WARWICKSHIRE, COVENTRY & SOLIHULL

SUB-REGIONAL GREEN INFRASTRUCTURE STRATEGY

Prepared by

Warwickshire County Council
Ecology, Landscape & Historic Environment
with
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Conservation of the Historic Environment, Landscape Architecture, Urban Design and Ecology
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Ecology

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Green Infrastructure Vision

A diverse and well-managed Warwickshire, Coventry and Solihull Green Infrastructure network that underpins the quality of life for communities and support nature's recovery. This will be the result of a well-connected, accessible and biodiversity resilient landscape, supporting economic growth, social health and climate change mitigation and adaptation.

Executive Summary

'*A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity*.' (National Planning Policy Framework, 2023)

The purpose of this Green Infrastructure (GI) Strategy (known henceforth as the Strategy) is to provide evidence for the preparation of plans, policies and strategies relating to GI at a sub-regional level and at a local level. It also details how GI can be delivered with the help from landholders and relevant stakeholders. The Strategy covers the disciplines of

- Landscape
- Biodiversity/Natural Capital
- Accessibility

Figure 1 shows the extent of the sub-regional area of Warwickshire, Coventry and Solihull that this Strategy covers.

Landscape

The main strategic areas of opportunity for strengthening landscape character are identified in the Warwickshire Landscapes Guidelines[1] and are still relevant, including opportunities to demonstrate exemplary approaches to landscape conservation management. However, it is recommended that the Enhancement Zones, where particular effort is required to restore and enhance landscape character, be re-assessed to identify target areas for landscape restoration. In particular, planning and implementing substantial landscape frameworks, well in advance of major developments and transport infrastructure, can bring many benefits, including safeguarding and enhancing vital landscape assets, helping to create a sense of place for new development and retaining vital links with the past.

Biodiversity / Natural Capital

The strategy identifies sub-regional GI Biodiversity Assets and identifies Strategic Areas for delivering the Biodiversity Strategy's aim to reconnect habitats throughout the sub-region. It makes the recommendation consistent with national policies and strategies to safeguard, enhance and create GI Biodiversity Assets to connect individual sub-regional GI Biodiversity assets together to form core areas creating large functional clusters of woodland, wetland and grassland habitats. After this has been scientifically demonstrated the next aim is to connect the large functional areas together. However, this does not preclude the opportunity to create new areas that will be large enough to function independently.

Accessibility

[1] https://www.warwickshire.gov.uk/landscapeguidelines

The Strategy uses the Natural England's Accessible Natural Greenspace Standard criteria and the Woodland Access Standards to identify sub-regional GI Accessibility Assets to enable residents, visitors and workers to maximise the benefits from green infrastructure and natural capital. In so doing, the sub-region can improve its environmental health and resilience and provide a better quality of life. It recommends that areas of deficiency are identified so that new or existing assets can be created or enhanced to meet any local through to sub-regional needs. It also recommends engagement with local people to learn about the opportunities that public open spaces, country parks and the countryside and rights of way network can offer to make the countryside more accessible to all with the promotion of encouraging walking, cycling and other forms of exercise to contribute to people's ongoing health and fitness. There is a need to develop an understanding of investment markets relating to social prescribing.

There are additional recommendations to increase and enhance connections to the existing path networks and the promotion of green tourism and leisure to expand the subregion's tourist destination offer.

