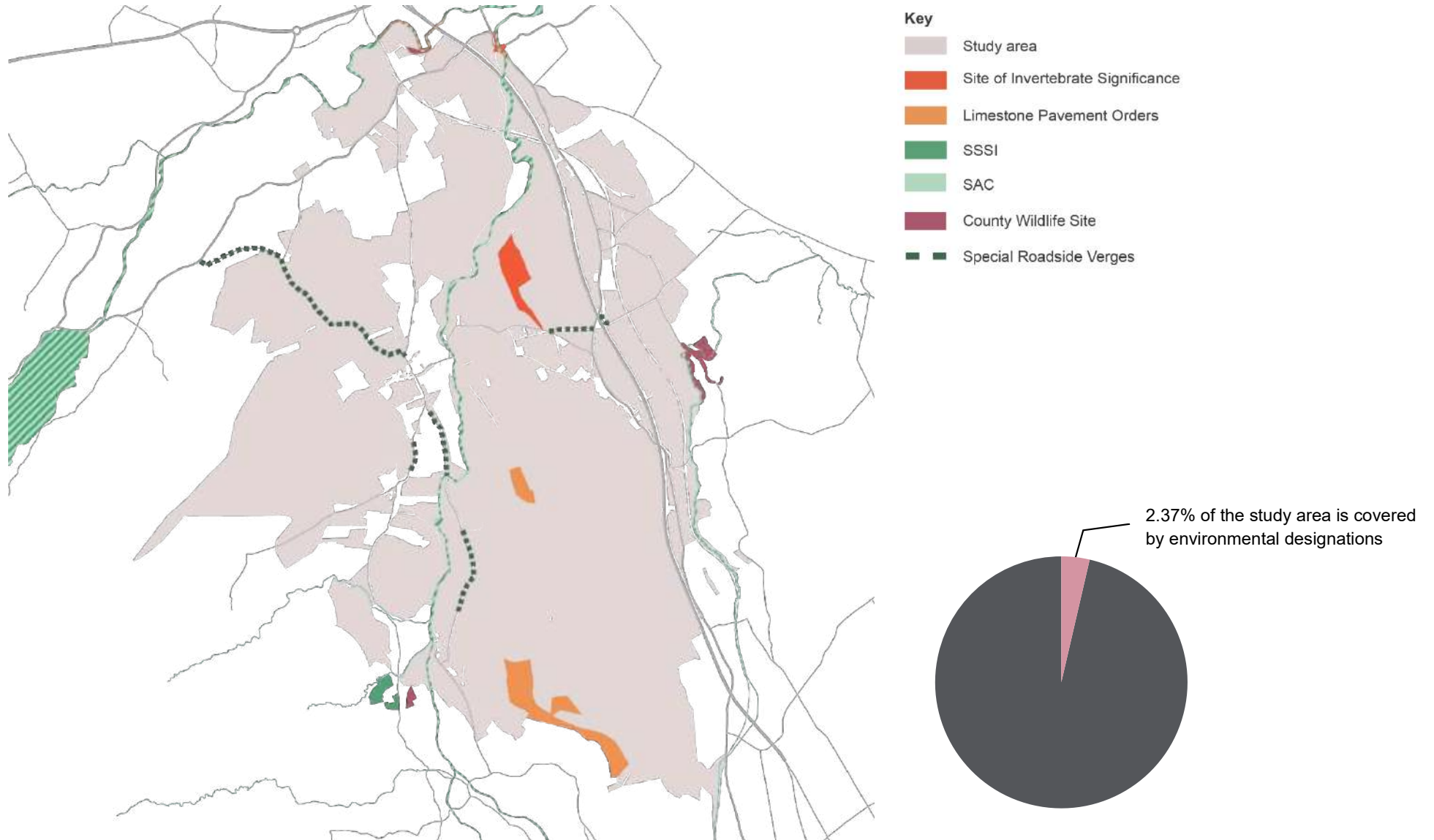


Figure 6.10. Environmental designations

Data sourced from Cumbria Biodiversity Record Centre. © Natural England copyright 2020.
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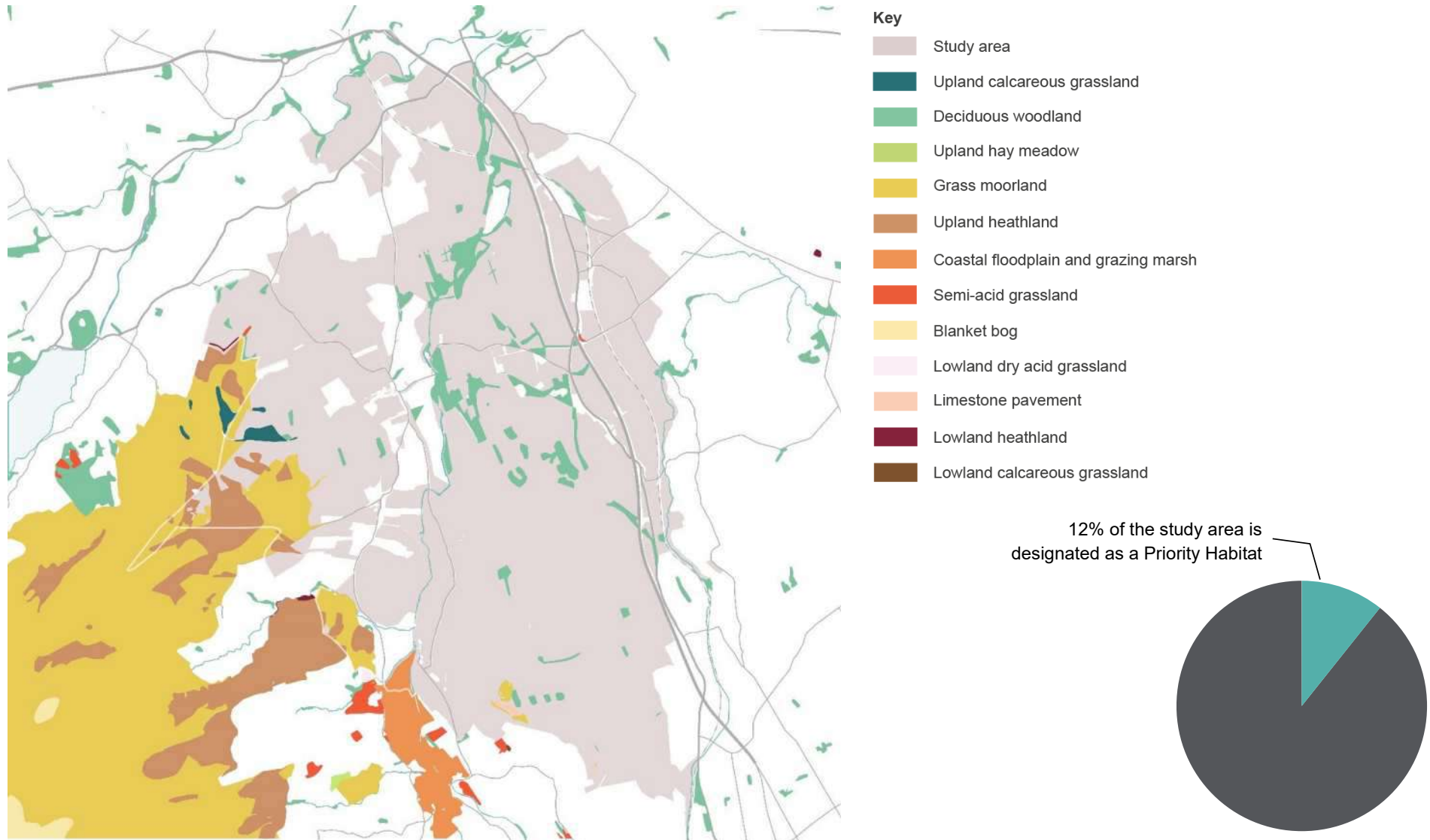


Figure 6.11. BAP Priority Habitats

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Property



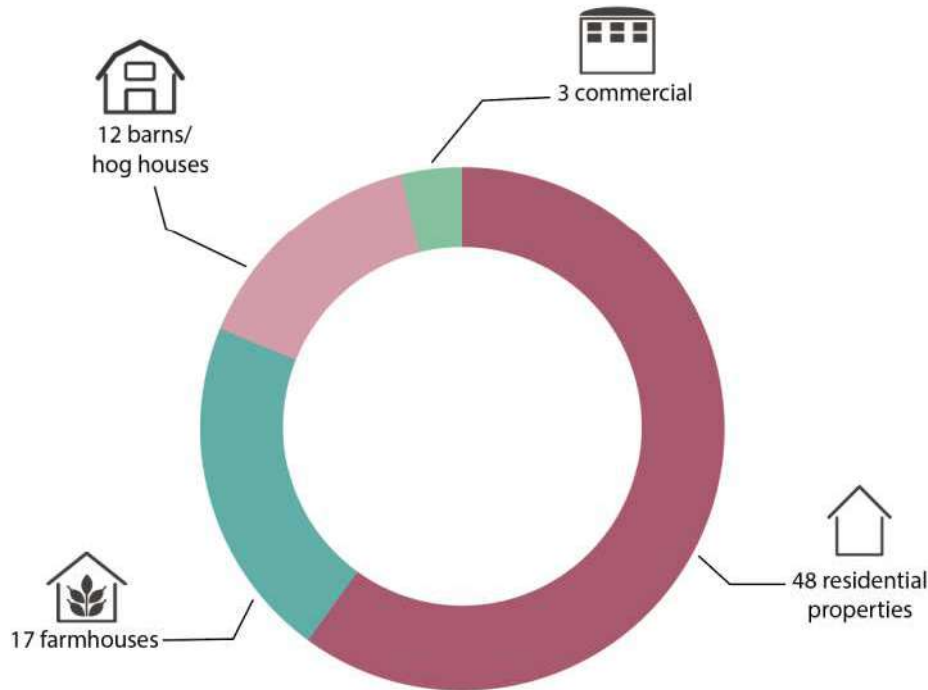
Whale Corner Cottage

6.31 The Estate's most significant properties are **Lowther Castle** and its associated buildings, including the Estate Offices within the former stables, and courtyard. These buildings are the prime attraction for tourists in the area and are of great historic importance.

6.32 The Estate contains a large portfolio of residential and commercial properties to let, including small cottages, large detached farmhouses and farms. The residential properties provide **homes to 112 people**, including 30 families that work on the Estate. In addition, 13 local, national and international businesses operate from the Estate. Businesses that operate from the Estate include: the Outward Bound headquarters, wholesale clothing and outdoor wear, outdoor events companies, handmade jewellery, business solutions and strategists, global security company, property consultants, computer software company, lift schemes for NHS, and a civil engineering laboratory.

6.33 As of 2018 there are 12 hoggist barns which are vacant, for which the Estate are looking into alternative uses in order to retain these buildings. These buildings are no longer suitable for agricultural use as they are either too small for modern farming operations, or the cost of restoring these buildings is prohibitive. Seven of these redundant barns have Class Q status for conversion to residential use and are currently being sold for development. Income from these sales will be re-invested back into the Estate. Two farms in particular, Home Farm and Whale Farm have been identified for future development as holiday accommodation.

6.34 Included within the study area is **Shap Beck Quarry** which is an essential source of local limestone used to maintain the character of local buildings and features important to the Outstanding Universal Value of the Lake District. It is also nationally significant for use in steel manufacture, with by-products sold as a range of aggregates. The products support Port Talbot Steelworks. The quarry currently produces approximately 750,000 tonnes per year on average. The site directly supports 25 full time employees as well as around 20 hauliers and a range of skilled local contractors. Proposed extensions to the quarry (discussed later in this report) will secure this product for the future.



Visitor experience



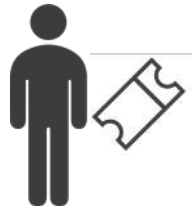
Lowther Castle Cycle Hire

6.35 Lowther Castle & Gardens Trust (LCGT) was established in 2007 as a registered charity. The Trust's founding mission was to enable public access to and enjoyment of the Castle and Gardens. It raised over £15million of private and public funds to this end. Lowther Castle opened for business in May 2012.

6.36 Promoted by LCGT, Lowther Castle & Gardens strives to expand as an attraction that brings new visitors and wider economic benefit to the region. LCGT is looking to provide greater learning opportunities for local people to learn from the land to the Castle portfolio.

6.37 Lowther Castle & Gardens is one of the Lake District's most popular visitor attractions and was voted **Large Visitor Attraction of the Year 2018 in the Cumbria Tourism Awards**. A dedicated team of 52 employees is supported by a network of volunteers who help staff in the gardens.

140,000 visitors at ticketed events



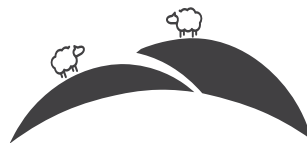
38.7 km Public Right of Way



7.3 km additional permissive paths



483.9 ha of open access land



6.38 Visitors to the Castle can enjoy the Castle ruins, exhibition, gardens, adventure playground, café and shop. The Castle is open daily from 10am to 4pm during winter, and 10am to 5pm in summer. The Castle hosts a varied programme of events throughout the year, workshops and other children's activities.

