

To support Protected Landscapes in meeting their huge potential for nature, climate, people and place, the Environmental Improvement Plan 2023 established ambitious targets for National Parks and National Landscapes.

These targets promote the long-term policies and actions that are most needed to achieve positive changes to achieve 3 outcomes:

- Thriving plants and wildlife
- Enhancing beauty, heritage and engagement with the natural environment
- Mitigating and adapting to climate change

The 75th anniversary of the National Parks and Access to the Countryside Act in 2024 has inspired this Management Plan. It has offered an opportunity to reflect on how the landscape has been conserved and enhanced over the past seventy-five years and to outline the vision, targets and priorities for the next 75 years, providing a 22<sup>nd</sup> Century Vision.

In May 2024, Julian Glover, Chair of the 2019 Designated Landscapes Review, launched the "Postcards from the Future" campaign. This initiative invited the public and partners to describe how they envision the Surrey Hills as a thriving place for both people and nature by the year 2100 in the context of a changing climate. Over two hundred submissions were analysed and processed using Al to help create vision statements and identify the strategic priorities for achieving that vision. These were then further appraised through a public survey in September 2024, which received over a thousand responses. The vision statements and the long-term strategic priorities were explored in a series of workshops with landowners, farmers, partner organisations, and local authority planning officers for help formulate the 5 year policy framework in Part 4.

#### **Contents**

#### Part 3. The 75 Year Vision

#### **Thriving Plants and Animals**

- 3.1 The Vision
- 3.2 Strategic Targets
- 3.3 Past, Present, Future
- 3.4 The Surrey Hills Nature Recovery Strategy
- 3.5 Long-term Strategic Priorities for Thriving Plants and Animals

#### Enhancing beauty, heritage and engagement

- 3.6 The Vision
- 3.7 Strategic Targets
- 3.8 Past, Present, Future
- 3.9 Long Term Strategic Priorities for Enhancing beauty, heritage and engagement
  - 3.9.1 Improving public access & engagement
  - 3.9.2 Supporting a thriving rural community
  - 3.9.3 Protecting heritage and landscape

#### Mitigating and adapting to climate change

- 3.10 The Vision
- 3.11 Strategic Targets
- 3.12 Past, Present, Future
- 3.13 Long-term Strategic Priorities for reducing agricultural carbon emissions
  - 3.13.1 Reducing agricultural carbon emissions
  - 3.13.2 Reducing transport emissions

# **NATURE VISION**

# - for Thriving Plants and Animals

#### 3.1 The Vision

#### Our Postcard from the year 2100

The Surrey Hills National Landscape is a haven of restored habitats, thriving biodiversity and harmonious coexistence between people and wildlife. We have legal rights for nature and proactive conservation of our heathland, chalk downland, woodlands, ancient trees and hedgerows. There is a revival of endangered species, regenerative agriculture, community-driven education like forest schools and a "Natural Service" for youth. We ensure a thriving place by balancing development with a passion to conserve and enhance the Surrey Hills for future generations.

Written from a synthesis of responses to the "Postcards from the future" campaign in 2024.

## 3.2 Strategic Targets

To create and restore:

Wildlife Rich Habitats (deciduous woodland, Heathland and Chalk Downland)

14,560 ha to 20,000 in 2100. 5-year Plan target of additional 1000 ha

Trees Outside Woodland (under 5 ha, agroforestry and tree belts)

6.5% of land cover to 10%. 5-year Plan target of 50 ha

#### **Hedgerows**

6,900 km to 10,000 km. 5-year Plan target of 20km

#### Protected sites (SSSIs)

75% in Favourable Condition to 95%. 5-year target 80%

#### 3.3 The Past

Prior to the 20th Century, agriculture was the key driver of landscape and nature change within the Surrey Hills.

A central aspect of land management for over a thousand years has been livestock grazing on the commons. These commons, typically areas too poor for consistent agricultural production, served as a vital resource for local communities for grazing, firewood and other materials for animal bedding, which played a crucial role in the wider agricultural economy. The Surrey Hills provided a seasonal grazing resource for livestock that were brought from further afield to feed the growing city of London. Evidence of important transhumance routes and agricultural trade remains in local place names, such as Sheepwalk Lane (East Horsley) and The Woolmead (Farnham).

Furthermore, the agricultural trade from the Surrey Hills to nearby London was a key source of employment for rural communities, with many people working in livestock production, milk, and dairy products. Hop growing and barley malting also played a significant role in shaping the agricultural landscape. In the 18th century, the sandy soils in and around Elstead became highly valued for growing carrots, while the tributaries of the rivers Mole and Wey supported a burgeoning watercress industry. In the 17<sup>th</sup> Century, the Tillingbourne Valley, which flowed off the steep slopes of Leith Hill was one of the most industrial small river valleys in the country producing bank notes, paper, wire and gunpowder from its many mills.

Forestry has also been integral to this landscape. The first book on forestry, Sylva, was written by John Evelyn of the Wootton Estate in 1664. At the western edge of the Surrey Hills National Landscape, the Royal Forests of Alice Holt and Woolmer Forest were protected as hunting grounds. They later fell under the administration of the Crown Commissioners for Woods and Forests, who managed them to produce timber for the construction of warships.