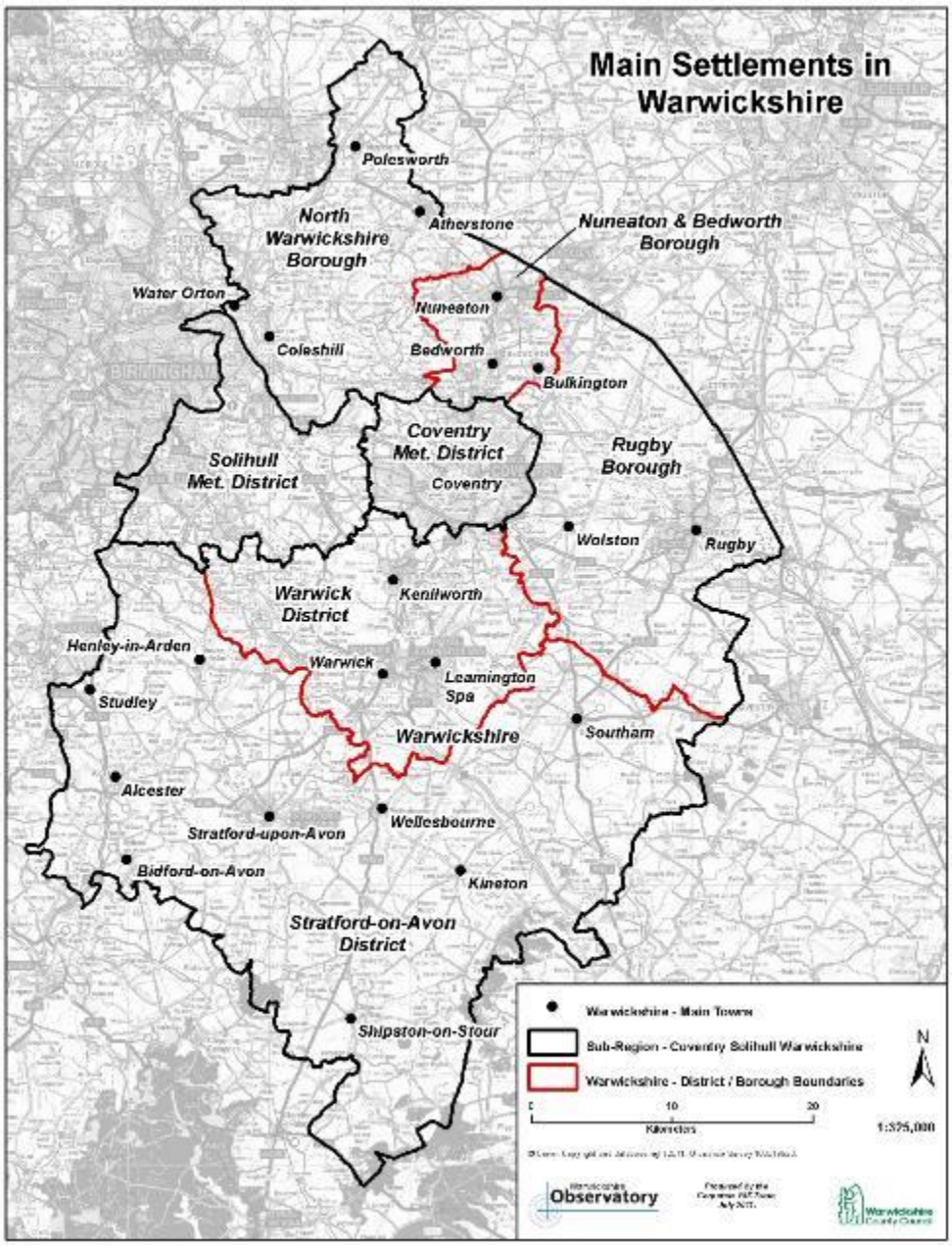


Figure 1 Sub-regional area covered by the Green Infrastructure Strategy

Introduction

Purpose

Warwickshire's Green Infrastructure Strategy sets out the strategic vision for the green spaces (both urban and rural) in Warwickshire, and how they can be created, managed and maintained to maximise the multiple benefits that the natural environment provides within the sub-region. These multiple benefits, known as ecosystem services, are essential to the survival of humanity, and in tackling priorities such as the health and wellbeing of individuals and communities, and the biodiversity crisis and climate emergency.

The Strategy takes into account both the current conditions of the sub-regions existing Green Infrastructure (GI) and potential future opportunities to deliver 'more, bigger, better and more joined up' GI[2].

A key objective of the Strategy relates to increasing awareness about the significance and various advantages of GI within the sub-region and specifies measures that can be implemented by the Council, residents, businesses, and other collaborators to safeguard and improve GI. The aim of this Strategy is to provide evidence for the preparation of plans, policies and strategies relating to GI at a sub-regional level. It will also be available for adopting as a strategic mechanism to deliver GI enhancements across the partner authorities to meet national, sub-regional and local GI needs. There will be elements that can be applied at a local, parish and field level through partnership and landowner assistance.

Structure

GI is dynamic and is subject to change from many influences: from land-use change, climate change, political approaches, scientific modelling and identifying assets. It is therefore essential that this strategy has the flexibility to evolve. This evolution, however, must be evidence based and democratically approved within an accountable partnership.

To allow for this flexible approach the strategy will form three parts:

PART A - STRATEGIC CONTEXT
This part will be 'static'; providing the background and reasoning as to why sub-regional GI Assets are important.

PART B - ASSESSMENTS and RECOMMENDATIONS
This part will be 'semi-static'; detailing methods as to how sub-regional GI Assets have been identified and how models of delivery have been determined.

PART C - ASSETS and MAPS
This part will be 'living'; showing the location of sub-regional GI Assets as they are now and as they change over time.

[2] Making Space for Nature: A review of England's Wildlife Sites and Ecological Network (Lawton et al, 2010)

Outputs and Outcomes

Although the primary purpose of this strategy is to be an evidence base for Local Plan Documents within the sub-region it will have an integral role in the delivery of the Local Nature Recovery Strategy. The desired outcome is a comprehensive, interactive, and highly flexible evidence base, which can be used for a range of purposes, including:

- Understanding the current green infrastructure provision in the sub-region, based on a set of common standards,
- Establishing a framework for sustainable land management in the sub-region,
- Predicting the implications of changes on the natural environment,
- Contributing to identified priorities in health, economy, and quality of life,
- Creating a structured plan for environmental change,
- Attracting inward investment,
- Assisting neighbouring authorities in prioritising areas of common interest,
- Assisting with planning green infrastructure as part of new developments or retrofitting Green Infrastructure in existing places,
- Set local green infrastructure targets to meet standards, and
- Monitor and evaluate green infrastructure provision against standards.

Governance

Coventry, Solihull and Warwickshire Association of Planning Officers (CSWAPO) own this document. The document has also been adopted by the Warwickshire, Coventry and Solihull Local Nature partnership as a delivery mechanism for the two Local Nature Recovery Strategies that cover the sub-region.

Each of this strategy's structural parts will require updating. Each may require different mechanisms to ensure all partners approve these changes and continue to work towards common goals.

Changes to PART A – STRATEGIC CONTEXT or PART B – ASSESSMENT and RECOMMENDATIONS: Any changes to these parts of the strategy will need to be initiated through CSWAPO. If CSWAPO believe that the changes are of a material nature, then this will trigger a full public and stakeholder consultation to be carried out in accordance with a most relevant Council's Statement of Community Involvement. The Warwickshire, Coventry and Solihull Local Nature Partnership will then acknowledge the final changed document.

Changes to PART C – ASSETS & MAPS and ANNEXES: This part will be updated on a regular basis. These changes will not require any approval as they will be in the form of maps that show the location of any Green Infrastructure Assets as defined in Part B.

PART A – Strategic Context

What is Green Infrastructure?

Green Infrastructure is defined in the National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing and Communities, 2023) as;

'A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.'

There are a number of definitions of Green Infrastructure, but they all promote the concept of multi-functionality, a holistic approach and the need to connect together different types of green and blue space.

The Green Infrastructure Principles[3] (Natural England, 2023) identify five key principles for what good quality GI should be, these are;

1. **Multifunctional;** GI should deliver a range of benefits for people, nature and places and address specific issues to meet the needs within the local area and the sub-region as a whole.
2. **Varied;** GI should feature a wide range of diverse types of green and blue spaces and environmental features.
3. **Connected;** GI should operate and link as a living network for people and wildlife and nature as well as strengthening ecological networks and improving ecosystem services.
4. **Accessible;** GI should allow people to experience and connect with nature. It should provide everyone, regardless of where they live, with access to high-quality green spaces that are inclusive, safe, welcoming, well-managed, and easily accessible.
5. **Character;** GI should be designed and managed to reflect the area's character in such a way that it helps landscape conservation, enhancement, and/or restoration, or, in degraded areas, produces new high-quality landscapes to which local people feel connected and provided with a 'sense of place'.

Green Infrastructure considers both public and private assets in both a spatial dimension as well as a conceptual/thematic level. Spatial infers, for example, ecological sites and features that link them together. At a conceptual/thematic level infers features for sustainable living, such as trees and their contribution to shading and cooling, and as part of wildlife corridors).

At a more holistic level it is seen as part of the life-support systems of the sub-region; providing 'ecosystem services'.

What are the benefits?