6.39 Parking facilities at the Castle can accommodate up to 410 cars. There is a charge point for electric vehicles. Penrith National Rail Station is served by the main west coast line from London Euston, Glasgow and Edinburgh, and is located 6 miles from Lowther Castle.

6.40 Major events on the Estate include the Kendal Calling, a four-day annual music festival in July and one of the biggest events in the Lake District which draws in 30,000 people. Until August 2019, the Estate also hosted the Lowther Show, a two-day country fair in August which attracted 20,000 people each year.

6.41 The Estate offers an **extensive network of Public Rights of Way, permissive paths and open access land (Figure 6.14)**. In 2018, the Estate teamed up with local family business Arragon's Cycles of Penrith, to provide visitors with the opportunity to hire bikes. This has proven to be very popular and is a valued contribution to health and well-being opportunities in the area. In order to increase prospective routes for cyclists, the Estate also plans to open a new way-marked route linking Penrith to Pooley Bridge.

6.42 Educational access is provided to new community woodlands at Clifton and Hackthorpe which link to the existing rights of way network. Hackthorpe woodland is also used by a local school for curricular activities and by local orienteering groups.

6.43 Holiday accommodation within the Estate is limited to Lowther Holiday Park which offers 50 acres of caravan and camping just outside the National Park. The site has a range of static holiday homes for purchase or hire, camping pods, and pitches for touring caravans, motor homes and tents. The Estate has recently partnered with Pure Leisure Group to oversee management of the holiday park.

6.44 Licensed events are permitted on the Estate including fishing, with an Annual Fishing Licence on the Rivers Lowther and Eamont administered by Penrith Anglers, ultra-marathons, cycle sportive, tractor runs, pony club rallies, orienteering, and hound trailing.

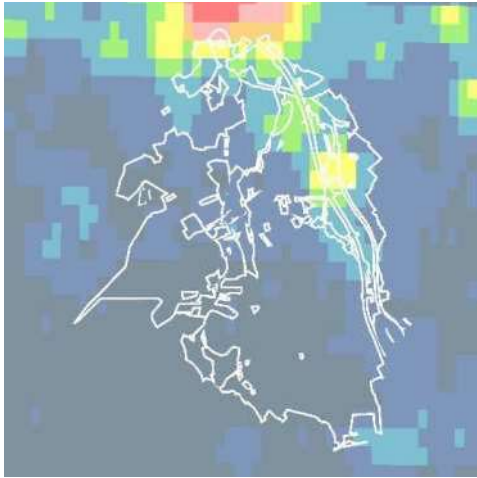


Figure 6.12. Dark skies Data sourced from CPRE

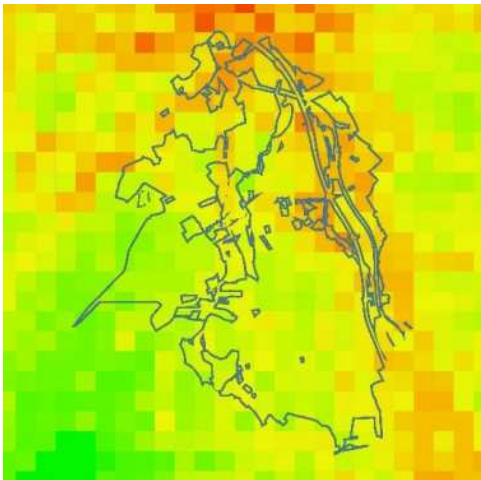
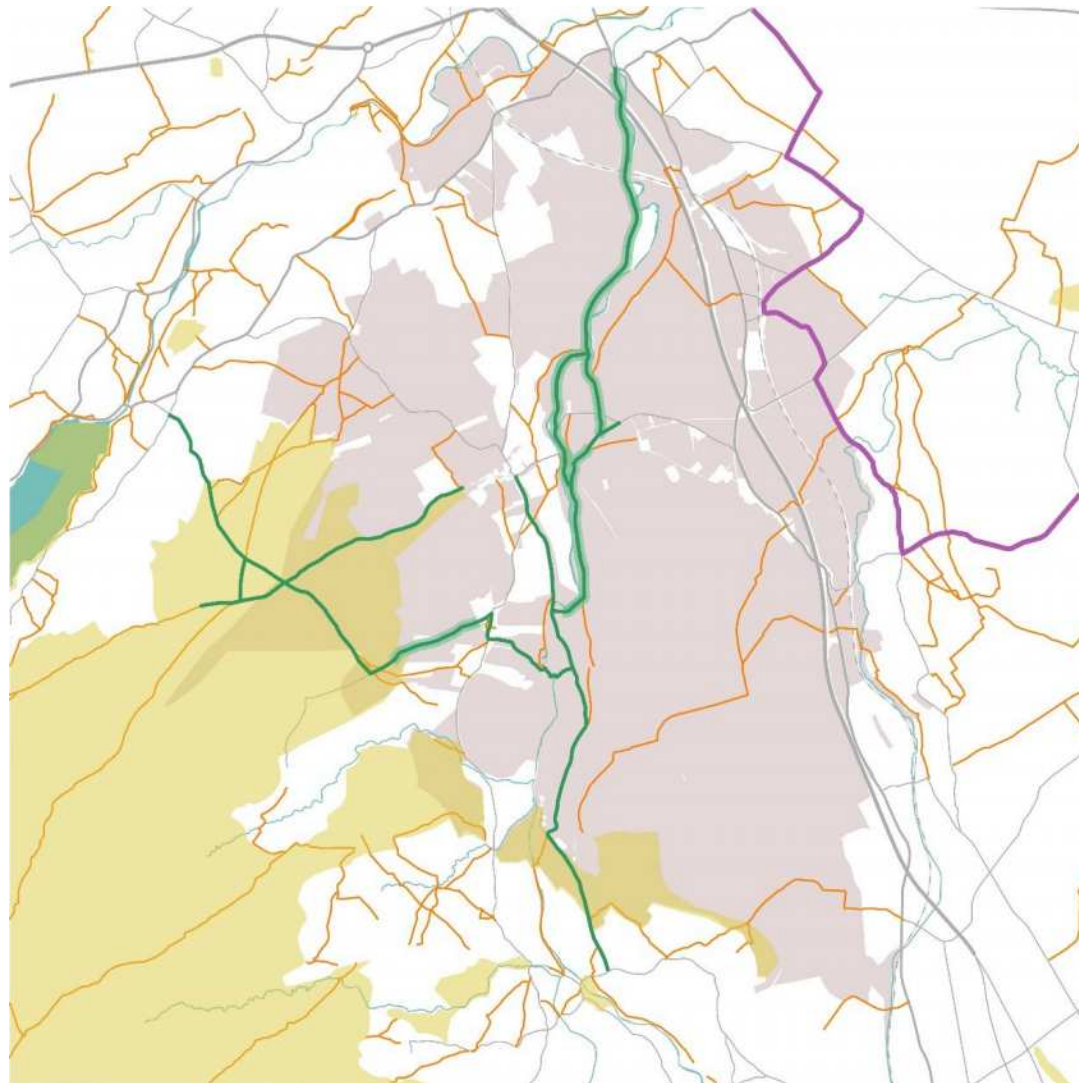


Figure 6.13. Tranquillity Data sourced from CPRE



- Key**
- Study area
 - Public Right of Way
 - Permissive path
 - Local cycle route
 - National Cycle Route 71
 - Open Access land

Figure 6.14. Access network Data sourced from Sustrans, Cumbria County Council and Lake District National Park Authority. © Natural England copyright 2020. Contains Ordnance Survey data © Crown copyright and database right 2020

Chapter 7

Ecosystem services



7.1 The natural world, its biodiversity and its constituent ecosystems are critically important to our well-being and economic prosperity; they underpin our very existence.⁵ As the UK population continues to grow, the pressure on these precious resources will increase, accelerated by the impact of climate change. By examining the services that the ecosystems at Lowther provide, informed management choices can be made to help ensure these services continue to deliver for future generations.

⁵ DEFRA, 2011. UK National Ecosystem Assessment.

7.2 The mosaic of grassland, water, arable crops, woodland and moorland at Lowther provide a range of crucial services for the local community and further afield. These include the provision of food and water, clean air, flood regulation, aesthetic value, heritage and opportunities for recreation.⁶ The value of these services and their condition, whilst not always visible, has a significant impact on the capacity of the land to continue to provide these services and directly affects the prosperity and well-being of the local community and economy.

7.3 The range and extent of services at the Lowther Estate can be considered under the headings of Supporting, Regulating, Provisioning, and Cultural Services, which are explored in the **Table 7.1**. It should be noted that this is a desk-based study intended to provide an overview of the services provided by the Estate. It has been based on the limited data available from the Estate and publicly available sources in 2018. As a result, the data here is likely to have a bias towards the in-hand farms and it is recommended that further gathering of quantitative data would improve the quality of the assessment and produce a more in-depth analysis of the Ecosystem Services on the Lowther Estate as a whole.

7.4 A land cover-based assessment of ecosystem service provision on the Lowther Estate was undertaken by Lancaster University in January 2019. This used the CEH Land Cover Map (amongst others) to calculate the annual monetary value of ecosystem services provided by natural capital assets. Using the CEH Land Cover Map the total natural capital value of the land at Lowther is estimated to be £871,135 per year. The woodland had the highest value at £457,505 per year, with the farmland (including the horticulture and grassland) valued at £347,463.⁷

7.5 The Estate's ecosystem services have been summarised in **Tables 7.1-7.4**.



Figure 7.1. Constituent parts of Ecosystem Services

⁶ DEFRA, 2015. Developing ecosystem accounts for protected areas in England and Scotland: Lake District National Park Summary Report.

⁷ Burke, T. et al, 2019. A Land Cover-Based Assessment of Ecosystem Service Provision in UK Farms and Estates.

Table 7.1: Lowther Estate Supporting Services summary



Supporting Services	Lowther Estate's Contribution	
<p><i>Supporting Services are necessary for the production of all other ecosystem services. The impacts of these services on people may be indirect or occur over long periods of time.</i></p>  <p>The diagram is a circular chart divided into four quadrants representing ecosystem service categories:</p> <ul style="list-style-type: none"> Supporting (Dark Green): Air quality, Water, nutrient cycling & soil formation, Biodiversity, Minerals, Tranquillity, Timber, Energy, Irrigation, aquaculture, yachting, Gender equality. Regulating (Light Green): Flood, Carbon, Carbon storage, Water supply, Soil & food, Erosion, Soil quality, Water quality, Disease & pest, Pollination. Cultural (Light Blue): Heritage, Cultural values, Recreation & tourism, awareness. Provisioning (Light Green): (This quadrant is mostly empty in the diagram). 	<p>Biodiversity</p> <p>Biological records indicate that a diverse range of species are supported by or benefit from the estate, many of which are protected or are of conservation concern. This includes at least six species of bat, Adder, Great Crested Newt, Atlantic Salmon, European Otter and at least 29 red listed species of bird.</p> <p>However, the Estate is largely under-recorded and monitoring of indicator species would improve understanding of the condition of habitats and the impact of management. With the exception of the SSSIs, little is known of the condition of priority habitats within the Estate.</p> <p>The rivers Lowther, Leith and Eamont are all SSSIs considered to be in an 'unfavourable recovering' condition. The River Lowther is considered low risk; however, Eamont is medium and the Leith high risk (the latter due to Shap Waste Water Treatment Works operating in excess of its discharge consent which threatens water quality). The rivers are considered 'at risk' due to concern over longer term delivery of restoration projects</p>	
	<p>Water, nutrient cycling and soil formation</p> <p>Currently, management measures to protect water courses and control surface water run-off include tree planting, minimum tillage and over-winter stubbles.</p> <p>Only a small proportion of the land on the Estate is managed for arable production, however a large area is grazed. Stocking densities are generally low where land is under agri-environment schemes which will help reduce poaching and soil erosion.</p> <p>Arable management practices for nutrient cycling include the use of green manures and using farm manure to fertilise arable land.</p> <p>With Lowther Park Farm's plans to adopt a regenerative approach to agricultural land management from 2019, this is likely to further improve water, nutrient cycling and soil formation.</p>	
	<p>Air quality</p> <p>Air and sound quality on the Estate is compromised by the presence of the M6 along the eastern boundary. Wide-scale tree planting helps reduce this pollution along this boundary.</p>	