As in many areas of the country, post-World War 2 agricultural industrialisation and the shift from horse-drawn farming to mechanised agriculture brought significant changes to agricultural practices. This shift led to a steady reduction in the agricultural workforce. The consolidation of fields, resulting in the loss of many hedgerows, and the near-total cessation of livestock grazing on commons caused a significant loss of heathland habitat. As a result, large areas of open heathland have succeeded into scrub and the lack of active woodland management has led to the development of coppiced

woodlands into secondary woodlands. This shades out other species and reduces the vertical structure of woodlands, as well as the proportion of forest edge habitats.

Records show that as many as seventeen species have been lost from Surrey over the past century. Documentary evidence indicates that a wide variety of characteristic species, such as Black Grouse and Pine Marten, were still present in the area until at least 1900.

#### The Present:

Much of the remaining agricultural land in the Surrey Hills has suffered significant depletion of its historic wildlife and nature value. In areas managed intensively for farming, the extensive use of nitrogen fertilisers and herbicides has likely degraded the soil and significantly contributed to the loss of hedgerows. However, even in these areas, the fundamental building blocks of habitat and ecology often remain, albeit in a fragmented state. As in most regions, the picture is inconsistent, with some landowners investing considerable efforts into enhancing the wildlife and conservation value of their farms.

The Surrey Hills has been fortunate to not only retain but also expand its woodland cover over the past century. Much of this woodland is unmanaged with poor species diversity and a lack of vertical structure. This may have contributed to the effects of tree disease outbreaks, such as ash dieback. In recent years, efforts have been made to bring more of this habitat into active management. However, the limited market for many forest products and the shortage of a trained workforce continue to present significant challenges.

A reduction in the rural workforce, coupled with the growth in commuting, has also impacted the state of nature in the Surrey Hills. Fewer people are directly connected to farming and nature, and the increasing dominance of roads and transport networks creates significant barriers to wildlife movement across the landscape, resulting in isolated communities that are vulnerable to habitat loss.

Human influence on nature in the Surrey Hills is growing, particularly due to the demand for housing expansion and recreation. A key concern is the impact of dogs and dog walking on protected species and sensitive habitats. While the wider growth in recreational activities is a cause for concern and requires active management, research suggests that disturbance caused by dogs is likely the most significant recreational impact on many priority species in the Surrey Hills.

Parts of the Surrey Hills National Landscape are located within Natura 2000 designated sites, including the Mole Gap Escarpment and the Thursley, Hankley & Frensham Commons, and Walden Heath Special Protection Areas. These priority habitats are designated at the European level, and all organisations involved in their management

carry significant additional responsibilities to ensure that they are not adversely affected by their actions or nearby development.

Recent studies have also shown that our rivers and watercourses are in a significantly degraded condition. Agriculture remains a major source of diffuse pollution in rural areas, contributing to nutrient overloads, sedimentation, and pesticide contamination in rivers. The primary challenges continue to be water quality, both chemical and biological, as well as connectivity. Obstructions and low flows can severely affect the life cycles of many species within the aquatic food web, which demonstrate the need to adopt farming methods that reduce runoff, prevent soil erosion, and limit the use of chemical fertilisers and pesticides.

#### The Future:

The importance of agriculture in feeding the nation can conflict with efforts to rewild or take land out of productive farming. However, the growth of more nature-friendly farming methods, including regenerative agriculture, the reduced use of artificial fertilisers and herbicides through technology and precision application, and initiatives to create effective buffer zones and wildlife habitats on less-intensive areas of farmland, can all significantly balance farming's impact with nature conservation.

Societal changes, such as increased leisure time and a growing understanding of the importance of access to nature and open-air recreation for health and wellbeing are likely to continue in the coming decades. This trend is consistent with the history of the Surrey Hills as a place for escape and quiet enjoyment, aligning with the original purposes of the 1949 Act. However, it will require active management, particularly around popular sites, to focus infrastructure for visitors on more robust areas of the Surrey Hills, whilst retaining sensitive areas as "spaces for nature."

Improving our rivers by reducing agricultural pollution, creating buffer zones to filter out sediments, nutrients, and pesticides, and stabilising riverbanks to prevent erosion, is another key area for improvement.

Effective woodland management, both in forested areas and in the wider landscape, including hedgerows and standard trees, will likely become increasingly important in the coming years. This offers significant opportunities to enhance the Surrey Hills for nature. Efforts to establish trees through natural processes, such as managed rewilding, also present opportunities to support nature recovery. Other initiatives, including species reintroductions and changes in watercourse management to help slow the flow, are expected to bring significant benefits to biodiversity and conservation. It is envisaged that humans will continue to play a key role in nature restoration and habitat management through deliberate intervention, rather than relying on entirely natural processes to drive habitat change.

Climate change also poses threats to the future of the Surrey Hills as a place for nature. A warming planet could impact the plant species that thrive in the region, and increased risks, such as the heightened likelihood of heathland and forest fires, may pose a significant threat to the integrity of some sites. These challenges, compounded by site isolation, will require substantial efforts to build a resilient National Landscape.

## 3.4 The Surrey Hills Nature Recovery Strategy

In 2022, the Surrey Hills Nature Recovery Strategy was launched, this remains the primary strategic document on how we hope to deliver improvements in nature conservation within the National Landscape, and across the wider landscape, through education, monitoring and collaborative working. This strategy will provide the key framework for species conservation in the Surrey Hills

The strategy identifies a set of seven priority habitats that are characteristic of, and important to, the Surrey Hills. Alongside these, a number of indicator species relevant to each habitat have been identified - each one representative of their associated habitat, and its presence indicative of the health of that ecosystem. These are set out below. Even if the listed species cannot currently be found, taking steps to provide the right conditions for that species to thrive will, at the same time, support a wide range of other species.