The benefits of Green Infrastructure are wide ranging and relate to three interdependent objectives of sustainable development within planning which aims to achieve economic, social and environmental gains (NPPF, 2023) One of the key challenges will be to ensure that Green Infrastructure can penetrate and impact upon all planning and land management decision-making processes. By planning, implementing and managing Green Infrastructure at the strategic landscape scale, it is possible to deliver a range of benefits, often in combination.

The Green Infrastructure Principles (Natural England, 2023) identify five key principles for why GI should be delivered, these are;

[3] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx

1. Nature rich beautiful places,
2. Active and healthy places,
3. Thriving and prospering communities,
4. Improved water management, and
5. Resilient and climate positive places.

Nature Rich, Beautiful Places

GI, as a well connected and funcitoning landscape, plays a vital role in promoting the recovery and growth of nature in all types of landscapes throughout the sub-region. It supports the preservation and enhancement of natural beauty, wildlife, and habitats, as well as the geological and soil features of the area. GI also underpins our cultural and personal connections with nature, promoting a healthy and sustainable relationship between the human society and the environment.

In recent years, the loss of biodiversity in England has accelerated due, in part, to the fragmentation of habitats and the decline of many species. Furthermore, soil loss and degradation as a result of poor agricultural practices, neglect, damage to important geological and fossil sites, and mineral exploitation have resulted in an overall loss of geodiversity[4]. Both the government and the environmental sector recognise that action at both the broad landscape and local level is necessary to address this issue.

The restoration and management of existing protected areas cannot provide sufficient biodiversity and geodiversity alone; therefore, implementation of new GI must occur wherever it can be encouraged to thrive. Moreover, biodiverse environments are the foundation for the creation and facilitation of other GI benefits and cannot be planned or managed in isolation from other GI benefits. Therefore, the design and implementation of GI should aim to increase biodiversity measurably through the creation, restoration, enhancement, and connectivity of new and existing habitats and sites.

Planning compensation mechanisms, such as Biodiversity Net Gain (BNG) and other Nature Markets, can provide an investment mechanism for on-site and off-site GI, either by enhancing existing habitats or creating new ones. Nature Markets can raise the quality of existing green and blue spaces (such as river restoration) and provide new GI. Additionally, Habitat Regulation Assessments offer opportunities for new or improved GI, such as when Suitable Alternative Natural Green Spaces (SANGs) are required as buffer zones to prevent damage to Special Protection Areas (SPAs) etc.

Urban landscapes support nature's recovery. Local Nature Reserves, often within or close to urban settings, provide important GI for local communities and can support rare and uncommon species. Urban areas are essential for pollinators. Small areas of habitats, such as green roofs and living walls, can be important, especially in combination with public parks and private gardens managed for wildlife, can act as stepping stones throughout the urban landscape.

While native species are crucial, it is recognised that carefully thought-out non-native species can create beautiful places, particularly in an urban context, where a diversity of trees, shrubs, and plants can enrich townscapes. Historic public parks, cemeteries, allotment and orchards all make a significant contribution, despite often supporting non-native species. The recognition that non-native species can and do contribute to GI within the sub-region and is linked to other key principles of GI such as climate resilience.

[4] Geodiversity is the variety of earth materials, forms and processes that constitute and shape the Earth, either the whole or a specific part of it.

GI can create opportunities to strengthen communities' connection with their surroundings, regardless of background or experience. Nature can carry powerful cultural significance. For example, common insects observed by long-term inhabitants or comparative thoughts of new arrivals familiar with plants from other nations can evoke a sense of place and ‘home’. These historical and cultural linkages might be used as an extra tool for connecting with communities who have historically been difficult to reach. Nature on the doorstep can help young people connect with nature on their way to school or other leisure activities.

Active and Healthy Places

Neighbourhoods that prioritise green spaces, including parks, waterways and pedestrian paths, promote physical activity, social unity, and ecological engagement, all of which enhance overall wellbeing and quality of life. Furthermore, well planned GI assets and features play a vital role in reducing health hazards. For example trees and ponds can reduce urban heat stress, noise pollution, flooding, and harmful air quality.

England is currently experiencing a health crisis, with conditions such as diabetes, obesity, dementia and mental health issues becoming more prevalent. To address these challenges, as well as those presented by the Covid-19 pandemic, there is growing emphasis on preventative measures in addition to treatment.

The health sector acknowledges that spending time in green spaces can be an effective alternative or addition to traditional treatments, for both mental and physical health issues. Green social prescribing refers to the practice of referring patients to participate in nature-based activities like cycling, walking, community gardening, and conservation work, among others. Several studies have found that access to greenspace can lead to improved immune system function, relaxation, and better sleep patterns.

The evidence indicating that individuals from more affluent social groups tend to visit natural environments more frequently than those from less affluent backgrounds, including certain black and minority ethnic groups, individuals with disabilities, and individuals with long-term illnesses, is widely established. Economically disadvantaged communities that lack access to high-quality natural green or blue spaces near their homes or workplaces often have poorer health and educational outcomes.

Inadequate housing, higher crime rates, insufficient play areas, and greater risks due to traffic (air pollution) also frequently exacerbate health inequalities. Lower-income individuals may have to share green spaces with a larger number of people due to higher population densities, making restorative or contemplative experiences more challenging. Additionally, individuals with lower incomes may lack the resources to travel to green spaces that are farther away from their homes. To effectively address health needs, green and blue spaces must be situated near people's homes and workplaces, be of good quality, safe, welcoming, provide necessary facilities, and be well-maintained.

Thriving and Prospering Communities

GI plays a key role in fostering thriving communities that benefit all and contributes to the creation of high-quality environments that attract businesses and investors. This, in turn, leads to the development of green jobs, supports retail and high streets, and helps to boost local economy and regeneration.

People have become disconnected from nature in the face of increasing urbanisation, even though our economies, livelihoods, and well-being all rely on it. Therefore, placing accredited and thereby accurate economic values on green infrastructure is crucial to support the rationale for sustainable investment.

Well-designed and well-maintained environments can serve as a catalyst for community regeneration and ownership, providing opportunities for education, training, and volunteering, and promoting job creation by attracting investment and tourism. Furthermore, spending time in greenspace has been linked to various benefits for employees and students, including improved motor skills, academic performance, and concentration.