Table 7.2: Lowther Estate Regulating Services summary

Regulating Services	Lowther Estate's Contribution
<p><i>Regulating Services are the results of natural processes such as water purification and air quality.</i></p> 	<p>Climate / Carbon Storage</p> <p>Carbon storage calculations have been conducted for the new woodland which has been valued as sequestering 60,000 tonnes over a 100 year period. This figure does not cover all woodlands within the Estate, and it is calculated that a further 30,000 tonnes will be captured as a result of planting planned for 2019-20.</p> <p>Soil carbon storage data available from the UK Centre of Ecology and Hydrology shows carbon storage in the top soil across the study area is at approximately 68 tonnes per hectare on the lower pasture and arable land. The higher land at Askham Fell stores up to 90 tonnes per hectare. Similarly, the estimated abundance of invertebrates in topsoil was on average 56 per hectare on the lower pasture and arable land, and as high as 107 per hectare on the higher around Askham Fell. Both sets of data showed the area immediately south of the Castle as being an area higher in carbon storage and invertebrate abundance.</p> <p>Plans to reduce stocking rates, revert some areas of arable to grassland as part of the parkland restoration scheme, and further tree planting will help to improve carbon storage on the Estate. The restoration of peat bogs at Bampton Common (just outside of the study area) will improve carbon storage on the moors and is an example of the Estate's approach to management of peat. The Estate has stopped burning as a method of managing the Fells in order to retain peat-forming vegetation and improve carbon storage.</p> <p>Where possible the Estate has opted for greening measures to reduce the environmental impact of restored or new buildings. For example, the Castle is heated by a biomass boiler which is housed in a building which has a green roof. All compost used for the gardens is peat free and locally sourced.</p>
	<p>Water flow and flood</p> <p>The project to de-canalise the River Lowther to encourage it to flow along its natural channels, together with further plans to reintroduce beaver at Whale, are likely to help retain water and reduce the risk of flood, hold back silt and other pollutants, and make significant improvements to the water-based ecosystem services on the Estate.</p> <p>The increase in tree cover across the Estate is also likely to have a positive impact on water regulation, reducing down-stream flooding and soil erosion.</p>
	<p>Erosion</p> <p>Efforts to improve riparian habitats include protective buffer strips, maintenance of riverside woodland strips and areas of minimum tillage on arable land. Extensive woodland planting will help to reduce surface water run-off and erosion into watercourses.</p>
	<p>Soil quality</p> <p>The majority of agricultural land management is under permanent grassland. However, agricultural production is undertaken on grade 3 land (moderate to good). The in-hand commercial farmland soils have been analysed for their levels of nitrogen, phosphorous and potassium, but not for their carbon sequestration.</p> <p>Arable practices to improve soil quality include minimum tillage on sloping land, over-wintered stubbles and spring cropping to prevent run-off. The Estate is currently undertaking Farm Environment Plans focussing on soil protection on the Fells.</p>
	<p>Water quality</p> <p>The rivers Lowther, Leith and Eamont run through or border the Estate, and together are designated as a SAC and SSSI (currently in unfavourable condition, with the Lowther and Eamont considered 'at risk'). Plans to reintroduce Beaver in 2020 are likely to improve the condition and water quality of the River Lowther. This project has required the Estate to make space for the land to</p>

Regulating Services	Lowther Estate's Contribution
	<p>receive additional floodwater from the river and allow water to move freely in the floodplain. An additional Higher Tier scheme is hoped to be approved for 2020 to help re-meander the stretch of the River Lowther at Setterah Park Farm which involves raising the level of the riverbed so that the river follows its natural channel through the landscape.</p>
<p>Disease and Pests</p>	<p>Due to the Estate's interest in honeybees, insecticides are avoided within the in-hand farmed portion of the Estate. This includes the avoidance of neonicotinoids.</p> <p>Farming within the in-hand Estate has adopted an extensive approach, to reduce the chance of disease; lambing outside later in the year helps to reduce the use of antibiotics. Similarly, the suckler herd of native breed cattle are bred outside for the same reason.</p> <p>Woodlands across the Estate are largely managed following plans approved by the Forestry Commission. These include consideration of pests and diseases whilst re-stocking. Woodland managers regularly attend Forestry Commission updates on the spread of disease and appropriate action. Grey squirrels are controlled to favour red. Deer numbers are controlled to improve natural regeneration in woodlands. Where possible, invasive plants such as rhododendron (which hosts <i>Phytophthora ramorum</i>) are removed and treated.</p>
<p>Pollination</p>	<p>76% of land cover on the Estate is grassland (including heather and acid grassland), with a good proportion of this managed under environmental stewardship schemes where stocking densities are reduced allowing grassland plants to flower. Areas of arable land are planted with crops for pollinators including nectar flower mixtures as part of the HLS scheme (1ha) and borage crops (24ha in 2018). The Estate's growing collection of bee hives (240 hives) will be contributing to pollination services across the Estate.</p> <p>Data from CEH shows the mean estimates of numbers of nectar plants species for bees in 2m x 2m plots. For the study area, this varies between 2.6 and 8, with the lowest concentrations up on the Fells, and the highest concentrations around the Castle, and in the south by Woodfoot Meadow County Wildlife Site.</p> <p>The Lowther Estate participates in the National Honey Monitoring Scheme where samples of honey are taken to examine the pollen to better understand the effect of the Estate's new regenerative land management methods.</p> <p>28ha of land within the Estate is designated as Sites of Importance for Invertebrates. 23ha of this is Buckholme Wood, a Planted Ancient Woodland which is managed as part of forestry operations. Further details about the invertebrates recorded here was not available for this assessment.</p>
<p>Water supply</p>	<p>There is a single borehole which provides non-potable water at Lowther Park Farms.</p>
<p>Food</p>	<p>In 2018 Lowther and the farms within the Estate produced approximately:</p> <p>Animal products: lamb – 196 tonnes (5000 lambs); beef – 157 tonnes (200 cattle, plus 800 as a result of the dairy industry); dairy – 10.8 million litres milk (with 400 dairy replacements); honey – 5 tonnes</p> <p>Cereals: oilseed rape – 250 tonnes; barley – 500 tonnes; wheat – 400 tonnes</p>

Table 7.3: Lowther Estate Provisioning Services summary



Provisioning Services	Lowther Estate's Contribution	
<p><i>Provisioning Services are products obtained from ecosystems.</i></p> 	Timber	Areas of scattered woodland and plantation produced 2,029.3 tonnes of timber products in 2018.
	Minerals	Shap Beck Quarry produces on average 750,000 tonnes per year of carboniferous limestone. This is of great significance; the product from Shap Beck Quarry supports the internationally important Port Talbot Steelworks, and is also used locally in the restoration of stone walls throughout the National Park. If planning permission is granted for the quarry extension this will release a further 9.6 million tonnes of limestone for kilnstone production, and stone wall and building restoration on the Estate.
	Energy	The woodland within in the study area produced 402.5 tonnes of woodchip and 304.7 tonnes of hardwood firewood in 2018.
	Genetic diversity	<p>At least 40% of agricultural land and all woodlands are managed following environmentally sound land management practices which support biodiversity.</p> <p>The Estate has built partnerships with various conservation bodies including Natural England, Forestry Commission, and RSPB to deliver landscape and habitat restoration projects which look to further increase biodiversity, helping to increase ecosystem resilience and enable movement of species through the landscape.</p>
	Inspiration / spiritual values	The Lowther Estate is a landscape that inspires – evidenced in paintings by J. M. W. Turner and in poetry by Wordsworth. More recently, the Estate's appointment of Dan Pearson to create a 21st century garden here, inspired by the combination of both controlled design and wilderness, reflects the history of the Estate.
	Tranquillity	The south-western side of the Estate (away from the M6 and more populated area of Penrith) scores well on tranquillity mapping (Figure 6.13). Dark skies mapping shows more than ¾ of the Estate has light levels below 0.5 Nano Watts / cm ² which means the skies fall within the darkest two categories, providing opportunities for visitors to truly partake in activities of quiet enjoyment and spiritual refreshment (Figure 6.12).

Table 7.4: Lowther Estate Cultural Services summary

Cultural Services	Lowther Estate's Contribution
<p><i>Cultural Services are spiritual benefits that people obtain through the interaction with the natural environment.</i></p> 	<p>Cultural heritage values</p> <p>The historic landscape is evident throughout the Estate; listed buildings, Scheduled Monuments, traditional agricultural buildings, a registered park and garden and designed landscape, stone walls, 483.9 ha of Common Land, and 398 known non-designated historic environment assets all indicate an intact historic landscape of great significance.</p> <p>A long history of agro-pastoralism is prevalent in the landscape, including hefted sheep grazing.</p> <p>Historic place names include Lowther (from the Norse, <i>lowth-a</i> meaning foaming river), and Whale (probably derives from Scandinavian word for grave-mound). Notable to the area are the names of Scandinavian origin. The family title Earl of Lonsdale is Scandinavian meaning 'valley of the River Lune'. There are examples of the ending '-by' meaning a farm or settlement, that fall within the Estate such as Whitbysteads and Thrimby Park. Keld Head in Askham, 'Keld' means a stream. At Melkinthorpe, 'Thorpe' denotes a secondary dependent settlement, in this case secondary to Strickland. Also of note are the commonly used landscape words of Scandinavian origin such as 'Beck', 'Fell' and 'Gill'.</p>
	<p>Recreation & tourism services</p> <p>Lowther Castle and the major events of Kendal Calling and the Lowther Show are both major draws for visitors. Between them they attract 140,000 visitors a year.</p> <p>38.7 km Rights of Way, 7.3 km permissive paths, 483.9 ha Open Access Land, bicycle hire, all provide opportunities for people to enjoy the Estate for free – quantitative data for the number of visitors who take advantage of this offer is not currently available.</p>

Chapter 8

Relationship with the Lake District National Park

8.1 The Lowther Estate sits within The English Lake District, first established in 1951 under the National Parks and Access to the Countryside Act (1949) and was designated as a World Heritage Site in 2017. The Lowther Estate contributes towards the special qualities of the Lake District and the attributes of Outstanding Universal Value (OUV) of the World Heritage Site (WHS) as follows.

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
1.	<p>A world class cultural landscape</p> <p>A landscape which reflects an outstanding fusion between a distinctive communal farming system that has persisted for a least a millennium with improvements of villas, picturesque planting and gardens during the 18th and 19th centuries. This combination has attracted and inspired writers and artists of global stature, and sparked the conservation movement with world-wide ramifications. A diverse landscape where each valley has its own distinct character.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ Extraordinary beauty and harmony ■ Fusion between a natural landscape and farming system 	<p>The Estate is a microcosm for the Lake District demonstrating traditional farming practices, designated gardens and parkland surrounding Lowther Castle, with a strong sense of tranquillity. A landscape which has inspired world-class painters such as J. M. W. Turner and poets such as William Wordsworth.</p> <p>The Estate sits largely within the Haweswater valley and contributes significantly to the beauty and harmony of the area with its continuous agro-pastoral landscapes at Setterah Park, Widewath, Whitbysteads and Askham demonstrating the long development of the farming landscape.</p> <p>The wide open landscape, and low levels of habitation provide opportunities for quiet enjoyment and spiritual refreshment (Figure 6.14).</p>
2.	<p>Complex geology and geomorphology</p> <p>The diversity of rock and minerals has given rise to a rich mining and quarrying history. These local natural resources have strongly influenced the built environment and the wider landscape, with local slate, limestone and granite featuring in buildings, bridges and walls.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ Rich mining and quarrying system ■ Local nature resources have strongly influenced the built environment and wider landscape ■ Water powered industry ■ Variety of each of the 13 valleys 	<p>A varied geology including mudstone, siltstone, heavy clay, sandstone, argillaceous rocks, Limestone Pavement Orders. Numerous lime kilns litter the landscape reflecting the history of quicklime production. Quarrying activities continue with abstraction of carboniferous limestone at Shap Beck quarry.</p> <p>The majority of buildings on the Estate are built of local stone and slate, including the limestone Lowther Castle. Limestone walls are a significant feature of the landscape with around 20km of wall within the registered park alone, some of which date back to the 17th century.</p>

⁸ Full Descriptions of the Special Qualities are available here: http://www.lakedistrict.gov.uk/_data/assets/pdf_file/0009/729756/5.0-Appendices.pdf