# 3.5 Long-term Strategic Priorities for Thriving Plants and Animals

After reviewing existing data, targets, including the Surrey Hills Nature Recovery strategy (2022) and developing Local Nature Recovery Strategym government priorities, public consultations and expert advice, the Management Plan identifies priority areas to convene and enable actions that delivers nature recovery on a landscape scale.

#### Land Based Priorities:

- 1. Habitat Restoration
  - Woodland restoration: Planting native trees and shrubs to restore forests and woodlands, which can enhance biodiversity, improve air quality, and sequester carbon.
  - Wetland Restoration: Restoring and creating wetlands to provide habitats for wildlife, improve water quality, and act as natural flood defences.

#### 2. Conservation of Existing Natural Areas

- Protecting Ancient Woodlands: Ensuring the conservation of ancient woodlands, which are vital for biodiversity and have historical significance.
- Preserving Heathlands and Chalk Grasslands: Maintaining and managing heath and grassland areas, which are unique ecosystems home to rare species.

#### 3. Promoting Sustainable Agriculture

- Agroecology Practices: Encouraging farmers to adopt agroecological practices that enhance soil health, reduce chemical use, and promote biodiversity.
- Hedgerow Planting and Maintenance: Planting and maintaining hedgerows to provide wildlife corridors and habitats for birds, insects, and small mammals.

#### 4. Urban Green Spaces and Connectivity

- Green Infrastructure: Developing green roofs, walls, tree-planting and parkland within urban and urban fringe areas in order to increase green spaces, providing habitats and improving residents' quality of life.
- Wildlife Corridors: Creating and maintaining wildlife corridors to connect fragmented habitats, allowing endangered species to migrate and thrive.

#### 5. Community Engagement and Education

- Volunteer Programs: Organising volunteer programs for habitat restoration projects, tree planting, and conservation efforts to involve the community in nature restoration.
- Educational Campaigns: Running educational campaigns and workshops to raise awareness about the importance of biodiversity and nature conservation, encouraging sustainable practices among residents.

#### Water Based Priorities:

Restoring nature and reducing pollution in rivers and watercourses requires a targeted approach to tackle the specific challenges faced by these environments. Tailoring strategies to the context of the Surrey river basins, where agriculture and local community involvement will be central to effective river restoration and pollution reduction. By combining these approaches, it will be possible to make significant improvements to the health and biodiversity of bodies of water in the Surrey Hills over the long term.

#### 1. Implementing Sustainable Agricultural Practices

- Land Use Alterations in crop choice and rotation, and increased use of cover crops in order to reduce soil erosion.
- Precision Farming Adopting farming methods which reduce excess fertiliser use, including through the use of technology, and the promotion of organic or low-input farming methods that minimise chemical inputs.
- Restoring and Protecting Riparian Buffer Zones Enhancing the vegetation along riverbanks with native species and agricultural crops, along with fencing off riparian zones to prevent livestock access, will allow us to create buffers that intercept pollutants before they enter the water and reduce bank erosion.

#### 2. Enhancing Wetland Areas

- Restoring or creating wetlands re-wetting drained land, reconnecting rivers to their floodplains, or creating new wetlands strategically placed to capture runoff from agricultural fields
- Watercourse flow interventions woodland planting and the creation of leaky dams which reduce the velocity and flow of water in minor watercourses

#### 3. Promoting Community-Led River Management Initiatives

Local knowledge and involvement are key to the success of river restoration projects, ensuring that initiatives are sustainable and have long-term support. It will be important to engage local land managers, and the wider community, in the stewardship of rivers through education, stakeholder programs, and local conservation projects. Initiatives can include farmer clusters and grant schemes, citizen science programs to monitor water quality, volunteer groups for riverbank planting and maintenance, and educational campaigns to raise awareness about the impact of pollution and the importance of river health.

Embedding these priorities within strategies and future delivery plans will contribute significantly to the preservation and restoration of nature in the National Landscape, enhancing biodiversity. The Management Plan supports projects that help deliver the above priorities, and to encourage other government bodies to deliver the same in accordance with their legal duty to seek to further the purpose of conserving and enhancing the natural beauty of the National Landscape.

# PEOPLE AND PLACE VISION

# - For Enhancing Beauty, Heritage and Engagement

#### 3.6 The Vision

#### Our Postcard from the year 2100

Our National Landscape retains its natural beauty, serving as a refuge of calm in a busier, warmer world. It is greener, more resilient with habitats adapting to climate change, and a place where nature thrives alongside people. The Surrey Hills are more accessible, welcoming a diverse population while remaining a sanctuary for wildlife and quiet reflection.

Key features are expanded green spaces, increased wildlife and accessibility for all. Technological advancements help preserve the landscape while enhancing visitor experiences. Nature corridors, community gardens and access to rivers and woodlands support conservation and recreation, while rewilding and species reintroduction boost biodiversity. Community involvement and education ensure people enjoy, value and protect the Surrey Hills for future generations.

Written from a synthesis of responses to the "Postcards from the future" campaign in 2024.

# 3.7 Strategic Targets

#### National Heritage at Risk

From 8 to 2. 5-year target 4.

Further targets to be developed as part of Consultation and engagement process.