GI can also generate a variety of "green" job opportunities, ranging from specialised ecologists to those involved in practical implementations such as green roofs, as well as jobs related to land products, including food production and forestry. The employment opportunities created by GI can contribute significantly to the local pool of skills and income available.

GI has been utilised by developers in the sub-region to enhance the value of their projects and distinguish their brand from others in the market. The advantages offered by green infrastructure include reduced building heating and cooling costs, which can translate into operational savings for businesses, more attractive and aesthetically pleasing landscape features in which to work, opportunities for recreational activities, improved climate resilience, and a strengthened sense of community.

Understanding and Managing Water Environment

GI has a range of benefits including reducing the risk of floods, improving water quality and filtration, maintaining the natural water cycle and drainage at local and catchment scales, thereby reducing pressure on water infrastructure and the environment. It also provides amenity, biodiversity, and economic benefits.

When properly planned and executed, GI may significantly lower the speed and amount of surface water reaching drains, sewers, and water courses while also putting that water to good use.

GI has the potential to contribute significantly to enhancing water quality through the introduction of vegetation that traps, filters or reduces pollutants in the environment. Additionally, blue infrastructure, or water-based features such as rivers, lakes and canals can provide recreational opportunities such as walking, sailing, and canoeing, along with related facilities, which are essential benefits of GI.

Green infrastructure, water management, and biodiversity are interconnected and can provide habitats for aquatic species, as well as serve as strategic stepping-stones, such as rest stops for migratory birds traveling between continents. Water management can be integrated into green infrastructure networks and corridors, which can have multiple functions at various scales.

Sustainable Drainage Systems (SuDS) involve utilising natural processes to manage water in urban environments. Instead of allowing rainwater to run off hard surfaces like pavements and car parks straight into sewers (hard infrastructure) SuDS mimic nature by holding back rainwater where it falls or letting it soak into the ground. Developments should incorporate green roofs and walls, rain gardens, permeable pavements, and other water retention features. These measures slow the water flow, reduce water pollution, create new habitats, and enhance recreational opportunities. Planning and integrating SuDS as part of a GI from the outset within new developments, local and wider GI networks can be strengthened, by linking small water-based or SuDS assets within sites to larger landscape-scale features beyond. Retrofitting SuDS within existing developments can be challenging and integrated systems may be harder to achieve, necessitating a long-term vision and a view to identifying opportunities early and achieving benefits over time.

Resilient and Climate Positive Places
GI does and will continue to make the sub-region more resilient and adaptable to climate change, and it contributes to meeting national zero-carbon and air-quality goals. To achieve long-term resilience, GI should be created and managed to adapt to climate change.

The anticipated increase in extreme weather events due to climate change, such as flash flooding, heat waves, high winds and disruption of transportation and communication networks, highlights the need for GI to be developed, implemented, and maintained to mitigate and adapt to these challenges within the sub-region. Such interventions can minimise the impact on both wildlife and human populations, encouraging low-carbon behaviours and build resilience.

For example, strategically planting trees can have a dual purpose of mitigating the effects of climate change, specifically by providing carbon storage and aiding in flood water management. Additionally, trees can provide shade and cooling during heat waves through evapotranspiration. This shade can also reduce the need for air conditioning, ultimately saving carbon. Trees also improve air quality by absorbing harmful gases and particles in the air.

Furthermore, incorporating cycling and walking networks as part of GI corridors can encourage active travel and contribute to reducing CO_2 emissions.

Local communities can directly participate in climate-related GI projects by engaging in tree planting and maintenance. Community engagement is a crucial element for the success of many GI and climate change initiatives.

Disciplines

For the purpose of identifying assets this strategy has sub-divided Green Infrastructure into three disciplines:

- Landscape
- Biodiversity/ Natural Capital
- Accessibility

Typology

In 2012 the Association of Local Government Ecologists (ALGE, 2012) produced a typology list of Green Infrastructure assets. Table 1 shows these typologies and their associations with the three disciplines covered by this strategy.

Ecosystems Services

Ecosystem services are defined in the UK National Ecosystem Assessment[5]; *'The benefits that people obtain from ecosystems. These include:*

- ***provisioning services*** *such as food, water timber and other resources that are directly harvested from the environment;*
- ***regulating services*** *these include climate regulation, air and water quality, pest control and pollination;*
- ***cultural services*** *such as spiritual, recreational, and educational benefits; and*
- ***supporting services*** *such as soil formation, biodiversity and nutrient cycling that maintain the conditions for life on earth'*

[5] http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx

Table 1: Typology of Green Infrastructure Assets and their Discipline Association

Typology	Landscape	Biodiversity	Accessibility
Natural and semi-natural rural, peri-urban and urban green spaces, including: woodland and scrub, grassland (for example downland and meadow), heath and moor, wetlands, open and running water, brownfield sites, bare rock habitats (for example cliffs and quarries), coasts, beaches, ancient trees and community forests.	++	++	+
Parks and gardens – urban parks, country and regional parks, formal and private formal gardens, arboretums, and institutional grounds (for example schools and hospitals).	++	++	++
Amenity green space – informal recreation spaces, play areas, outdoor sport facilities, housing green spaces, domestic gardens, roof gardens, village greens, urban commons, other incidental space, green roofs, hedges and trees, community woodland, civic squares and spaces, and highway trees and verges.	+	+	++
Allotments, city farms, orchards and urban edge farmland.	++	++	++
Cemeteries and churchyards.	++	+	++
Green corridors – rivers and canals including their banks, road and rail corridors, cycling routes and rights of way.	++	++	++
Existing national and local nature reserves and locally designated sites for nature conservations (for example Local Wildlife Sites etc).	++	++	+
Archaeological and historic sites.	++	+	+
Functional green space such as sustainable urban drainage schemes and flood storage areas.	++	++	+
Built structures – bird and bat nesting, roost sites attached to existing and new build developments.	+	++	o

Key
++ Strong association
+ Relevant association
o No association

The UK Millennium National Ecosystem Assessment (NEA)[6], published in 2011, was the first comprehensive study of its kind that aimed to assess the state and value of the UK's ecosystems and the services they provide. One of the key findings of the NEA was the significant role that green infrastructure plays in supporting and enhancing ecosystem services. The study highlighted how green infrastructure can help to regulate air and water quality, mitigate flooding and climate change, and provide recreational opportunities and cultural benefits. The NEA also noted that green infrastructure can enhance biodiversity and support ecosystem resilience, which are essential for maintaining the long-term provision of ecosystem services. Overall, the NEA emphasised the importance of integrating green infrastructure into planning and development processes to ensure the continued provision of ecosystem services and support human well-being.