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
3.	<p>Rich archaeology and historic landscape</p> <p>The landscape reflects a long history of settlement, agriculture and industry.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ Landscape that reflects a long history of settlement, agriculture and industry ■ Distinctive early field system ■ Medieval buildings ■ Local dialect vocabulary, place names and traditions 	<p>The Estate has a rich and diverse multi-period historic environment resource, all of which will be susceptible to physical change. The majority of Scheduled Monuments relate to the prehistoric period and evidence a landscape of considerable importance in those times. There are four Roman period Scheduled Monuments – 3 settlements and one road. There are a very large number of medieval non-designated assets, including numerous lynchets, ridge and furrow and deserted settlements that contribute to the setting of the landscape and understanding of its history. These highlight a relict medieval agricultural landscape. There are four listed buildings that are on the Heritage at Risk register. The majority of the listed buildings are post-medieval and of agricultural function.</p> <p>Historic place names include Lowther (from the Norse, lowth-a meaning foaming river), and Whale (probably derives from Scandinavian word for grave-mound). Notable to the area are the names of Scandinavian origin. The family title Earl of Lonsdale is Scandinavian meaning ‘valley of the River Lune’. There are examples of the ending ‘-by’ meaning a farm or settlement, that fall within the Estate such as Whitbysteads and Thrimby Park. Keld Head in Askham, ‘Keld’ means a stream. At Melkinthorpe, ‘Thorpe’ denotes a secondary dependent settlement, in this case secondary to Strickland. Also of note are the commonly used landscape words of Scandinavian origin such as ‘Beck’, ‘Fell’ and ‘Gill’. The large country residences and their gardens that are listed contribute to the romantic/picturesque landscape.</p>
4.	<p>Unique farming heritage and concentration of Common Land</p> <p>The pastoral system that has evolved in the Lake District for over a thousand years and its continuation by today’s farmers maintains a unique farming legacy. The Lake District has the largest concentration of Common Land in Britain, and possibly Western Europe, with a continuing tradition of hefted grazing and collective management.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ Hefted grazing and collective management ■ Herdwick, Rough Fells, Swaledale Flocks ■ Common Land and shepherd meets ■ Customary tenure of farms ■ Pastoral system that has evolved in the Lake District for over a thousand years and its continuation by today’s farmers maintains a unique farming legacy. 	<p>Farmland across the Lowther Estate is managed largely by a pastoral farming system. There are two areas of Common Land which are managed by traditional hefted sheep grazing - Askham Fell and a small parcel of Bampton Common, both managed by two hefted flocks belonging to tenant farmers.</p> <p>Many of the farming families at Lowther can trace their ties to the landscape over hundreds of years. The social and cultural elements of the pastoral system are still evident today in the pattern of farm tenure with collective communal grazing, shepherds’ meets, local dialect and language. Traditions such as agricultural shows and distinctive local sports such as Cumberland and Westmorland Wrestling are also evident. The Lowther Show, hosted by the Estate, celebrates traditional rural crafts such as swill basketry, stick making and wrestling.</p>

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
5.	<p>The High Fells</p> <p>The Lake District includes the highest land in England. These mountains, known as “fells” are rich in wildlife, full of archaeological sites and are predominantly open, Common Land and an integral part of the hill farming system. For centuries people have come to walk and climb on them, while numerous writers and painters have been inspired by their beauty. The fells’ peaks define the valleys and shape the communities below.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ Open, Common Land and an integral part of hill farming system ■ For centuries people have come to walk and climb 	<p>To the west of the Lowther Estate lies Askham Fell, Common Land which is managed by hefted grazing. This area includes the Scheduled Monument funerary cairns, and surrounding cairnfields, historic stone alignments, and the Skirsgill Romano-British enclosed stone hut circle settlement.</p> <p>To the south of the study area lies Knipe Scar Common which includes the Scheduled Monuments of a univallate hillfort and ring cairns.</p> <p>These fells are a popular draw for visitors enjoying outdoor pursuits, something the Estate is keen to encourage.</p>
6.	<p>Wealth of habitats and wildlife</p> <p>The Lake District supports a unique assemblage of wildlife and habitats. The habitats which we see today have been developing since the retreat of the glaciers 10,000 years ago and are a response to a complex underlying geology, geomorphological processes, altitude, climate and the history of human land management. The earliest human influences to vegetation began in Neolithic times. Small areas of clearance are reflected in the pollen record. As cultivation and grazing increased, woodland gave way to more grassland communities. Much later, woodland industry modified the species composition of many of our woodlands.</p> <p>On the valley bottoms, upland hay meadows and pastures reflect pastoral management. On the fringes of the park, limestone pavements, grasslands and woodland add to the diversity.</p> <p>Almost 20% of the National Park area is designated for its biodiversity value. Each of these habitats is represented by a suite of species, some of which are considered to be particularly important. This may be because they are rare or scarce or because they are in decline and vulnerable to threat (or both). An example is red squirrel.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ Unique assemblage of wildlife and habitats 	<p>The Estate contains 100.8 ha of land designated for its biodiversity value.</p> <p>The Estate includes a range of priority habitats including ASNW, limestone pavements, grass moorland, coastal and flood plain grazing marsh, upland heathland, upland calcareous grassland, and good quality semi-improved grassland.</p> <p>The River Eden SAC and SSSI (which incorporates the rivers Lowther, Eamont and Leith) were designated for the unique ecological conditions created by the underlying geology, the diversity of plant species (more than any other in the UK), and for the fauna that these rivers support which includes the Annex II species white-clawed crayfish, river lamprey, Atlantic salmon and otter. Both designations are considered to be unfavourable and ‘at risk’.</p> <p>The Whinell Red Squirrel Reserve lies approximately 1.5km east of the study area. The study area therefore falls within the 5km buffer zone of the reserve; grey squirrel populations are controlled on the Estate as part of the licence agreement with Centre Parcs at Whinell.</p>

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
7.	<p>Mosaic of lakes, tarns, rivers and coast</p> <p>The National Park has a rich variety of becks, rivers, lakes, tarns and coast. They are internationally important because of their water quality, range of habitats, and species, such as vendace, arctic charr, and schelly.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> Collectively contribute to the high quality scenery and natural resource which is so distinctly 'the Lake District' and unique in England 	<p>The study area for this Whole Estate Plan does not encompass any lakes in the National Park. However, the habitats and land management here are heavily influenced by the rivers which border and cross the study area. These rivers make up part of the River Eden Special Area of Conservation (SAC) and the River Eden and Tributaries Site of Special Scientific Interest (SSSI), designated for the unique ecological conditions created by the underlying geology, the diversity of plant species (more than any other River in the UK), and for the fauna that it supports. Species include the Annex II species White-clawed crayfish, River Lamprey, Atlantic salmon and Otter.</p>
8.	<p>Extensive semi-natural woodlands</p> <p>The semi-natural woodlands add texture, colour and variety to the landscape. Some are internationally important habitats, defining the character of the valleys. The limestone on the fringes of the National Park supports distinctive woodland types and wood pasture, pollards and old coppice woodland and contains one of the greatest concentrations of ancient trees in Europe - this forms a living record of past land use, part of the rich cultural landscape.</p> <p>The Lake District woods have been used for centuries as a source of raw materials for local industries. The Lake District's woodland is increasingly valued for carbon sequestration and storage and as a source of renewable wood-fuel and wood products. Recent woodland regeneration schemes on the fell sides are adding a new generation of woodlands to the landscape</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> Semi-natural woodlands add texture, colour and variety to the landscape 	<p>The Lowther Estate contains 128.8 ha of ASNW, although 85% of this has been planted with conifer for wood fuel and wood products.</p> <p>Since 2018, the Lowther Estate has contributed significantly to woodland regeneration within the Lake District by planting 213,000 trees (165.5 ha).</p> <p>In addition, the treed landscape of the parkland is a vital part of the historic landscape and the Estate's setting. Plans to restore 205ha of parkland and wood pasture in 2019 will help improve this distinctive feature.</p>

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
9.	<p>Distinctive buildings and settlement character</p> <p>Materials and details are a common link between contrasting building types and styles. Vernacular buildings have a simple functional character and often rugged appearance using local materials.</p> <p>Many towns, villages and hamlets have a range of building types and styles and a distinctive spatial and townscape character depending on their history and development.</p> <p>The network of dry stone walls, hedgerows, lanes, footpaths and the surviving field patterns form a visual and historic link between settlement and countryside. The survival of a dispersed network of vernacular farm building groups, often relatively unaltered by more recent development, is an important component of this special quality. A diverse range of historic settlements types has emerged within a relatively small geographical area.</p>	<p>A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral traditions and local industry in a spectacular mountain landscape</p> <ul style="list-style-type: none"> ■ The local architecture varies from the traditional vernacular buildings with related characteristics to the more formal architectural style settlement pattern villas 	<p>Settlement types include planned villages guided by a wealthy patron (such as Lowther Village) and agricultural villages with historic field patterns. Materials largely consist of red sandstone, limestone, slate and stone built barns.</p> <p>Listed buildings of national importance include two Grade I, seven Grade II* and 31 Grade II. The Castle, its terraces, and St Michael's Church are on the Heritage at Risk Register.</p> <p>There are 17 farmsteads within the study area with associated vernacular farm building groups.</p> <p>Lime kilns across the study area date from the early 19th century when lime production was an essential component for soil improvements and ironworks.</p>
10.	<p>A source of artistic inspiration</p> <p>The unique beauty of the Lake District's distinctive pastoral landscape has inspired generations of artists and writers. The influence of Picturesque aesthetics led to the physical embellishment of the landscape through construction of villas and gardens, designed landscapes and planting schemes. The Romantic movement transformed this into a new and influential view of the relationship between humans and landscape. This included the possibility of a sustainable relationship between humans and nature, the value of landscape for restoring the human spirit and the intrinsic value of scenic and cultural landscape. This was fundamental to the formation and sharing of globally important ideas of the need to protect such landscapes.</p> <p>Key writers and artists of the 18th and 19th centuries associated with the Lake District include William and Dorothy Wordsworth, Samuel Taylor Coleridge, John Constable, J. M. W. Turner and John Ruskin.</p>	<p>Discovery and appreciation of a rich cultural landscape</p> <ul style="list-style-type: none"> ■ The unique beauty of the Lake District's pastoral landscape has inspired generations of artist's and writer's Romantic engagement with the landscape ■ Viewing stations ■ Designed landscape ■ Key literary associations ■ Key artistic associations 	<p>Lowther Park is a nationally important designed landscape, with an imposing castle designed to be admired within the landscape. Its design, the fact that it is a 'fortified' castle built in an age when they were no longer required, is typical of the Romantic movement. J. M. W. Turner painted the Castle in 1809 and William Wordsworth frequently celebrated the Castle and Estate in his poetry.</p> <p>Today the landscape continues to influence with the 21st century gardens at the Castle designed by Dan Pearson. The Castle Gardens have brought the Estate into the present, re-purposing the Castle and securing its continued enjoyment by the public.</p> <p>Views across the Estate are managed to preserve these features. The value of these views to visitors is evidenced by the Panoramio data collected for the Sustainable Land Management Tool by the National Trust; this dataset illustrates the number of users photographing landscapes and uploading their images to Google and highlights the valued viewpoints at Lowther Castle, Askham, and Lowther Holiday Park.</p>

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
11.	<p>A model for protecting cultural landscapes</p> <p>In parallel with the aesthetic appreciation of the “natural beauty” of the Lake District from the 18th century onwards, there also developed an understanding of its vulnerability to forces of change as a result of emerging industrialisation, tree-felling, and landscape enclosure. This combination of ideas gave rise to the idea that valued landscapes could be nurtured and protected. The early conservation battles to protect the Lake District began a chain of events which established the Lake District as the birth-place of an innovative conservation movement committed to the defence of its landscape and communities.</p>	<p>Develop a model for protecting landscape</p> <ul style="list-style-type: none"> ■ Developed an understanding of its vulnerability to forces of change ■ Birthplace of an innovative conservation movement committed to the defence of its landscape and communities ■ National Trust ownership ■ Other protective trusts ■ Importance of conserving the physical and social elements of hill farming in the English Lake District 	<p>Lowther Estate works closely with the National Park Authority to support its values and protect its special qualities and sustain its OUV.</p> <p>The Estate works to nurture and protect the landscape actively engaging with conservation bodies to seek out opportunities to restore the landscape using best practice in land management techniques. The Haweswater Valley has not historically played a significant role in the conservation movement and this is something the Estate is keen to address. Good working partnerships have been fostered with conservation bodies such as the RSPB, Wildlife Trust, Woodland Trust and Natural England, often looking at innovative ways to conserve biodiversity; re-introducing beaver to help improve water quality and flood prevention, natural grazing regimes, and trialling different methods of arable reversion. These projects are entered in consultation with the WHS coordinator to ensure the physical and social elements of traditional hill farming are preserved.</p>
12.	<p>A long tradition of tourism and outdoor activities</p> <p>The diverse Lake District landscape provides opportunities for a wide range of sporting and recreational activities on land and water.</p> <p>There is a tradition of unrestricted access to the fells together with an historical network of roads, tracks and footpaths. As a result, the Lake District has become a focal point for recreational walking.</p> <p>The history of tourism can be traced back to the Picturesque fascination with the Lake District landscape and its potential for aesthetic experiences.</p>	<p>Discovery and appreciation of a rich cultural landscape</p> <ul style="list-style-type: none"> ■ History of tourism can be traced back to Picturesque fascination with the Lake District ■ Tradition of unrestricted access to the fells. ■ Early tourist infrastructure ■ Key associations with climbing and outdoor movement 	<p>The Estate has a long history of tourism and outdoor activities. The deer park dates back for about 800 years with stalking and an active shoot.</p> <p>Open access to the fells includes 483.9 ha at Askham Fell and Knipe Scar. The Estate also has a good network of rights of way and permissive routes (totalling nearly 46 km) across the land. In the last couple of years new cycle routes have been opened up between Penrith, round Lowther and across to Pooley Bridge.</p> <p>The Estate supports activities such as orienteering, and welcoming local schools to use their land for outdoor curricular activities.</p> <p>Tourist attractions within the Estate draw tourists into the area, most notably Lowther Castle (which brings in c.90,000 visitors a year), the Lowther Show (c.20,000) and Kendal Calling music festival (c.30,000 people).</p>