#### 3.8 The Past:

Since time immemorial, the social and economic value of the Surrey Hills for its communities has been deeply intertwined not only with its natural beauty, but also with its built heritage. Many of these historic landmarks remain today, from the remnants of 13th-century Cistercian abbeys near Farnham to the enduring traces of the region's wartime strategic significance. Victorian forts, World War II encampments, and, for those who know where to look, Cold War bunkers are scattered throughout the area. The landscape bears the scars of past quarrying, gunpowder mills, and other industries, offering a glimpse into the region's industrial history. Meanwhile, the extensive woodlands, downlands, and heathlands reflect the agricultural and forestry heritage that supported markets in nearby London.

Up until the mid-20th century, however, the daily life of the Surrey Hills remained predominantly rural, centred around village life. Outside a few small towns, the area's character was shaped by agricultural and woodland production, with a calendar driven by seasonal cycles of harvesting and livestock management. The region also maintained large tracts of common land, a defining feature of its rural landscape.

In recent decades, the Surrey Hills has experienced a significant expansion of woodland cover. Historical photographs show that many of the region's commons were once far less wooded, with these changes likely linked to the decline of commons practices after the war and the associated reductions in grazing and coppicing. This shift has led to profound changes in the landscape over the past century.

For hundreds of years, the Surrey Hills has also been a popular destination for recreation, particularly for the residents of nearby London. As early as the 1630s, John Evelyn wrote of Box Hill as a place where:

"...the ladies, gentlemen, and other water-drinkers often resort during the heat of summer to walk, collation, and divert themselves in those antilex natural alleys and shady recesses among the box trees."

By the turn of the 20th century, Box Hill had become one of the most famous hills in the world. As one contemporary observer noted:

"...it has all the advantages. It is within easy reach of London for school treats, excursions, choir outings, weekends, and all other journeys in the open air; it has a railway station at its foot, several inns, a tea garden at the top, and a hundred bank holidays have left it unspoiled."

The early 20th century saw a growing national movement advocating for public access to open country. The need for statutory protection of such landscapes became widely accepted. Voluntary organisations like the Open Spaces Society and the Council for the Protection of Rural England played a key role in advancing the cause, while social movements, including the Cyclists' Touring Club, Youth Hostels, and Ramblers'

Associations, highlighted the public's desire to escape from the industrial cities to the countryside. Special "ramblers' trains" were introduced to carry visitors to the Surrey Hills. During this period, the arts also played a significant role, with arts retreats and other excursions attracting visitors before the war. Visionary politicians, such as James Chuter-Ede, also shaped public support for conservation. A number of subscription schemes helped raise funds to purchase land around Box Hill for public benefit.

In this context, the Surrey Hills was well known for its estates and country houses. Like much of the country, many of these estates were broken up in the early 20th century due to death duties and financial losses during the 1930s stock market crashes. However, a number of important properties and their surrounding parklands were preserved through the National Trust, though many of these properties have become disconnected from the agricultural estates that once supported them.

As in the past, the visitor economy continues to make a vital contribution to the economic well-being of the Surrey Hills, benefiting both its rural industries and the towns and villages within it. This economic impact spans a wide range of businesses from exclusive hotels and golf clubs to shops selling outdoor clothing and accessories, and from pubs to bakeries catering to mountain bikers. For both visitors and residents, access to the countryside remains important for the health and well-being benefits of experiencing the countryside.

A major draw for many visitors is the North Downs Way National Trail, which opened in 1978 although it has its origins in the ancient Pilgrims Way, believed to date back to the Stone Age. This trail follows the historic ridgelines from east to west. More recently, the Greensand Way has been added as a popular route, and for cyclists, King Alfred's Way links the Surrey Hills with Winchester, Avebury, and Stonehenge.

The long history of common land within the Surrey Hills provides a significant resource for outdoor access. There are extensive areas of open-access land and a vast network of public footpaths. However, access for other groups remains patchy, with a fragmented bridleway network and inconsistent rights of access for equestrians, cyclists, and other users. Additionally, many routes remain inaccessible to those with disabilities. While outdoor pursuits are an option for many, some demographics are still underrepresented in our countryside. The current social and economic diversity of visitors remains a concern.

Recent research commissioned by Natural England, suggests that more than half of visits to the protected heathlands in the western part of the National Landscape are for dog walking. This underscores the need for active management of recreational access

to mitigate potential negative effects, particularly on endangered ground-nesting bird species. Similar concerns are raised by farmers, with recent increases in incidents of livestock worrying and growing concerns over the spread of parasitic worms from dog faeces. It is also important to note that the majority of visits to the countryside, by residents and visitors, continue to be facilitated by car journeys. This increase in motor traffic is widely seen as a key threat to the rural tranquillity and enjoyment of the Surrey Hills.

In addition to these threats, key challenges remain regarding inappropriate development that threatens to damage the rural character of the protected landscape. Housing demand poses a significant threat to both the rural character and public enjoyment of the countryside. The shortage of affordable housing has had a marked impact on the composition of rural communities, with fewer young people and families able to afford to live in villages. This has led to the erosion of village life and the closure of local facilities. Simultaneously, changes in working patterns, including the growth of remote working (facilitated by high-speed internet), may further alter living and commuting patterns.

Concerns have also grown over the increasing industrialisation of the countryside through various development proposals, ranging from oil exploration to solar energy installations and biofuel manufacturing facilities. Some fear that recent government policies on farming could lead to the breakup of traditional farm enterprises, making them more vulnerable to sale and development. Furthermore, the conversion of farm buildings for other purposes is contributing to the urbanisation and industrialisation of existing rural sites. On a more positive note, many of the region's most important historic buildings and estates have been preserved under the National Trust's conservatorship.