In addition to highlighting the importance of green infrastructure, the UK Millennium National Ecosystem Assessment also identified the need for better management and protection of ecosystems and their services. The study noted that human activities, such as land use change, pollution, and over-exploitation of natural resources, are major threats to the health

[6] http://uknea.unep-wcmc.org/

and functioning of ecosystems and the services they provide. Therefore, the NEA called for more effective policies and strategies to promote sustainable management of ecosystems and their services.

One example of how green infrastructure can support sustainable management of ecosystems is through the restoration of degraded habitats. Restoring degraded habitats, such as wetlands, can help to improve water quality, support biodiversity, and mitigate climate change. These restored habitats can also provide additional benefits, such as flood mitigation and recreational opportunities. By integrating the restoration of degraded habitats into green infrastructure planning and development, the UK can not only enhance the provision of ecosystem services but also support the sustainable management of ecosystems.

In accordance with the Millennium Ecosystem Service categories, there are five potential functions performed by GI. This categorisation enables the sub-regional GI assets available in different parts of the sub-region to be compared against potential functions to help establish where functional deficiencies might exist.
Table 2 demonstrates the links between ecosystem services and the GI functions.

Table 2: GI Functions and Links to Categories of Ecosystem Services

		Ecosystem Service Categories (Millennium Assessment)			
Functions performed by GI	Examples of relevant GIS datasets	Provisioning	Regulating	Cultural	Supporting
Habitat provision and access to nature	Nature conservation designations, biodiversity records, local biodiversity data, Biodiversity Action Plans	✓	✓	✓	✓
Sustainable resource management and climate change adaptation	Vulnerability mapping, flood risk mapping, UKCIP data, Water Framework Directive datasets		✓	✓	
Productive landscapes	Natural England HLS target areas, allotments, orchards, Agricultural Land Classification	✓	✓	✓	✓
Landscape setting and context including historic environment	Landscape character assessments, historic landscape character, cultural heritage designations, tranquillity and intrusion maps	✓		✓	
Access, recreation and movement	Infrastructure, green space (NPPF assessment of open spaces), ANGSt analysis, local green space provision standards, Public Rights of Way, Cycle Network	✓	✓	✓	

The NEA provides a comprehensive account of how the natural world, provides us with services that are critical to our wellbeing and economic prosperity. However, it also reveals that nature is consistently undervalued in decision-making and many of these services are declining. However, in January 2023, the government launched the Environmental Improvement Plan 2023 (EIP23)[7] to reverse the decline in nature. The plan aims to transform the frameworks for financial decision making in the wider economy, as set out in the government's Green Finance Strategy[8]and attract private investment in nature, targeting at least £500 million annually by 2027 and over £1 billion by 2030. The government intends to develop high-integrity nature markets to mobilise this investment.

Nature markets enable private investment in nature through the creation and trading of units or credits. Businesses can also invest in nature through various means such as providing finance to projects, improving their own operations' environmental benefits, or funding nature restoration projects philanthropically. Nature markets facilitate investment from businesses to farmers and land and coastal managers to enhance natural and farmed land, as well as freshwater and marine habitats, for environmental benefits like carbon sequestration, nature recovery, and clean water.

Where robust methodologies are established, units or credits are awarded based on codes or standards that set out the methods used to quantify the ecosystem service (for example how many tonnes of carbon are expected to be absorbed) and how quality assurance will be provided.

Warwickshire County Council has developed the Warwickshire, Coventry, and Solihull Ecosystem Services Trading Protocol as an annex to the strategy. This protocol aims to promote investment in natural capital, adopting a "prevention versus cure" philosophy by emphasising nature-based solutions before any negative impacts occur. In the absence of national trading standards, it also establishes standards and trading rules for the sale, transfer, or exchange of ecosystem services derived from natural capital within the sub-regional local authority and regulatory frameworks.

[7] https://www.gov.uk/government/publications/environmental-improvement-plan
[8] https://www.gov.uk/government/publications/green-finance-strategy