	Lake District National Park Special Qualities ⁸	OUV theme and attributes of WHS	Lowther Estate contribution
13.	<p>Opportunities for quiet enjoyment</p> <p>The tranquillity of the fells, valleys and lakes gives a sense of space and freedom. The open character of the uplands, and the absence of modern development, is especially important.</p> <p>There is a feeling of wildness, offering personal challenges for some and impressive open views for everyone.</p> <p>These characteristics provide important opportunities for spiritual refreshment: a release from the pressures of modern day life and a contrast to the noise and bustle experienced elsewhere. These are all vital components of the concept of quiet enjoyment and can be found in many places across the whole of the National Park.</p> <p>The value of the Lake District landscape for spiritual nourishment, originating in the Romantic recognition of the capacity of landscape to nurture and stimulate imagination, creativity and spirit.</p>	<p>Discovery and appreciation of a rich cultural landscape</p> <ul style="list-style-type: none"> ■ Tranquillity of the fells, valleys and lakes gives a sense of space and freedom 	<p>The open uplands of Askham Fell, and further south from Knipe Scar Common, afford far-reaching views down Ullswater and across to the massif of the Lake District.</p> <p>The Estate falls within the Eden district which is ranked as having the 3rd darkest skies in the country. This is protected by local planning policy to ensure that the tranquillity and dark skies of the open countryside are not compromised (Figure 6.12).</p> <p>The Lowther Estate promotes activities for quiet enjoyment such as walking, wildlife watching, fishing and acts as a source of inspiration for artists and musicians.</p>

Summary of the Estate's contribution

8.2 As demonstrated in the preceding table, the Lowther Estate has made, and continues to make, significant contributions through its management approach to sustain and protect the Special Qualities and attributes of the Lake District. The Estate engages with the National Park in the physical management of the place and the development of policy and strategy to protect and maintain the Special Qualities, and to safeguard the attributes of the Outstanding Universal Values of the World Heritage Site.

8.3 The National Park Management Plan (The Partnership's Plan, 2015) identifies three Showcase Areas which epitomise the Lake District's credentials as a National Park and World Heritage Site. Much of the Lowther Estate lies within the Ullswater Showcase area. The purpose of these Showcase Areas is to:

- Offer visitors opportunity to experience and engage with a broad range of what makes the Lake District special, illustrating the Lake District's character and cultural significance, as well as offering a whole range of experiences, adventures and hospitality within them.
- Offer visitors the best opportunities to see and experience the Special Qualities of the Lake District.
- Increase the average length of stay by visitors.
- Provide the greatest opportunities to make it easy and attractive for visitors to move through these areas without being reliant upon having their own car.
- Enhance movement and travel to, from and between these Showcase Areas.

8.4 The Lowther Estate, and in particular the area of Lowther Castle and its gardens, already plays a critical role in the delivery of the purposes which the National Park seek to deliver in the Ullswater Showcase Area. The Estate's proposals to further enhance the visitor offer, enhance movement by environmentally thoughtful transport within the Showcase Area, and increase the length visitors stay within this Showcase Area will contribute to the delivery of the purposes of the National Park.



Chapter 9

Challenges and opportunities

This section considers the current challenges faced by the Lowther Estate and explores possible opportunities for improvements. These have been assessed alongside the National Park Authority's vision to ensure future decision making is in line with the objectives of the National Park Authority.

Conserving the Landscape



Action no.	Challenge	Opportunity
1.	<p>Conserving the Castle</p> <p>The Castle is included on Historic England's Heritage at Risk Register and therefore investment is required to ensure that these features do not deteriorate further.</p>	<p>Conserve the Western Wing of the Castle</p> <p>A scheme has been developed to help conserve the Western Wing of the Castle. This opportunity would see the remaining wing of the Castle secured with an enclosed education and events space constructed within the ruin. As a ruin, Lowther Castle is primarily an outdoor attraction and so is greatly affected by weather. The new event space would allow the Estate to offer a venue for a range of educational and cultural events in all weathers for all visitors all year-round. Longer term financial viability will be improved, enabling the Castle to continue to invest in its long-term conservation.</p>

Action no.	Challenge	Opportunity
2.	<p>Conserve the Castle terraces</p> <p>The inner and outer terraces are included on the Heritage at Risk Register and therefore investment is required to ensure these features do not deteriorate further.</p>	<p>Identify funding and implement project to restore Castle terraces</p> <p>Restorative works to the affected masonry on the inner and outer terrace walls will be undertaken in consultation with Historic England to ensure these important features are conserved.</p>
3.	<p>Conserve St Michael's Church</p> <p>The Church of St Michael at Lowther Park (Grade II*) is currently on the Heritage at Risk Register with no current solution agreed.</p>	<p>Conserve St Michael's Church</p> <p>With guidance from Historic England and in conversation with the diocese, the Estate intend to address the current issues with damp masonry, decaying timbers in the tower, and malfunctioning guttering to restore this historic structure.</p> <p>To ensure continued use to protect the building in the long-term, the Estate is considering alternative uses such as a gallery, for workshops, parties, as well as wedding services.</p>
4.	<p>Restoration of the historic gardens at Lowther Castle</p> <p>The restoration of the gardens at Lowther Castle has been a long-term project for the Estate since 2012. Achieving the ambitious plans for the Castle grounds is a huge undertaking.</p>	<p>Continue to deliver the vision set out by Dan Pearson in 2012 to realise a notable world-class garden and park with a reputation of excellence</p> <p>The detailed proposals for the gardens (available on request from the Estate) are borne out of a sense of place, working within the garden's historic framework to deliver a garden that leads on sustainability and land management, whilst adding new layers of expert plantsmanship and offering a unique and interactive visitor experience.</p> <p>The Estate is 8 years into the delivery of this plan with huge progress made so far. The latest development was the latest installation of the Rose Garden in 2018-19. Next on the project proposals is the restoration of the Rock Garden and the Japanese Gardens.</p>
5.	<p>Conserving the historic landscape</p> <p>Conserving the character of the landscape which has been negatively impacted by modern farming enclosures is a key concern for the Estate. This is particularly prevalent across the southern reaches of the historic deer park.</p>	<p>Deer park restoration project</p> <p>A new project to restore 205ha of wood pasture will conserve the medieval structure of the park, whilst removing all the post-war wire fencing (totalling 31.5km).</p> <p>Under Natural England's guidance, arable fields within the parkland will revert back to grassland, parkland trees and pockets of trees will be planted, and different methods for grassland restoration and establishment will be trialled. The planting of parkland trees should be mindful of the historic presence of Ash and, as the impact of Ash dieback unfolds over the next 30 years, consideration should be given to reinstating resistant strains of this tree if appropriate. The parkland project will not only improve the historic landscape, but will restore habitats and contribute to national understanding on successful techniques for grassland restoration.</p> <p>There is also an opportunity for the Estate to adopt a natural grazing regime where a reduced herd of native breed cattle such as longhorn is kept on the parkland year round. It is thought the benefits of natural grazing where the natural cycle and rhythms of herd social structure are present could lead to a more varied</p>

Action no.	Challenge	Opportunity
		<p>landscape and biodiversity. The merits of this method over a more traditional summer grazing regime are currently being debated.</p>
<p>6.</p>	<p>Conserving the historic landscape</p> <p>Stone walls are one of the strongest and most important landscape features on the Estate. These were surveyed by The Landscape Agency in 2006 who found 75% of the walls within the registered park were in a good condition. Walls identified as requiring restorative work were predominantly located within the southern half of the Park.</p>	<p>Source funding for stone wall restoration project</p> <p>There is an opportunity to undertake a complete review of the condition survey of the stone walls outside of the registered park to ensure walls across the whole Estate are preserved. Funding for this work could be secured through the Higher Tier Umbrella scheme.</p>
<p>7.</p>	<p>Conserving the historic landscape</p> <p>The landscape is littered with redundant lime kilns which are an important feature of the history of the site. These are in danger of being lost from the landscape without some restoration work.</p>	<p>Secure funding to restore historic landscape</p> <p>There is an opportunity to secure funding through the National Grid Landscape Enhancement Initiative (LEI) to help fund landscape character restoration works and visual screening of the 400kV pylons visible from the registered park.</p> <p>An application has been submitted to restore eight historic features within the Grade II parkland: two limekilns, a bridge, two dewponds, a drinking trough, a hoggist barn, and the Grade II listed gate piers. Training in traditional restoration skills will also be given to volunteers.</p> <p>In addition, funding could be available through the Rural Development Programme to produce a Heritage Strategy for the Scheduled Monuments within the study area. This will be to understand present condition of monuments, manage change, identify opportunities for conserving features and improve local understanding.</p>
<p>8.</p>	<p>Retention of views and treed landscape</p> <p>The treed landscape of the parkland is a vital part of the historic landscape and the Estate's setting, with planting framing views and creating spaces within the designed gardens.</p>	<p>There are a number of opportunities for improvements to the treed landscape which would help to conserve the landscape's character</p> <ul style="list-style-type: none"> ■ The historic tree avenues at Lowther are a key landscape feature, directing the eye through the formal gardens and out into the surrounding landscape. The lime avenue leading north-east from the Castle would benefit from some restorative work to conserve this view, particularly where trees are currently encroaching across the avenue just north of the River Lowther. Equally, the beech avenue which leads from the Castle to the Walled Garden would also benefit from some restorative management. ■ Similarly, efforts to conserve historic trees across the designed landscape should be supported. The historic lime pollards along the western edge of the Terrace Strip would benefit from halo thinning and sensitive trial pollarding to prolong the life of these trees. ■ The current level of tree cover within the core Estate should be conserved in keeping with its historic design. Where possible invasive species such as <i>Crassula helmsii</i>, <i>Impatiens glandulifera</i> and <i>Fallopia japonica</i> should be eliminated and the habitats where these species are found restored.

Action no.	Challenge	Opportunity
9.	Recognition of the importance of the parkland	<p>Heightened protection by upgrading designation</p> <p>The 2006 Parkland Plan (The Landscape Agency) suggested that, given the good condition of the park and the quality of the archival resource that relates to the gardens as well as the park, there is an excellent case to raise the grading of the Park to at least Grade II*. Plans to restore the wood pasture, avenues and stone walls will further improve the condition of the parkland landscape over the next 10 years.</p>
10.	A family house is no longer present within the park	<p>Planning permission has been granted to construct a new country house which has been materially implemented</p> <p>In 2008 the Lowther Estate won a landmark case under PPS7 to permit the construction of a new country house of outstanding quality. Whilst the house (called Lowther House), designed by Craig Hamilton, has not yet been completed, a material start has been made so as to preserve the planning consent.</p>
11.	<p>Threat to limestone pavements due to lack of management</p> <p>Lowther Estate contains a significant proportion of limestone pavements, an internationally rare geomorphological feature formed by the weathering of exposed beds of Carboniferous limestone. It is considered a priority habitat for conservation in the UK and Cumbria Biodiversity Action Plans. Common Land at Knipe Moor and Knipe Scar Common is not currently managed under a stewardship scheme and includes the most significant area of Limestone Pavement Orders on the Estate.</p>	<p>Improve management of limestone pavements</p> <p>There is an opportunity to examine the current condition and improve management to conserve this priority habitat for the future at Knipe Scar. Advice should be sought on the current condition of this important environmental asset in order to bring it back into good management.</p>

Sustainable Agriculture



Action no.	Challenge	Opportunity
12	<p>Farming is an integral part of the cultural landscape of the Lake District</p> <p>The future evolution and prosperity of the farming industry must be supported in order to sustain the OUV of the WHS.</p>	<p>The Estate will work with neighbouring landowners to support its tenant farmers in order to support a prosperous economy and the future of farming</p> <p>In early 2019, the Estate partnered with the RSPB, United Utilities and Natural England to apply for funding from the Endangered Landscapes Programme (ELP) fund for a Project Innovation Grant. A grant of £60,000 was awarded to develop a plan over the next two years to share approaches, road test them and establish a framework based on feedback from landowners and farmers, and securing income for the project for future reinvestment. Inaugural ELP meetings were held in late 2019 at Lowther, Orton and Matterdale engaging farmers and land managers in the project area. Attendees were asked about their confidence in the future, the biggest challenges currently faced (business, culture, community, natural environment), and the impact of these issues on business, views on how to make farms more resilient, and where they need help.</p> <p>Working closely with farmers and land managers in this way, the landowners hope to work towards a more sustainable future for all. The steering group is now recruiting a project officer to drive the project forwards.</p>
13.	<p>The end of EU-based subsidy for agriculture presents an uncertain future for farmers</p> <p>With the potential end of EU-based subsidy for agriculture looming, the Estate and its tenants need to prepare for the future as existing schemes come to an end.</p>	<p>Work with tenant farmers to foster increased collaboration under an umbrella scheme</p> <p>Due to the competitive nature of the current Countryside Stewardship Higher Tier scheme, tenants on small farms are unlikely to be able to compete with larger farms to be granted a scheme. With this in mind, Lowther Estate is proposing to bring all tenant farms together under an umbrella scheme to help to reduce the financial impact of economically uncertain times, and to reduce the intensification of production through the Lowther</p>