All these issues highlight the ongoing importance of the land use planning processes to conserving and enhancing the natural beauty of this special area.

#### The Future

`The high aesthetic and architectural standards demanded in National Parks may not he attainable throughout the length and breadth of all the Conservation Areas; but planning powers under the new Bill should be strictly and wisely applied to the preservation of the landscape, to the mitigation of existing disfigurement and to the protection of all features of natural or scientific interest.`

The original vision of the Hobhouse Report, and its emphasis on preserving both the character and aesthetic of protected landscapes as integral to their natural beauty, will likely continue to face pressure from urban development in the coming decades.

Current projections indicate a continuing increase in population and ongoing demand for housing in Southeast England, underscoring the need for robust protections to remain in place. The recent legal duty requiring public authorities to not only consider but actively further the purpose of the National Landscape is a welcome development. This is an opportunity to establish clear policies and guidance on how these public bodies should interpret and implement this strengthened responsibility.

Planning policies and decisions must ensure that development is appropriate for its location, considering the potential effects, including cumulative impacts on the special features and rural character of the National Landscape. Activities occurring outside the boundaries of the National Landscape can still significantly affect people's experiences and enjoyment of the area. This includes the impact of transport networks, road, rail, and air, and their effects, particularly in terms of noise and light pollution. Effective mitigation strategies and robust policies must be in place to manage the potential negative impacts of regional development. Moving forward, ways need to be explored to offset the effects of external development by funding improvements in nature conservation and sustainable visitor management within the protected landscape.

The Surrey Hills' role as a place of enjoyment and responsible recreation, for both local communities and those seeking respite from the city, should be recognised and safeguarded. Access to, and enjoyment of, the countryside for health and wellbeing has never been more important, as evidenced by the recent pandemic, and the need for all members of society to have the opportunity to access nature.

When the National Parks Bill was introduced in Parliament in 1949, it was described as:

"...a people's charter for the open air, for the hikers and the ramblers, for everyone who loves to get out into the open air and enjoy the countryside. Without it, they are fettered, deprived of their powers of access and facilities needed to make holidays enjoyable. With it, the countryside is theirs to preserve, to cherish, to enjoy and to make their own."

Over the next seventy-five years, the aim is to strive to continue fulfilling this vision and expand the provision of responsible access for all members of the community, including those currently excluded due to disability, or social and economic barriers.

# 3.9 Long Term Strategic Priorities for Enhancing beauty, heritage and engagement

### 3.9.1 Improving public access & engagement

The process of developing the Plan has identified a series of priority areas which on which to focus efforts to enhance responsible public access to the countryside. This will deliver improved opportunities for the public to engage with nature within the Surrey Hills, to conserve and enhance the natural and cultural heritage of the National Landscape, and to meet future challenges:

#### 1. Enhancements to existing green infrastructure

Improvements to public rights of way, commons and access land, including proposals which seek to improve disabled access, enhance inclusive access for socially and underrepresented groups, improve the rights of way network, in particular for enhancing connectivity within the bridleway network, to mitigate the impact of existing or increased recreational access on protected features, and other proposals which result in benefits to protected species or habitats.

#### 2. Gateway locations

Appropriate improvements to facilities which attract people with the investment in infrastructure, accessible by public transport, which reduce pressure on more sensitive locations. Such Gateway locations require appropriate level of visitor services and facilities including, where appropriate, parking spaces, picnic areas, play areas and toilets.

#### 3. National Trails & Promoted Routes

Significant opportunities exist to better integrate and enhance existing promoted routes, including the North Downs Way National Trail. Likely enhancements include surfacing and furniture improvements that better facilitate disabled access or improve safety, for example by moving routes off roads or improve road crossings whilst being sympathetic to the rural location and not having an unacceptable urbanising impact.

#### 4. Active Travel Routes

Routes which connect local communities, link communities to the countryside, or facilitate safe walking, cycling or equestrian exploration of the National Landscape.

#### 5. Inspiring Views, interpretation and public understanding

The creation or improvement of facilities which enhance public enjoyment of the nature, heritage and cultural appreciation of the National Landscape, or which encourage people to take action for their conservation. This includes viewpoints, interpretation and artworks which are designed in a way which is sensitive to the context of, and enhances, the surrounding environment and landscape.

#### 3.9.2 Supporting a thriving rural community

The Management Plan process identified a series of key issues to be addressed in order to ensure sustainable development, economic stability and a high quality of life for its residents. Schemes should support the delivery of the following outcomes whilst conserving and enhancing the natural beauty of the Surrey Hills.

#### 1. Economic Development and Diversification

- Local Business Support: Encouraging the growth of local businesses and entrepreneurship through grants, training, and infrastructure support.
- Agriculture and Agri-business: Promoting sustainable farming practices and value-added agricultural products to enhance profitability and sustainability.
- Tourism and Recreation: Developing sustainable eco-tourism and responsible recreational opportunities that capitalise on the natural beauty and cultural heritage of the area.

#### 2. Access to Healthcare and Education

- Healthcare Services: Ensuring that residents have access to quality healthcare services, including access to the countryside for nature prescriptions.
- Educational Opportunities: Providing access to quality education through well-funded schools, vocational training, and adult education programs to prepare residents for a diverse range of careers.