Landscape

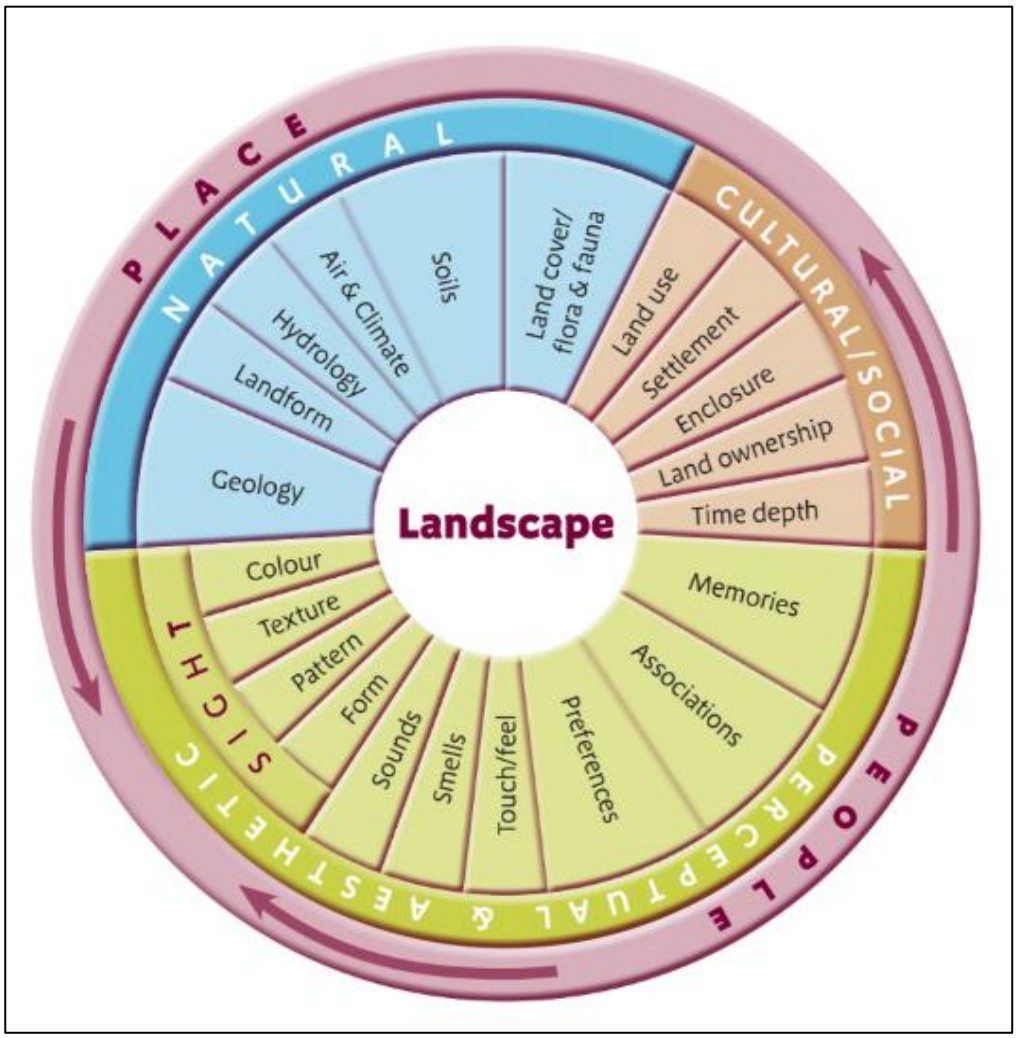
Landscape Vision

Development and land management will be sustainably integrated into the landscape to ensure that the beauty and diversity of the sub-region is conserved and enhanced for present and future generations to enjoy.

Background

The term landscape applies to land shaped over time by geological and biological processes and by human intervention. Although the Oxford Dictionary's definition of landscape as *"all the visible features of an area of land, often considered in terms of their aesthetic appeal*" still persists, strategic landscapes and Green Infrastructure are not only concerned with the visual appearance (including the shape, form and colour) of the landscape but also consider the way in which the various components come together to create different landscapes. Where these components occur in a distinct and consistent pattern, they give character to the landscape. Figure 2[9] summarises the characteristics that make a landscape distinctive.

Figure 2 What is landscape?



[9] Figure 1 in '*An Approach to Landscape Character Assessment'* by Christine Tudor (Natural England, 2014).

Landscapes will have to be increasingly multifunctional to meet current and future economic and environmental demands. This is demonstrated in the Government's aim to publish a Land Use Framework in 2023 to help inform land use decisions and to reconcile competing demands[10]. GI is essential for creating these multifunctional landscapes, contributing to the management, conservation and improvement of strategic and local landscapes. It should be designed and managed as a multifunctional resource, capable of providing the landscape, ecosystem services and quality of life benefits that are needed to underpin sustainability. Its design and management should also protect and enhance the character and distinctiveness of an area with regards to habitats and landscape types.

In 2013 the Landscape Institute produced the position statement 'Green-Infrastructure – An integrated approach to land use'[11] The paper emphasises how a GI approach "enables landscapes to deliver social, economic and environmental benefits simultaneously, and then looks at how these benefits can be multiplied by being connected to a wider network of spaces" (p.7). By understanding the elements that define an area's character and integrating these into design proposals, well-designed GI can provide cost-effective and sustainable solutions, creating more resilient proposals.

GI also has an important role in contributing to the setting of landscape and historic features and the subsequent value of these features.

International

The European Landscape Convention (ELC)[12] defines Landscape as: "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."

The European Landscape Convention introduced a Europe-wide concept centring on the quality of landscape protection, management and planning, covering the entire territory, not just outstanding landscapes. Its definition of landscape covers natural, rural, urban and peri-urban areas including inland water. Through its ground-breaking approach and its broader scope, it complements the Council of Europe's and United Nations Educational, Scientific and Cultural Organisation (UNESCO's) heritage conventions.

National

National Planning Policy Framework (NPPF) 2023

The National Planning Policy Framework (NPPF)[13] is a document produced by the UK government that sets out the policies and guidance for the planning system in England. The NPPF provides a framework for how planning decisions should be made, and it sets out the government's priorities for sustainable development.

In relation to landscape and GI, the NPPF policies state how planning policies should contribute to and enhance the natural and local environment. In particular this includes:

- **Para 20**: *"conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation"*

[10] https://www.gov.uk/government/publications/government-food-strategy/government-food-strategy
[11] https://www.landscapeinstitute.org/policy/green-infrastructure/
[12] https://www.gov.uk/government/publications/european-landscape-convention-guidelines-for-managing-landscapes
[13] https://www.gov.uk/government/publications/national-planning-policy-framework--2

- **Para 96c**: *"enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling."*
- **Para 180a:** protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan).
- **Para 180b:** recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
- **Para 180f:** remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The NPPF also states the need to take a strategic, landscape scale approach across local authority boundaries to maintain and enhance networks of habitats and green infrastructure.