Action no.	Challenge	Opportunity
		<p>valley. Such an umbrella scheme could be hugely beneficial to the continuation of traditional grazing on high ground with hefted sheep flocks, as well as helping to reduce greenhouse gas emissions and improve habitats for wildlife.</p> <p>The Estate will continue to be supportive of sustainable diversification, with many of its tenants supplementing their farming income through other avenues such as ice-cream production, a livery, and accommodation offers.</p>
14.	<p>Loss of farms due to lack of succession</p>	<p>Support for young farmers</p> <p>The Estate is keen to explore the opportunities of share-farming with young farmers to help reduce the initial capital expenditure involved in starting up as tenant farmers. These share-partnerships could help fund the purchase of stock, invest in buildings or purchase machinery to help encourage the next generation of farmers on the Estate.</p>
15.	<p>Lack of quantitative data on the ecosystem services the Estate provides</p>	<p>Develop a long term plan for ecosystem services assessment across the whole Estate</p> <p>This will help inform the Estate of the ecosystem services it provides, track progress and to identify areas for improvement.</p>
16.	<p>Develop a market for Lowther-branded products to strengthen the Lowther and WHS brand</p>	<p>Develop a market for Lowther-grown produce</p> <p>The Estate currently use and sell their own honey and meat in the Lowther Castle café and shop. This could be developed to increase the reach of these products to help strengthen the Estate's presence and brand within the Lake District to help improve audience awareness of Lowther's solid philosophy, quality local products and value to the local and wider community. Lowther products will receive considerable promotion following the launch of the Lowther shop in Penrith in January 2020.</p>
17.	<p>Balancing land management for carbon sequestration alongside maintaining agro-pastoral heritage</p> <p>The Common Land on the Fells is currently overgrazed which is compromising the capacity of the land to sequester carbon. However, hefted sheep grazing is an important aspect of the agro-pastoral heritage of the landscape and a key attribute of the OUV for the WHS.</p>	<p>Support tenants to retain hefted flocks</p> <p>There are two areas of Common Land within the study area which are managed by traditional hefted sheep grazing - Askham Fell and a small parcel of Bampton Common. Both are managed by hefted flocks belonging to tenant farmers on the Estate. The Estate recognises the importance of supporting its tenants to retain these two hefted flocks at a size which is sustainable for the farmers and sustainable for the land. The Estate will continue to work with the World Heritage Site Coordinator to help determine what this level should be to ensure neither the OUVs of the Lake District nor the important service of carbon sequestration provided by this habitat is compromised.</p>

Climate Change



With global temperatures rising and extreme weather events occurring with increased frequency, climate change is likely to present challenges for all aspects of management on the Estate over the next 30 years. Climate change poses the following risks to agricultural production in the UK:

- Soils at risk from increased aridity and wetness.
- Risks to natural carbon stores and carbon sequestration.
- Water scarcity and flooding.
- Risk of land management practices exacerbating flood risk.
- Risks to agricultural, forestry, landscapes and wildlife from pathogens, pests and invasive species.
- Risks and opportunities from changes in landscape character⁹.

Many of the Lowther Estate's plans for future land management included in this plan will help to mitigate the impact of these changes.

⁹ Committee on Climate Change (2018), Land use: Reducing emissions and preparing for climate change.

Action no.	Challenge	Opportunity
18.	Reduce carbon emissions	<p>To improve carbon sequestration on the Estate</p> <p>Supported by a Higher Tier Countryside Stewardship scheme, the Estate has planted 165.5 ha of new woodland, sequestering 60,000 tonnes of carbon, with plans to plant a further 70ha of woodland in 2019. Ongoing management of this asset will be a key concern over the next 30 years of this Plan to ensure the potential climate change impacts of water, pests and disease are controlled.</p> <p>Lowther Park Farms are making carbon management a focus of their operations by adopting a regenerative agricultural production approach from 2019. This focuses on the following key principles:</p> <ul style="list-style-type: none"> ■ minimum disturbance of soil using minimum tillage ■ increasing diversity of cover crops ■ covering the soil as much as possible using an 'armour' of cut material ■ natural grazing regimes ■ no chemicals <p>This approach aims to increase organic matter in the soil and restore the natural cycle of nutrients to lock in carbon.</p>
19.	Detrimental impact of Ash dieback on landscape character	<p>Mitigate the impact through monitoring and informed planting choices</p> <p>Ash trees have not been planted as part of the new woodland plantings due to the current threat of Ash dieback. However, this pathogen could have a devastating impact on the historic ash trees within the Estate and the wider landscape. The Estate should monitor the progress of this disease, alongside Phytophthora, and Acute Oak decline (amongst others), and undertake proactive management to mitigate the impacts of these diseases on the character of the landscape and parkland were possible over the next 30 years.</p>
20.	<p>Flooding as a result of increased rainfall and extreme weather events</p> <p>The River Lowther is currently classified as being in 'unfavourable recovering' condition.</p>	<p>Mitigate flood risk in the Lowther Valley through sensitive riparian management</p> <p>The River Lowther passes through the centre of the Estate and is classified as Flood Zone 3 (high probability of flooding), particularly around Setterah Park and up river at Butterwick meadows (outside the study area). This supports the need for sensitive riparian management that reduces the risk of soil erosion and pollution events, and further mitigation efforts to hold water to protect properties downstream. In light of this, the Lowther Estate has partnered with the RSPB, United Utilities and Exeter University to identify appropriate locations for the reintroduction of beaver and two release sites have been identified on inhouse land. The return of this keystone species could help to improve the condition of the SAC and SSSI, and to mitigate the impact of climate change through holding water back during flash-floods and drier weather, creating new habitats in the landscape, and improving water quality by holding silt and agricultural run-off. This project will be closely monitored and is hoped to have a long-term positive impact on the valley for the foreseeable future.</p> <p>Complimentary to this, an application for a new Higher Tier Stewardship Scheme at Setterah Park is in the pipeline for approval in 2020. This focuses on the re-meandering of the River Lowther by raising the riverbed to encourage the river to flow along its original channels. This will further improve water quality, enable the land to take more water in the case of high rainfall and increase biodiversity. This project will be delivered in consultation with the WHS Coordinator.</p>

Action no.	Challenge	Opportunity
		<p>In addition, a project to re-meander Bessy Gill and restore an original parkland pond which was drained as a result of construction of the M6 motorway is being undertaken in partnership with the Eden Rivers Trust. This, aided by the extensive woodland planting north of Bessy Gill, will reduce run off, improve water quality and reduce flood risk. This project will be delivered in consultation with the WHS Coordinator.</p>
21.	<p>Loss of biodiversity due to changes in habitat quality and connectivity as a result of climate change</p>	<p>Look into feasibility of pine marten reintroduction</p> <p>Pine martens have been reported to be recolonising areas of Cumbria. The Estate is interested in supporting this recolonisation and will seek out project partners to explore opportunities within the Estate in more detail. A feasibility study will be commissioned to better understand the condition of the Estate's woodlands to support these creatures, and what might be required to support the recovery of this species in this area.</p> <p>Recent research¹⁰ in Scotland has found a positive correlation between the presence of Pine Martens and Red Squirrels. If Pine Martens are supported to return this could be good news for the ongoing efforts on the Lowther Estate to support local Red Squirrel populations.</p>
22.	<p>Loss of biodiversity due to changes in habitat quality and connectivity as a result of climate change</p>	<p>Establishing a coherent and resilient ecological network will be crucial in helping wildlife cope with changes in climate</p> <p>There is an opportunity to improve biodiversity links within the Estate and to its immediate surroundings at Woodfoot Meadow County Wildlife Site. The CWS borders the Lowther Estate at Butterwick Green / Low Knipe. This area is not currently managed under an agri-environment scheme and so management in this area to improve the quality, size and connectivity of these habitats could be of great benefit to biodiversity.</p> <p>The importance of this area for pollinators is highlighted in data from Natural England and CEH.</p>
23.	<p>Continued ecological monitoring is imperative to continued understanding of biodiversity at Lowther</p> <p>To date, the Estate has engaged a number of Universities to help deliver environmental projects on the Estate; Salford University has undertaken the hydrological surveys for the river restoration project, Exeter University undertook the feasibility studies for the release of beaver, and Lancaster University is involved with the feasibility and ongoing monitoring of biodiversity and water flows at Bessy Gill. However, the longevity of this monitoring after project implementation is uncertain. Unless under the umbrella of a specific project, monitoring across the wider Estate is not currently taking place.</p>	<p>Develop a structure annual monitoring programme</p> <p>There is an opportunity to improve understanding of the current condition of habitats within the Estate through a structured annual programme of monitoring. This should focus on ecological, water quality, soil carbon and fixed point photography to create a detailed baseline from which change can be tracked.</p> <p>The Estate has entered into a partnership with the Centre of Wildlife Conservation at University of Cumbria where students are able to gain fieldwork experience under a catch-all licence for flora and fauna. Whilst this provides useful data on biodiversity for the Estate in areas of interest for the students (outside the study area for this Whole Estate Plan), wider monitoring across the Estate is currently lacking.</p> <p>There is an opportunity to build upon the existing relationship with the Universities engaged in biodiversity projects at Lowther, in particular with the University of Cumbria. A review of the known biological records has highlighted areas of the Estate where future monitoring could be focussed which could be used to direct efforts.</p> <p>This is also an area where volunteer involvement could be developed, upskilling local people and providing an opportunity to engage with the landscape.</p> <p>All monitoring data recorded on the Estate should be fed back to the Cumbria Biodiversity Data Centre to improve local understanding of the area.</p>

¹⁰ Sheehy, E., Sutherland, C., O'Reilly, C. & Lambin, X. 2018. The enemy of my enemy is my friend: native pine marten recovery reverses the decline of the red squirrel by suppressing grey squirrel populations. Proc. R. Soc. B. 285: 20172603

Tourism



The National Park visitor forecasts predict an increase in visitors to the National Park from 19 million to 23 million by 2040. A key aim for the National Park is to reduce the number of tourists travelling by car from 86% to 60%.

With good infrastructure connections including the M6 corridor and national rail links from the north and south, the Lowther Estate is well placed to increase visitor numbers into the area. Developing sustainable transport links between Penrith and Pooley Bridge will be vital.

The Lowther Estate is already becoming an 'attract and disperse' hub for the north-eastern Lake District and Eden Valley. The proposals are for an Estate Masterplan to be adopted that 'provides for increased visitor numbers whilst ensuring further enhancement of its heritage, including the Castle, its gardens and parkland. Additional tourism developments must further sustainable transport links and reduce the dependency on the private car. We will see the creation of a new and significant cycle hub at Lowther with new and improved cycle routes linking with Penrith, Pooley Bridge and Howtown' (Lake District National Park Authority Draft Local Plan, 2018).

Action no.	Challenge	Opportunity
24.	Transport links between Penrith and Lowther Castle are poor, and a major challenge to increasing visitors to the Castle	<p>Increase public transport links between Penrith Station and the Castle</p> <p>The Estate is becoming an 'attract and disperse' hub and there is opportunity to enhance this still further. This would require a pilot scheme to assess the feasibility of this long-term. Future funding opportunities could be directed into this.</p>
25.	Improved links between Pooley Bridge and Lowther Castle could help to draw more visitors and retain them in the local area	<p>Ullswater is a major tourist hub in the immediate area and there are opportunities for Lowther Estate to create connections</p> <p>In 2018 the Estate joined forces with local company Arragon's Cycles of Penrith to provide visitors with the opportunity to hire bike (including e-Bikes or electric bikes) to explore the Estate and surrounds from the Castle. In 2018, the Estate opened an additional 7km of new cycle paths across the Estate which has proven to be very popular. In spring 2019, the Estate further extended these routes by signposting from the top of Askham Fell down into Pooley Bridge.</p> <p>The Ullswater Way is a 20 mile circular walk route around Ullswater which attracts 68,000 people a year. In 2019, an additional loop will link the Askham Fell route around the Lowther Estate with the Ullswater Way. This will be promoted in local guide books and is hoped to extend the length of time that visitors wish to spend in the area.</p> <p>A mountain bike trail has been developed within Yanwath Woods with the first event in 2019 attracting around 250 adventurous cyclists.</p> <p>Longer term aspirations include:</p> <ul style="list-style-type: none"> ■ Arragon's Cycles setting up a cycle hub in Pooley Bridge to enable cyclists to explore between there and Lowther Castle, possibly through the use of electric bicycles. ■ To develop the cycling offer at Lowther Castle with a more permanent cycling hub building located on the site of the present derelict 1960s bungalow in the carpark. ■ Providing experience packages for tourists such as wildlife tours. ■ Working with hotels and accommodation around Ullswater to provide an exclusive offer to guests and build awareness of what the Castle has to offer. ■ Working with Ullswater Steamer Company to provide joint steamer and Castle trips.