#### 3. Infrastructure and Connectivity

- Transportation Networks: Developing and maintaining reliable road, public transport, and non-motorised transport infrastructure to connect residents to services and opportunities. Including car-share and rural bus services.
- Digital Connectivity: Supporting high-speed internet access in order to benefit support education, business, telemedicine, and social connectivity, while mitigating potential impacts on landscape.

#### 4. Environmental Sustainability and Conservation

- Natural Resource Management: Implementing sustainable practices to manage and protect local natural resources, including water, soil, and wildlife.
- Renewable Energy: Promoting the use of renewable energy sources such as solar, wind, and bioenergy to reduce environmental impact and provide local energy solutions.

#### 5. Community Engagement and Social Well-being

 Community Programs: Supporting social, cultural, and recreational programs that strengthen community bonds and enhance residents' quality of life. • Volunteerism and Civic Participation: Encouraging volunteerism and active participation in local governance and decision-making processes to ensure that community needs and voices are heard.

Addressing these priorities will lead to a more resilient, prosperous, and vibrant rural community, providing a high quality of life for its residents while preserving the unique character and environment of rural areas.

#### 3.9.3 Protecting heritage and landscape

Alongside these priorities, we have identified a series of areas of concern in order to prioritise efforts to conserve and enhance the Natural Beauty of the Surrey Hills and its special features will function, and that, along with other planning policies, we will expect partners to prioritise as they fulfil their own duties to conserve and enhance the National Landscape - including through the planning process:

1. Resisting the loss of agricultural land.

The protection of agricultural land is important for landscape protection, and the loss of such land, including to renewable energy schemes and equestrian uses, risks undermining the rural character of the area and changing the appearance and mosaic of fields through the seasons. Further, the nation's food production and associated security would be reduced. Consequently, development resulting in the loss of agricultural land should be resisted

2. Resisting inappropriate development, particularly in locations close to, or which risk having an effect on, protected sites.

Where, in exceptional circumstances, development is authorised, extensive mitigation will be sought in order to minimise the effect of proposals, including through design, landscaping, and the delivery of net gain schemes for biodiversity, landscape and public access.

3. Controlling the replacement of agricultural buildings, and their conversion into other uses

Special care needs to be taken over the siting, volume and design of replacement agricultural buildings to minimise potential impacts on the landscape, conversion to alternative uses should only be supported where it is related to, and supports the viability of, existing agricultural businesses.

4. Favouring development of small-scale, affordable housing projects within the boundaries of, or adjacent to, existing settlements,

Where housing development is supported, assurances will be sought preferably through a social housing landlord and, if necessary, through a legal agreement that the

occupancy of the homes would be restricted in perpetuity to those associated with the locality and in need of affordable housing.

#### 5. Controlling the effects of light pollution

Development in remote locations which risks causing light pollution, including large areas of glazing and roof lights, should be avoided unless automatic blinds or shutters are fitted and operative in times of darkness and poor light. Any necessary external lighting will normally be resisted, though where special circumstances exist it should be designed to minimise light pollution. Developments outside the boundaries of the National Landscape which are likely to have significant effects on light pollution will be expected to design lighting schemes in a manner which mitigates their impact.

#### 6. Safeguarding against the risk of pollution to rivers and streams

Careful controls of development in and around bodies of water, preventing development in natural flood zones, and through drainage management that prevents direct discharge into watercourses through sustainable drainage systems.

# **CLIMATE VISION**

# Mitigating and adapting to climate change

#### 3.10 The Vision

#### **Our Postcard from the Future**

The Surrey Hills is a balanced and harmonious environment where nature and human activity coexist sustainably. The National Landscape is greener with a resurgence in biodiversity as habitats adapt to extreme weather conditions. This is a result of proactive measures taken in the 21<sup>st</sup> Century to combat climate change. The area is a place where species that were once at risk of extinction now thrive, and new species have been introduced through rewilding efforts whilst maintaining productive climate and nature friendly farming.

Written from a synthesis of responses to the "Postcards from the future" campaign in 2024.

## 3.11 Strategic targets:

Net Zero by 2050 (national target) -0.5 by 2075, -1.0 by 2100

Details to be in the Climate Change Action Plan in 2028.

#### **3.12 The Past:**

The landscape of the Surrey Hills has been shaped not only by geological processes over millions of years but also by a complex interplay of climatic factors over millennia. The area's diverse ecosystems, including heathlands, woodlands, and downlands, have been profoundly influenced by shifts in climate, both natural and anthropogenic. These changes have also left their mark on the cultural history of the region, from the

cultivation of Roman vineyards to the rise of hop farming. The climate history of the Surrey Hills, then, is not just a story of natural forces but also one of human adaptation and ingenuity in response to the environment.

As the last Ice Age ended around 12,000 years ago, a warmer, more temperate climate marked the beginning of the Holocene epoch, which continues to the present day. The warmer temperatures allowed forests to spread across much of southern Britain, including the Surrey Hills. This period of post-glacial afforestation saw the establishment of dense woodlands dominated by oak, elm and birch.