National Character Areas

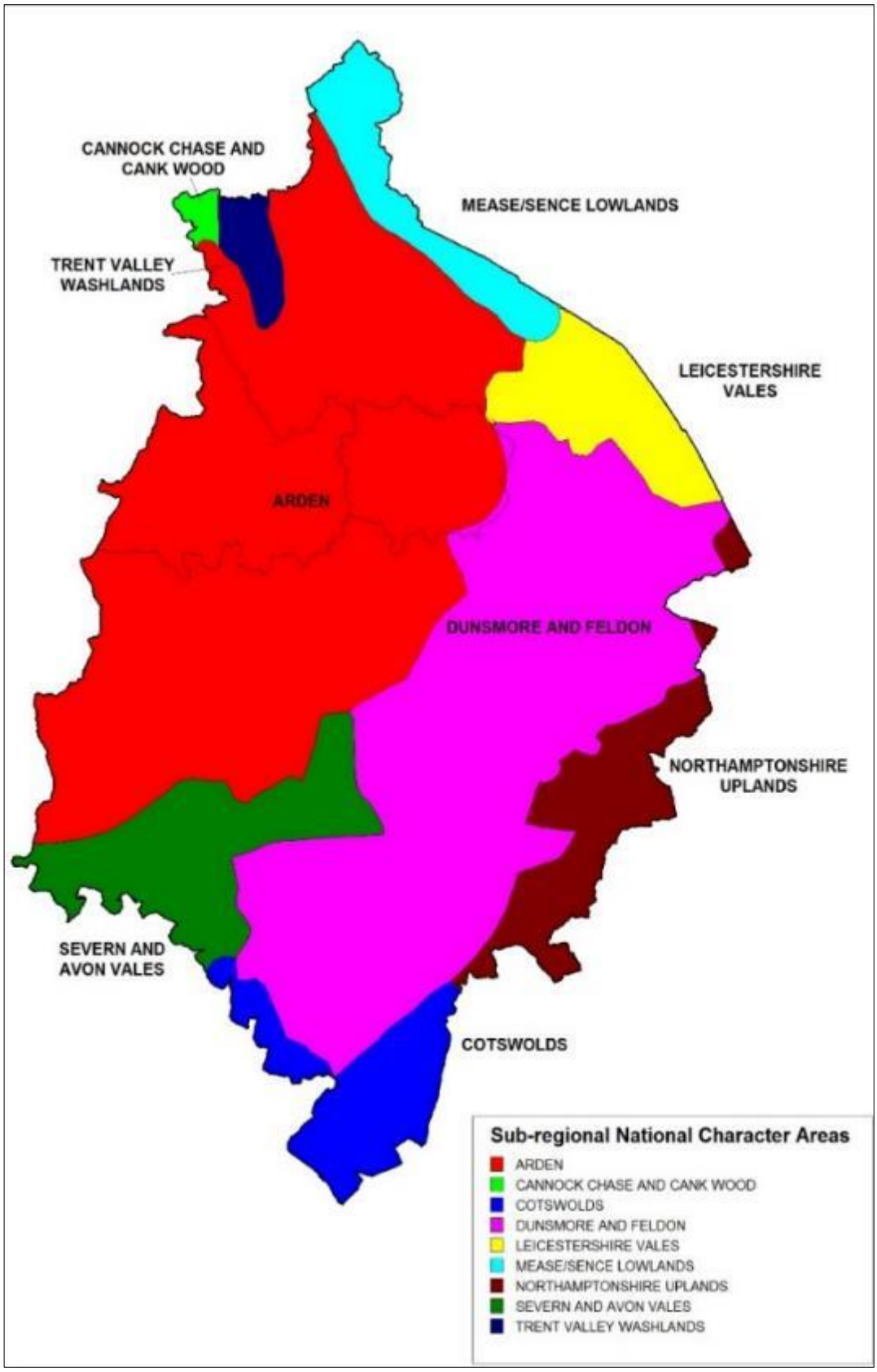
England is divided into 159 National Character Areas (NCAs)[14] which represent an area of distinct and recognisable character at the national scale. These provide a national spatial framework, which can be used as a tool for decision-making, for example to inform the delivery of Nature Recovery Networks, target agri-environment schemes, inform land management and in making planning decisions.

Character descriptions for each of the NCAs are published in regional volumes to highlight the influences determining the character of the landscape, such as land cover, buildings and settlements. The descriptions can be found on the Natural England website[15]. Each of the regional groupings breaks down into a longer list of NCAs sitting within each of the regional areas.

It is important to remember that the boundaries of the NCAs are not precise and that many of the boundaries should be considered as broad zones of transition. NCAs form part of the data gathered for a Landscape Character Assessment (LCA). LCAs provide more detailed descriptions at a local level within NCAs. The figure opposite shows the NCAs for the sub-regional area covered by this Strategy.

[14] https://www.gov.uk/guidance/national-character-area-profiles-information-for-local-decision-making
[15] National Character Area – West Midlands

Figure 3: Natural England - Sub-regional National Character Area Map



Levelling-up and Regeneration Bill (2023)

The Bill changes the way powers can be devolved to Local Authorities and introduces reforms to the planning system in England with the aim of reducing regional inequality. One of the significant requirements is for local authorities to produce a design code for its area and which will have full weight in making decisions on development.

The Bill introduces a new national infrastructure levy where locally produced 'infrastructure delivery strategies' will determine where and how infrastructure spending is allocated be this through and infrastructure levy or traditional section 106 obligations. However, it is not yet confirmed if infrastructure includes landscape, accessibility and biodiversity improvements.

Land Use Framework 2023

The Land Use Framework[16] and GI are related concepts that both address the management of land and natural resources to promote environmental sustainability, human well-being, and economic development.

The land use framework is a planning tool that provides a strategic approach to land use management, balancing economic, social, and environmental considerations.

Together, the land use framework and GI can help to create more sustainable communities. By incorporating green infrastructure into land use planning, the framework can help to ensure that natural areas are protected and integrated into urban development, providing important ecosystem services, and enhancing the quality of life for residents. In turn, green infrastructure can help to support the goals of the land use framework, by providing a framework for the sustainable use and management of natural resources.

Regional

West Midlands Environment Plan 2021-2026

The West Midlands Combined Authority (WMCA) *Environment Plan*[17] includes a shared vision for green infrastructure across the region. Actions related to the role of landscape in GI include:

- **Trees and hedgerows**: increasing planting but also protecting and caring for mature trees across the region to retain their biodiversity value, canopy cover, and contribution to landscape quality and character.
- **Wildlife corridors**: the WMCA will establish a Wildlife Corridors Commission to maximise the connectivity of green and blue corridors for both people and wildlife, and address barriers such as transport infrastructure. The plan has a vision for a 'doorstep to landscape' for the region.
- **West Midlands National Park (WMNP)**: the vision for a WMNP aims to unite the landscape, culture, and heritage of the West Midlands region, creating healthy and resilient communities and a better environment for the future. Examples of how this may be done include making blue infrastructure more publicly accessible; extensive garden and street planting, forests and woodland; and sequences of parks and open spaces to improve connectivity between communities and habitats.