Action no.	Challenge	Opportunity
26.	<p>Potential loss of redundant historic buildings. Accommodation provision for tourists is lacking in the area</p>	<p>Provision of guest accommodation and facilities</p> <p>The Estate has sought pre-application views on their redevelopment and reuse. The proposal will see the conversion of derelict agricultural buildings and the Estate Office, and the sensitive redevelopment of open sheds to create accommodation units in keeping with the existing buildings. The vision is for this to be a sustainable family hotel.</p> <p>Further to this, some of the redundant hoggist barn will be available as additional accommodation. These barns will be accessed by environmentally sensible modes of transport such as electric bikes. Private car access would be restricted to avoid impact on the landscape by adopting an approach where visitors are encouraged to park their car at the beginning of their stay and then explore the area via bike or public transport.</p> <p>Vacant agricultural buildings at Whale offer a development opportunity to create a hotel. This would differ from the accommodation at Lowther Park Farm, offering small, affordable rooms. There is an opportunity also to host a unique community space where old sheep sheds could be transformed into workshops for local people and visitors can learn about traditional crafts. This space could also be used as a venue for visiting speakers delivering talks on environmental conservation. The workshops would also provide a permanent home for the new tutor from the Ernest Cook Trust who will be working with young people aged 14-24 facing barriers to employment on land-based subjects. This accommodation offer is located just 1.5 miles from Lowther Castle and is easily accessed on private roads via bike etc.</p> <p>Low Sawmill at Askham near the head of the cycle route also presents an opportunity to be opened up to provide a car park and break area for cyclists, preserving this historic vernacular building by giving it a new use.</p> <p>Redundant satellite barns also present further opportunities for re-use as workshops or premises for small local businesses.</p> <p>The Estate are exploring the idea of installing five hanging tents in the woodlands near the Castle. These would provide a novel accommodation offer in contrast to the proposals for the two hotels, and will help to increase the demographic of the visitors attracted to and retained in the area. Constructed from sustainable, eco-friendly materials, and designed and manufactured in the UK, this proposal has the potential to spark lots of interest whilst having a low impact on the environment.</p>
27.	<p>Ensuring the Estate continues to meet tourists' needs and preferences</p>	<p>Visitor profiling analysis</p> <p>As part of the expected increase in tourists to the area, improved analysis of visitors will be an important part of understanding the current demographic, potential gaps in the market, and to ensure the Estate continues to meet demand. This should become a regular part of Estate management.</p>
28.	<p>Lack of engagement amongst community and visitors with the landscape</p>	<p>Develop regular themed tours for visitors</p> <p>In April 2019, the Estate began to work in partnership with the RSPB to develop wildlife tours of the Estate. The Estate intends to develop this offer, continuing to work with conservation bodies, and their inhouse team to provide tours to engage visitors and the local community and inform them of the importance of the local landscape and its environmental value.</p>

Vibrant communities



Action no.	Challenge	Opportunity
29.	<p>Current provision of high speed internet and mobile network coverage is poor in Whale and Askham which can deter local businesses</p>	<p>Investigate broadband and mobile coverage options</p> <p>There is an opportunity to attract local business to the area and improve facilities for the local community by investing in internet and mobile coverage in the Lowther Valley. The Estate is actively involved in hosting local businesses and this is an area it would like to develop; through the Estate's engagement of B4RN and Openreach's new Community Fibre Partnership.</p>
30.	<p>Lack of appropriate workshop space for local traditional skills</p> <p>The Estate is often approached by local and traditional craft businesses such as joiners, blacksmiths, and stonemasons who are interested in using some of the redundant agricultural buildings such as the 12 vacant hoggist barns. However, the investment to install services to these buildings and set them up as workshops is often prohibitive.</p>	<p>Invest in supporting local skills</p> <p>This is an area where future funding streams could be focused to give traditional rural businesses a home in the Lowther Valley, ensuring these local skills are not lost, and increasing the tourist interest to the area.</p> <p>The Estate is also interested in the creation of a new, shared-use business premises within the National Park.</p>

Action no.	Challenge	Opportunity
31.	<p>There is a limited understanding amongst young people of the opportunities available in land-based vocations and the broad appeal of such careers</p> <p>Young people are disconnected from the landscape, with few incentives to return to the area following higher education.</p>	<p>To engage and raise the skill levels of young people</p> <p>In February 2019 the Estate teamed up with the Ernest Cook Trust to employ a new Outdoor Learning Officer. This new post focuses on (but is limited to) the 14-24 age group, particularly where there are barriers to employment, for those who need practical experience to enhance their employability, for those who are out of the education system, and possibly also looking to provide opportunities to young offenders to gain employment. The officer will look at developing projects within the Estate with people from the County to raise awareness of outdoor learning and career opportunities linked to the land in farming, forestry and gardening. This will include apprenticeships and qualifications in employability and land-based skills.</p> <p>The Estate is working with Newton Rigg College to develop work experience opportunities on the Estate for students from both the forestry courses and horticultural courses.</p> <p>In addition, the Endangered Landscapes Programme (mentioned above under the Sustainable Agriculture section) will also support a community learning programme starting at secondary school level, and including apprentices and Higher National Diploma students to encourage young people to engage with and forge careers in the landscape in which they were born. Farmers will be able to access business advice to improve knowledge-sharing and improve farm viability. This project has the potential to have a great impact on the community.</p>
32.	<p>Learning opportunities for school groups at Lowther Castle is currently very limited</p>	<p>Improved learning provision for primary schools</p> <p>The project to create a new indoor space within the walls of the Castle will provide a home for learning activities at the Castle throughout the year.</p> <p>There is an opportunity to develop a self-led learning offer for primary school aged children linked to KS1 and KS2, so that Lowther can create a unique outdoor learning and local history resource for school visits as well as children's social groups. This will promote engagement and understanding of the landscape and its history amongst school children.</p>
33.	<p>Lack of engagement with landscape</p> <p>With so many exciting projects across the Estate, there is a lot to share with visitors. Interpretation for wider exploration of the Estate is currently lacking.</p>	<p>Invest in new interpretation and opportunities to engage visitors and the community</p> <p>New interpretation could provide opportunities for visitors to learn about the history of the landscape and its future, particularly with regards to the impending beaver release, restoration of the parkland and educational opportunities. Enhancing visitors understanding of the Estate and its wildlife is an area the Estate is keen to expand on.</p>

Action no.	Challenge	Opportunity
34.	<p>Volunteer involvement is currently focused mainly on gardening activities</p> <p>Currently, volunteers play an important role in the management of the gardens and engagement of local people in the day to day running of the Estate.</p>	<p>Expanding volunteer and local engagement on the Estate</p> <p>There is an opportunity to greatly expand volunteer engagement on the Estate:</p> <ul style="list-style-type: none"> ■ Ecological species monitoring; building on existing partnerships with Lancaster, Cumbria Universities, local interest groups, and young people who engage with the Estate through the new partnership with the Ernest Cook Trust. ■ Engaging young people on the Estate as part of their training and qualifications. <p>In addition, the events programme at Lowther Castle focuses on local talent. For example, Ullswater Community College students take part in delivering the ghost walks. Expert workshop leaders, musicians and street performers are engaged from the surrounding area. With an expansion in the events programme underway, this is likely to grow.</p>
35.	<p>Restoration work over the last 10 years has improved accessibility at Lowther Castle, but there are still areas of the Estate that remain inaccessible for less able groups</p>	<p>Identify and make improvements to accessibility</p> <p>The Estate is working with the Calvert Trust to look at ways in which the Castle, Gardens and Estate can be attractive to less abled community groups and provide opportunities not currently available. For example, making cycling available to the less abled; and offering all-terrain mobility scooters.</p>
36.	<p>Shap Beck Quarry is reaching the end of its productive life</p> <p>Closure of the quarry will present a risk of loss of income for the Estate, a loss of employment in the local area, and loss of local building materials to help conserve the estate. The attributes of Outstanding Universal Value identify the rich mining and quarrying system and local natural resources that have strongly influenced the built environment and the wider landscape. In particular, local limestone is a significant building material, giving local buildings their distinctive character, not least Lowther Castle itself.</p>	<p>Extend existing quarry to secure employment, materials and income</p> <p>There is an opportunity to extend the existing quarry by 11ha at Shap Beck Quarry to secure local building materials to help conserve the Estate buildings and stone walls, secure income for the Estate, and help to sustain local communities in the area through providing local employment at the Quarry. A restoration plan for the existing Quarry will see the landscape in this area restored.</p>

Chapter 10

Delivery plan

10.1 This section sets out the broad timescales for delivering the opportunities developed as a result of analysing the challenges currently faced by the Estate. It also shows the links to the Estate’s vision, the delivery of Ecosystem Services and the Special Qualities of the National Park. The Estate is committed to working with the Lake District National Park Authority and World Heritage Site Coordinator in the delivery of this Whole Estate Plan. Where required, Heritage and Environmental Impact Assessments will be undertaken prior to project implementation.

10.2 The Whole Estate Plan will be reviewed and adjusted as required in year 5 (2025), year 10 (2030), and year 20 (2040). In 2050, the Plan will be re-written, reflecting on the achievements of the first Whole Estate Plan, highlighting the challenges and opportunities that have arisen since the initial plan was written and including any new information and understanding of the Estate’s assets that has come to light in the intervening time. This revised plan will look ahead to 2080 and outline a strategy for the next 30 years.

10.3 **Table 10.1** presents the actions for the Estate over the next 30 years as developed in the Chapter 9 Challenges and Opportunities. **Figure 10.1** provides the locates the actions on a masterplan map.

Table 10.1 Delivery Plan

Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
1	Restore the West Wing of the Castle and create internal space as developed in the National Lottery project proposals.	Active	48	0-5 years	Cultural	1, 3, 9, 10	1, 2, 4

Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
3	Agree an approach with Historic England advisor to address poor condition of St Michael's Church and implement.	Pending	49	0-5 years	Cultural	1,3, 9, 10, 13	1, 2, 4
4	Continued restoration of the historic gardens at Lowther. Next stages are the Rock Garden and the Japanese Gardens.	Active	49	0-5 years	Cultural	1, 3, 9, 10	1, 2, 4
5	Secure funding through Higher Tier Scheme and restore 205ha of historic parkland.	Active – scheme live 2020	49	0-5 years	Cultural / Regulating	3, 10	1, 2, 3, 4
7	Secure funding through the LEI scheme to restore the historic landscape. This project will restore eight historic features within the Grade II parkland; 2x lime kilns, a bridge, 2x dew ponds, a drinking trough, a hoggist barns, and the Grade II listed gate piers. Training in traditional restoration skills will also be given to volunteers.	Active – funding applied for	50	0-5 years	Cultural	1, 3, 6	2, 3, 4
8	Survey and undertake identified remedial tree work along the lime and beech avenues at Lowther Castle. Halo thin around the lime pollards along the Terrace Strip. Trial sensitive re-pollarding to prolong the life of these trees.	Pending	50	0-5 years	Cultural	3, 10	1, 2, 3, 4
12	Work with the World Heritage Site Coordinator to improve management of peat for carbon sequestration on Common Land whilst balancing the need to retain hefted sheep grazing.	Active	52	0-5 years	Regulating	5, 6	1, 2, 3, 4
12, 29	Along with project partners for the Endangered Landscapes Programme, recruit a project manager and support development of the programme (outlined on p.51).	Active – Project development grant secured	52, 60	0-5 years	Supporting	6, 7, 8	1, 2, 3, 4
13, 18	Implement regenerative farming approach across the core Estate. This will include extensive grazing, no-till farming and pasture cropping, and perennial crops.	Active implementation	52, 55	0-5 years	Supporting	1, 4, 11	1, 2, 3

Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
13, 17	Work with tenant farmers to improve carbon management across tenanted farms, supported by an umbrella Higher Tier Scheme which includes all tenant farmers.	Active	52, 53	0-5 years	Supporting	1, 4, 11	1, 2, 3
14	Develop share-partnerships to assist new young farmers on Estate. The Estate will advertise opportunities for young farmers in Spring 2020.	Pending	53	0-5 years	Regulating, Cultural	1, 4	1, 2, 4
15	Ongoing monitoring will enable the Estate to track the Ecosystem services provided by the Estate. This should use the services identified in Chapter 7 of this plan as a baseline and build on this information annually.	Pending	53	0-5 years	All	1-13	1, 2, 3, 4
16	Develop market for Lowther-branded products. In January 2020, the Estate are opening a shop in Penrith to sell and promote Lowther products. Lowther produce is already sold in the Castle shop, and there are plans to include a section of tenant farm produce.	Active	53	0-5 years	Cultural	4, 12	1, 2
18	Undertake a feasibility assessment to convert Low Sawmill at Askham into a car park for cyclists.	Pending	55	0-5 years	Cultural	9, 12, 13	1, 2
18	Undertake a further 70ha of woodland planting as part of the Woodland Carbon Code scheme.	Active – winter 2019/20	55	0-5 years	Regulating	8	1, 2, 3
19, 23	Secure funding to implement a structured monitoring programme to track changes in carbon / biodiversity / pest and disease management.	Pending	55, 56	0-5 years	Supporting	6, 11	1, 2, 3
20	Implement beaver release and re-meandering of the River Lowther project at Setterah Park.	Active	55	0-5 years	Regulating	6, 7	2, 3
20	Restore Bessy Gill and pond system.	Active	55	0-5 years	Regulating	6, 7	2, 3