The climate of the Surrey Hills continued to warm through the early Holocene, though with periodic fluctuations. By the 1st century AD, Roman settlers in had established vineyards, where the combination of well-drained, south-facing slopes and a relatively warm climate provided an ideal environment for grapevines. Though the decline of Roman Britain in the 5th century led to the abandonment of many vineyards, the tradition of winemaking in the region would later be revived, and it is likely that viticulture flourished again between the 9th and 13th centuries, when Europe is widely accepted to have experienced a climatic phase known as the Medieval Warm Period (MWP), characterised by higher than average temperatures. This period of warmth had significant impacts on agriculture and land use in the Surrey Hills, facilitating the expansion of arable farming and the clearance of more woodland for crops and grazing. The region, with its fertile soils and mild climate, was particularly suited for the cultivation of grains such as wheat and barley.

After the MWP, the climate began to cool, This cooler period, from roughly the 14th to the 19th century. had profound effects on the climate of the Surrey Hills. Winters became colder, with more frequent snowfall and harsher frosts, while summers were cooler and wetter. These climatic shifts had a marked impact on agriculture in the region, reducing the growing season and making farming more difficult. A notable change in this period being the expansion of heathlands, coinciding with changes in agricultural practices with farming becoming more prominent. The introduction of grazing sheep and cattle on the heathland areas was particularly common in areas like the Surrey Hills where the underlying chalk and sandy soils supported their development. Heathland ecosystems, with their distinctive flora such as heather, gorse, and broom, became a defining feature of the region's landscape.

As the climate began to warm again in the 19th century, new agricultural practices emerged in the Surrey Hills, influenced both by local conditions and broader economic trends. One of the most significant developments during this period was the rise of hop cultivation in the region. The cultivation of hops, essential for brewing beer, became a major industry in the Surrey Hills, particularly in areas like Godalming, Farnham, and Guildford. These regions, with their chalky soils and mild climate, were ideal for hop growing, and by the 18th century, hops were a key agricultural product in the area.

The cultivation of hops in the Surrey Hills was part of a broader agricultural revolution that occurred across Britain in the 18th and 19th centuries. This period saw the adoption of new farming techniques and crop rotations, which allowed for increased productivity and more diverse agriculture. The rise of hop farming in Surrey, along with the growth of other industries like wool production, helped fuel local economies and contributed to the region's cultural landscape

The climate history of the Surrey Hills is a story of adaptability and transformation, shaped by both natural forces and human ingenuity. From the post-glacial forests and Roman vineyards to the spread of heathlands during the Little Ice Age and the rise of hop farming, the region's landscape has been continually influenced by changes in climate.

#### The Present:

The 20th and 21st centuries have seen significant changes in the climate of the Surrey Hills, as global warming has led to rising temperatures and altered weather patterns. All of the UK's ten warmest years on record have occurred since 2002. Heatwaves, like that of summer 2018, are now 30 times more likely to happen due to climate change. Summers have become hotter and drier, while winters are generally milder and wetter. These changes have had both positive and negative effects on the region's ecosystems and agricultural practices.

In particular, the warming climate has helped to revitalise the wine industry in the region. As temperatures have increased, conditions for grape growing have improved, and vineyards have once again been established in parts of the Surrey Hills. The resurgence of viticulture in the region, particularly with the production of sparkling wines, is a testament to how changing climate conditions can enable the re-emergence of practices that once thrived in Roman times. However. climate change is having a significant impact on nature conservation efforts in the Surrey Hills. The increasingly unpredictable weather patterns associated with climate change, such as heavy rainfall and prolonged droughts, present severe challenges for agriculture and conservation in the region. Delicate ecosystems within this region are facing increasing stress, threatening biodiversity and complicating conservation work.

Heathlands, which are highly sensitive to both over (and under) grazing and changes in climate, are at risk from increased fire risk, the spread of invasive species, and from habitat degradation, while the spread of new crops and changes in farming techniques continues to reshape the rural landscape. One of the most prominent effects is the shifting of species' habitats. Many plant and animal species in the Surrey Hills are adapted to specific climate conditions, and as temperatures increase, some species may struggle to survive in their traditional habitats. Warmer winters and hotter summers can also alter the timing of seasonal events such as flowering, breeding, and migration. For

instance, migratory birds may arrive earlier or later than usual, disrupting their relationships with local food sources and potentially leading to mismatches in ecosystems.

In addition, changing weather patterns, including more frequent droughts and extreme rainfall, can damage vital habitats. Waterlogged soils and eroded riverbanks threaten aquatic species and plant life, while longer dry spells may lead to the decline of woodland and heathland habitats that are home to rare species like the heath fritillary butterfly or the rare woodlark. Furthermore, the spread of invasive species, which are better suited to warmer conditions, poses a growing threat. Non-native plants and animals may outcompete native species for resources, further destabilising ecosystems and reducing biodiversity.

To mitigate these challenges, conservation efforts in the Surrey Hills must focus on reducing net carbon emissions and creating resilient landscapes, which are more able cope with, and adapt to, the expected climate changes over coming years. This includes restoring habitats, promoting species migration corridors, and improving land management practices to better cope with the changing climate. However, as global warming continues, more adaptive and long-term strategies will be necessary to protect this unique and cherished landscape, there is a tension over the nature and extent of renewable energy infrastructure that is appropriate in Protected Landscapes

#### The Future:

"Great civilisations are built when old men plant trees they will never see grow..."

It is said that Admiral Collingwood, Nelson's second-in-command at Trafalgar, walked the lanes of his native Northumberland with a pocketful of acorns, sowing them as he went, so that England's navy would never want for timber. The world was changing. Britain was adjusting to the loss of her most precious colony. The Industrial Revolution was transforming her domestic landscape. Across the English Channel, a new revolution was brewing in France. Within a few years, the French would execute their king, and Britain would be at war. Neither Collingwood nor Nelson would survive that war, but their legacies remain.

The Surrey Hills faces considerable challenges as it adapts to the realities of climate change. Yet, the resilience and richness of its ecosystems continue to offer hope for the future. As the region strives to preserve its unique cultural and natural heritage, understanding its climate history is crucial for ensuring that it remains a thriving part of the English countryside for generations to come.

Warmer, drier weather is likely to pose significant risks to the remaining areas of heathland. With the increased risk of fire, combined with existing fragmentation, there is a real danger of local extinction caused by fire, as there may be no nearby habitat for

species to recolonise. Additional risks to heathland include increased storm intensity, which could lead to the loss of soil from nutrient-poor, thinly-soiled sites. Similarly, chalk grassland is vulnerable to fragmentation and potential loss. Expected increases in storm intensity and extreme weather events also pose threats of catastrophic flooding, impacting both wildlife and communities, both within the National Landscape and downstream.

It is imperative that, over the coming years, decisive steps are taken to mitigate the impacts of climate change on the protected landscape in order to prevent the further fragmentation and loss of our sensitive habitats.

Projects to reduce fuel loads on heathland sites, such as tree removal, mechanical mowing, or controlled burning, may become increasingly important to preserve the long-term integrity of these habitats. The expected increase in storm intensity is also likely to exacerbate flooding risks. However, efforts to slow the flow of water into and through watercourses, particularly through sustainable drainage, the expansion of wetlands, and semi-natural flow interventions, including the use of trees and the damming of streams, can help to mitigate and prevent downstream flooding.

Similarly, to sustain livestock farming in a warmer climate, agroforestry can provide significant benefits for animal welfare, such as using trees for shade, along with carbon fixation and biodiversity benefits.

# 3.13 Long-term Strategic Priorities for Mitigating and adapting to climate change

### 3.13.1 Reducing agricultural carbon emissions

The development of the Plan has identified a series of key interventions required to reduce agricultural carbon emissions that will help mitigate climate change and promoting sustainable farming practices:

#### 1. Adoption of More Sustainable Farming Practices

- Conservation Tillage: reducing or eliminating tillage to minimise soil disturbance and maintain carbon sequestration in the soil.
- Cover Cropping: planting cover crops to improve soil health, reduce erosion, and capture carbon dioxide from the atmosphere.

#### 2. Optimising Fertiliser Use

- Precision Agriculture: using technology to apply fertilisers more efficiently, reducing the amount needed and minimising nitrous oxide emissions.
- Organic Fertilisers: utilising organic fertilisers like compost and manure to improve soil health and reduce reliance on synthetic fertilisers.

#### 3. Improvements in Livestock Management

- Methane Reduction: implementing strategies to reduce methane emissions from livestock, such as altering diets, improving manure management, and using feed additives that reduce methane production.
- Grazing Management: adopting rotational grazing, mob grazing, and other sustainable grazing practices to enhance soil carbon storage and reduce methane emissions.

#### 4. Enhance Carbon Sequestration

- Agroforestry: integrating trees and shrubs, including hedgerows, into agricultural landscapes to capture and store carbon while providing additional benefits such as shade and wind protection.
- Soil Carbon Sequestration: implementing practices that increase organic matter in the soil, such as adding biochar or compost, to enhance the soil's ability to sequester carbon.

#### 5. Utilising Renewable Energy

- Solar and Wind Power: small-scale instillations of solar panels and wind turbines on farms (without loss of agricultural land) in order to generate renewable energy and reduce reliance on fossil fuels.
- Biofuel Production: using anaerobic digesters to convert agricultural waste into biogas, which can be used for heating, electricity, or as a vehicle fuel, thereby reducing methane emissions from decomposing organic matter.

#### 3.13.2 Reducing transport emissions

Over the long term, the following actions can significantly contribute to reducing emissions from rural transport, promoting sustainability, and improving overall environmental health.

#### 1. Promotion of Electric and Hybrid Vehicles

- Adoption of Electric Vehicles: Encouraging the use of electric cars, trucks, and buses through incentives and the development of charging infrastructure.
- Hybrid Vehicles: Promoting the use of hybrid vehicles as a transitional solution to fully electric vehicles.

#### 2. Enhanced Public Transport Infrastructure

- Expanded Bus and Rail Services: Improving and expanding rural public transport options to reduce dependence on private vehicles.
- Electric Public Transport: Introducing electric, or sustainably fuelled, buses and trains to further reduce overall emissions from public transport.

#### 3. Improved Active Travel Options

- Walking and Cycling Infrastructure: Developing safe and accessible active travel infrastructure to encourage walking and cycling, including the development of multi-user greenways and quiet lanes which seek to prioritise non-mechanically propelled user access
- Bike-sharing Programs: Implementing bike-sharing schemes to provide convenient access to bicycles, in particular those which might reduce the use of commercial and delivery vehicles

#### 4. Implementing Smart Transport Solutions

- Route Optimisation: Optimising routes for deliveries and personal travel, in order to improve road safety and reduce fuel consumption.
- Telematics: Utilising vehicle telematics and other technologies in order to improve driving habits, leading to more efficient fuel use.

#### 5. Supporting Local Economic Activities

- Local Production and Consumption: Encouraging local production and distribution, in order to reduce the need for long-distance transport of goods.
- Remote Work and Services: Promoting remote work and the provision of local services in order to minimise commuting.