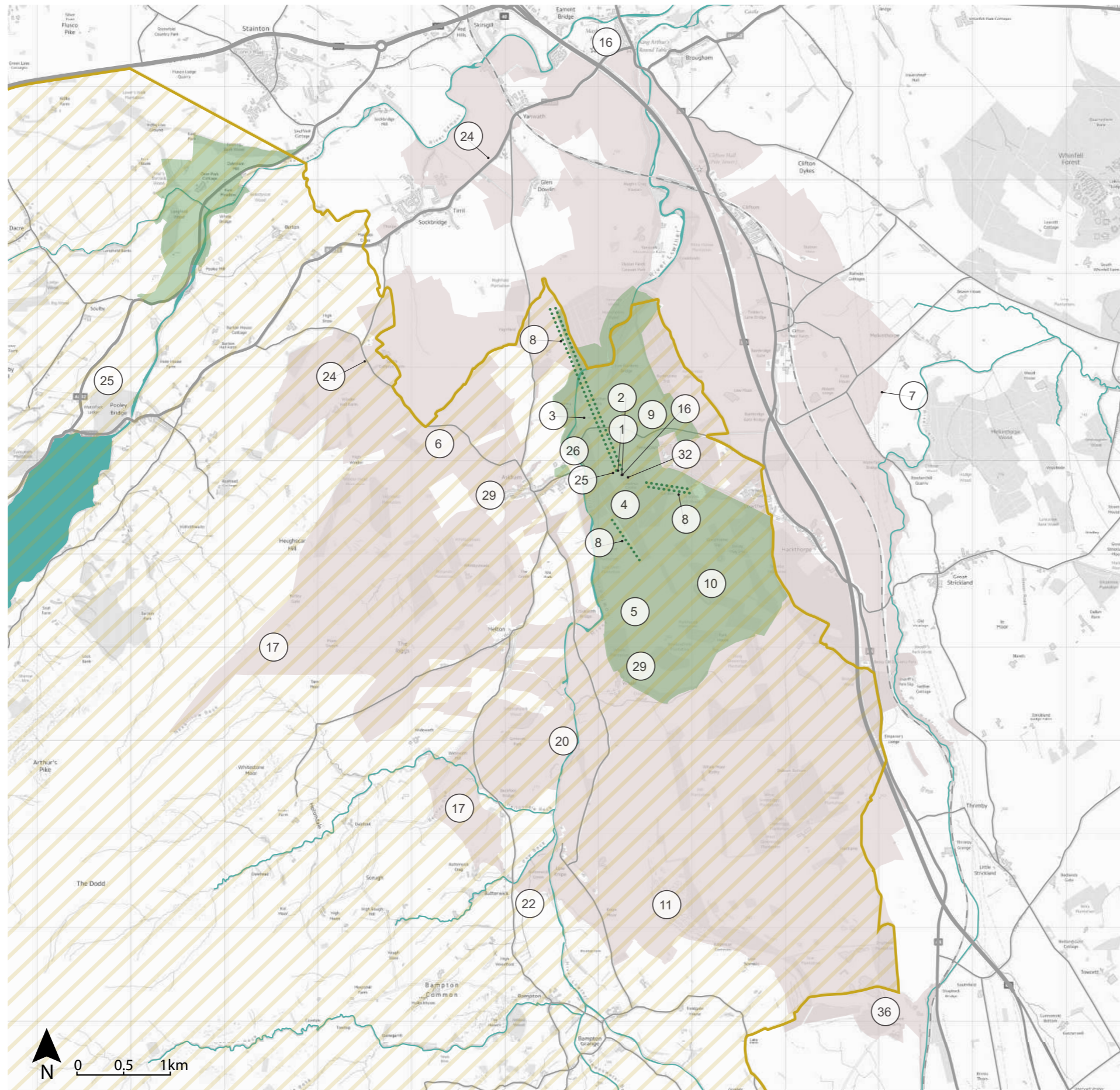
Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
21	Commission a feasibility study to assess the potential for re-introducing pine marten to the Estate. Identify and work with project partners to identify the best course of action.	Pending	56	0-5 years	Regulating	6, 7	2, 3
24	Undertake a feasibility study for improving sustainable transport links between Penrith railway station and Lowther Castle.	Pending	58	0-5 years	Cultural	12	1, 2, 3
25	Develop and promote mountain bike trail in Yanwath Woods.	Active – first event in 2019	58	0-5 years	Cultural	12, 13	1, 2
25	Signpost new cycle route to Pooley Bridge from Askham Fell and make improvements to linking rights of way where possible.	Active	58	0-5 years	Cultural	5, 12, 13	1, 2
25	Develop new bike hire hub at Pooley Bridge; a site has been identified at Hill Croft. Build on relationship with Arragon's Cycles and The Quiet Site to develop a Penrith – Pooley – Glenridding cycle route.	Active	58	0-5 years	Cultural	5, 12, 13	1, 2
25	Explore further opportunities to provide joint ticketing offers with other National Park attractions; Ullswater Steamers, Askham Hall Hotel already in place. Also discounted entry to the Castle for visitors who park at White Moss carparks.	Active	58	0-5 years	Cultural	11, 12	1, 2, 4
26	Convert and redevelop Home Farm to sustainable holiday accommodation.	Pending	59	0-5 years	Cultural	3, 9, 12	1, 2, 4
26	Construct a new hotel at Whale with a community and learning hub.	Pending	59	0-5 years	Cultural	1, 12	1, 2, 4
26	Develop 'hanging' tented accommodation at Lowther Castle.	Pending	59	0-5 years	Cultural	12, 13	1, 2, 4
27	Devise and implement new systems for ongoing visitor profiling to ensure the Castle tourism offer meets visitor demand where possible.	Pending	59	0-5 years	Cultural	10, 12, 13	1, 2, 4

Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
28	Continue to offer the successful wildlife tours given by the Estate and in partnership with the RSPB, and build on this to improve visitor engagement and appreciation for the natural world.	Active	59	0-5 years	Cultural	1, 12	1, 2, 3, 4
29	Investigate and deliver opportunities to improve high-speed internet and mobile network coverage. The Estate are in discussions with Broadband for the Rural North (B4RN) regarding local investment. An application has also been sent to Openreach's new Community Fibre Partnership scheme to improve broadband coverage.	Active	60	0-5 years	Supporting	1, 4, 11, 12	1, 2
31	Support Lowther's Outdoor Learning Officer, and through the ELP scheme, raise awareness of outdoor learning and career opportunities linked to the land in farming, forestry and gardening; offering work experience placements, apprenticeships and qualifications in land-based skills.	Active – through Outdoor Learning Officer	61	0-5 years	Cultural, Supporting	1, 4, 6, 7, 13	1, 3, 4
31	Develop learning opportunities for school children at Lowther Castle with the Outdoor Learning Officer.	Active – through Outdoor Learning Officer	61	0-5 years	Cultural	12, 13	1, 2, 4
33	Review and improve interpretation across the core Estate to improve visitor understanding and appreciation	Pending	61	0-5 years	Cultural	12	1, 2, 4
34	Develop opportunities to increase volunteer involvement on the Estate.	Pending	62	0-5 years	Cultural	1, 12, 13	1, 2, 4
35	Work with the Calvert Trust to continue to improve accessibility at Lowther Castle.	Pending	62	0-5 years	Cultural	12, 13	1, 2, 4
36	Extend quarry operations at Shap Beck Quarry and restore former quarry area which is no longer active.	Pending	62	0-5 years	Provisioning	2, 9	1, 4

Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
	Review Whole Estate Plan actions in collaboration with the National Park Authority and adjust as required.			Year 5			1, 2, 3, 4
2	Agree an approach with Historic England advisor and implement restorative masonry works to the Inner and Outer terraces at Lowther Castle.	Pending	49	5-10 years	Cultural	1, 3, 9, 10	1, 2, 4
6	Assess stone walls outside the registered parkland and seek funding to ensure all stone walls across the Estate are preserved. Seek support through the Umbrella Higher Tier scheme proposed with tenant farmers.	Pending	50	5-10 years	Cultural	1, 3, 9, 10	1, 2, 4
7	Explore funding opportunities to produce a Heritage Strategy for the Scheduled Monuments within the study area, secure and implement.	Pending	50	5-10 years	Cultural	1, 3, 9, 10	1, 2, 4
9	Following parkland restoration work as part of the LEI fund and Higher Tier scheme, consult with Historic England to upgrade the classification of the Registered Parkland to II*.	Pending	51	5-10 years	Cultural	10, 11	1, 4
11	Seek advice on improvements to management of limestone pavements and implement.	Pending	51	5-10 years	Supporting	6, 12	2, 3
25	Create a permanent cycle hire hub at Lowther Castle. Review and consider opportunities for further cycling and walking routes within the estate	Pending	58	5-10 years	Cultural	12, 13	1, 2
25	Identify and implement further opportunities to increase access across the Estate for visitors.	Pending	58	5-10 years	Cultural	12, 13	1, 2, 4
30	Seek funding opportunities to restore traditional farm buildings for use by local traditional skilled craftsmen and women.	Pending	60	5-10 years	Cultural	1, 9, 10, 12	1, 4
	Review Whole Estate Plan actions in collaboration with the National Park Authority and adjust as required.			Year 10			1, 2, 3, 4

Action no.	Action (see masterplan map for location)	Status	Reference to Challenges & Opportunities table (page number)	Timescale	Contribution towards:		
					Ecosystem Services	Special qualities of the NP and OUV of the WHS	Estate Vision
19	Continue to monitor tree stock for pests and diseases and adjust management practices and planting plans depending on best practice advice.	Ongoing long-term	55	10-20 years	Regulating	8, 11	3
	Review Whole Estate Plan actions in collaboration with the National Park Authority and adjust as required.			Year 20			1, 2, 3, 4
10	Construct Lowther House within the Park.	Pending	51	20-30 years	Cultural	1, 3, 9, 10	1, 4
22	Identify new areas for improved habitat management, such as at Knipe Moor where a project could be developed in collaboration with the Woodfoot Meadows County Local Wildlife Site just outside the study area.	Pending	55	20-30 years	Regulating	6	3
	Reflect on the achievements of the Whole Estate Plan, the challenges and opportunities that have arisen. Review and re-write the Whole Estate Plan looking ahead to 2080.			Year 30			1, 2, 3, 4

Figure 10.1. Lowther Estate Masterplan 2020-2050



Key

- Study area
- Registered Parks and Gardens
- Landscape Enhancement Initiative band
- National Park and World Heritage Site boundary
- Waterways
- Avenue planting

- ① Restoring the West Wing of the Castle
- ② Preserve and restore the Castle terraces
- ③ Preserving St. Michael's Church
- ④ Restoration of the historic gardens at Lowther Castle
- ⑤ Preserving and restoring the historic deer park landscape
- ⑥ Source funding for stone wall restoration outside core estate
- ⑦ Parkland restoration through LEI fund
- ⑧ Retention of views and treed landscape
- ⑨ Upgrade parkland designation to Grade II*
- ⑩ Construct a new family country house within the park
- ⑪ Improve management of limestone pavements
- ⑫ Develop a market for Lowther-grown produce
- ⑬ Balance land management and carbon sequestration
- ⑭ Mitigate flood risk in the Lowther Valley through riparian management
- ⑮ Habitat management to establish coherent ecological network
- ⑯ Improve public transport between Penrith Station and the Castle
- ⑰ Improve connections between the Castle and Ullswater
- ⑱ Develop hotel at former Estate office and Home Farm
- ⑲ Investigate options for improved broadband and mobile phone coverage
- ⑳ Improved learning opportunities for primary schools

Estate-wide Unmapped Actions

- ⑫ Estate-wide support for tenant farmers
- ⑬ Umbrella agri - environment scheme for tenant farmers
- ⑭ Support for young farmers
- ⑮ Ongoing Estate-wide Ecosystem Services Assessment
- ⑯ Improve carbon sequestration across the Estate
- ⑰ Monitor ash dieback
- ⑱ Feasibility study of pine marten re-introduction
- ⑲ Estate-wide annual monitoring programme
- ⑳ Visitor profiling analysis
- ㉑ Regular themed tours for visitors
- ㉒ Invest in supporting local skills
- ㉓ Engage and raise the skill level of young people
- ㉔ New interpretation to engage visitors across the Estate
- ㉕ Expand volunteering opportunities
- ㉖ Improve accessibility across the Estate