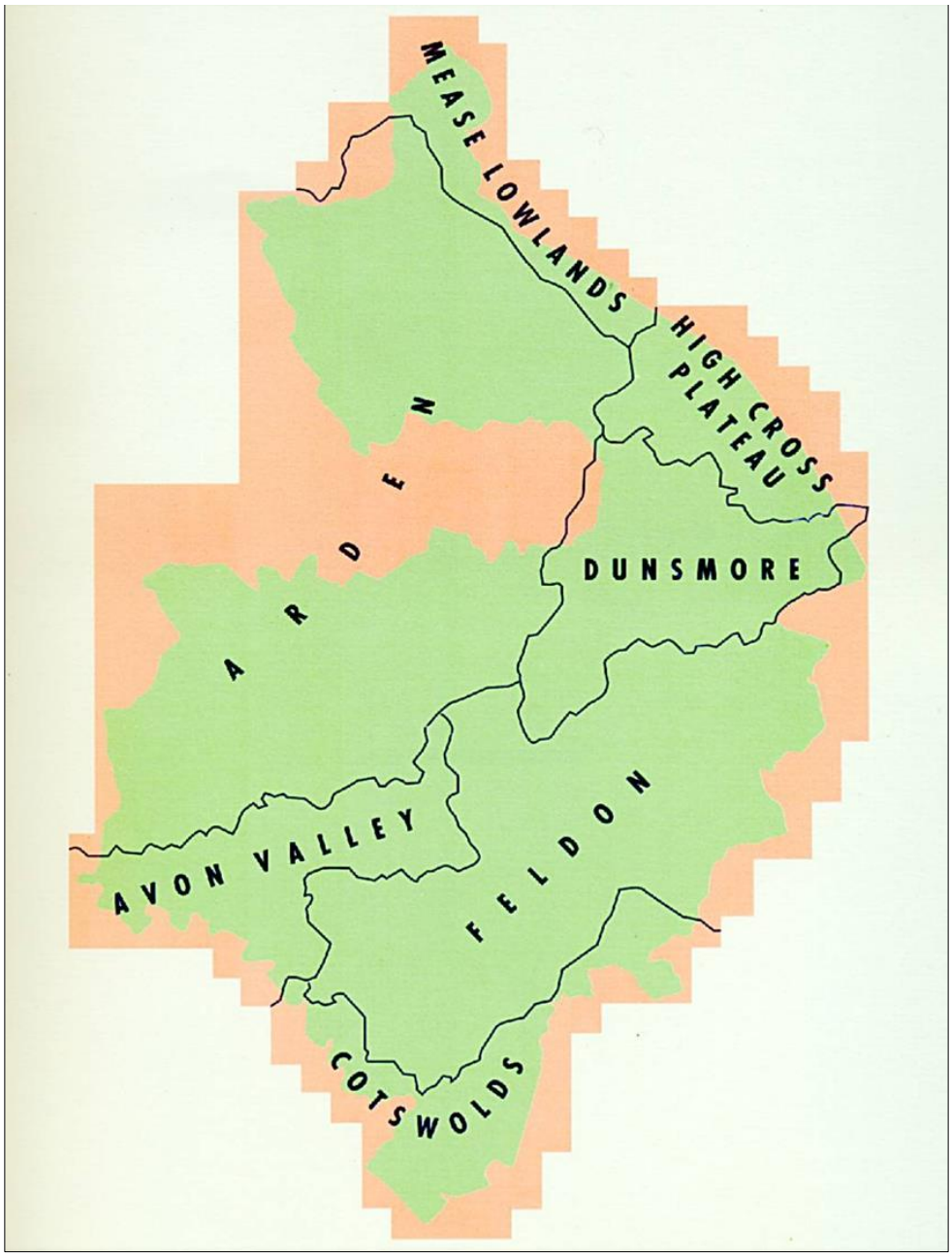
[16] Land Use in England Committee- Making the most out of England's land House of Lords - Making the most out of England's land - Land Use in England Committee (parliament.uk)
[17] https://www.wmca.org.uk/documents/environment-energy/natural-environment-plan/west-midlands-natural-environment-plan-2021-2026/

Sub-regional

Warwickshire Landscape Guidelines (1993)

The *Warwickshire Landscape Guidelines*, produced by Warwickshire County Council, pioneered the now accepted model by Natural England for assessing the character of lowland landscape in England. The original project carried out a systematic landscape assessment

Figure 4:The seven broad regional landscape character areas in the sub-region



within the old geographical area of Warwickshire, including the countryside in and around Coventry and Solihull. The Guidelines were originally produced in the mid-1990s and have been revised in the light of the information produced by the regional mapping of the Midlands. These Guidelines have proved an invaluable planning and land management tool, helping to ensure that the diversity and beauty of the Warwickshire landscapes are conserved and enhanced for present and future generations. Although landscape assessment is an evolving process, more recent local studies have demonstrated that the Guidelines remain highly

relevant today. The Landscape Guidelines and any updates are available at https://www.warwickshire.gov.uk/landscapeguidelines.

The diverse landscapes throughout the sub-region, identified in the Warwickshire Landscapes Guidelines, are particularly valued for their scenic qualities, rich wildlife and cultural associations, and are fundamental to the intrinsic character and local distinctiveness of the area. These landscapes also have an essential function in delivering environmental, social and economic objectives.
The Warwickshire Landscapes Guidelines divides the county into seven broad regional character areas shown in the Figure above[18]. Each character area can broadly be described as follows:

1. **Arden** – a historic region of former wood pasture and heath characterised by a dispersed settlement pattern, ancient woodlands and mature hedgerow oaks. The Arden character is also found within Solihull and Coventry.

Ancient Arden - Mature hedgerow oaks along a narrow, winding lane, near Hatton.

2. **Dunsmore** – a well wooded, and in places urbanised, region characterised by low glacial plateaus, sandy soils and remnant heathy vegetation.

A wooded landscape with urbanising industrial units in the distance, Ryton-on-Dunsmore.

3. **Avon Valley** – a prosperous agricultural and market gardening region closely associated with the river Avon and characterised by historic market towns, nucleated villages and orchards.

Market gardening near Wasperton.

[18] Diagram taken from the Warwickshire Landscape Guidelines series, published by Warwickshire County Council Planning & Transport Department, 1993

4. **Feldon** – a lowland agricultural region strongly influenced by Tudor and later parliamentary enclosures and characterised by heavy clay soils, large geometric fields and a nucleated settlement pattern of small rural villages.

Feldon Vale Farmlands, a flat, open, hedged landscape with wide views, looking from Burton Dassett

5. **Cotswolds** – a sparsely populated region of limestone and ironstone uplands characterised by open wolds, large walled fields and distinctive stone villages.

Cotswold Fringe / The Wold - a varied, undulating landscape with rich, red soils and pockets of permanent pasture, Lower Brailes

6. **High Cross Plateau** – a rural agricultural region characterised by open clay wolds and small nucleated villages.

Open Plateau, a large-scale landscape with a strong impression of emptiness, Wolvey

7. **Mease Lowlands** – a rural agricultural region of large country estates and small nucleated villages characterised by tall church spires.

Looking across the Mease Lowlands from Hartshill Hayes Country Park.

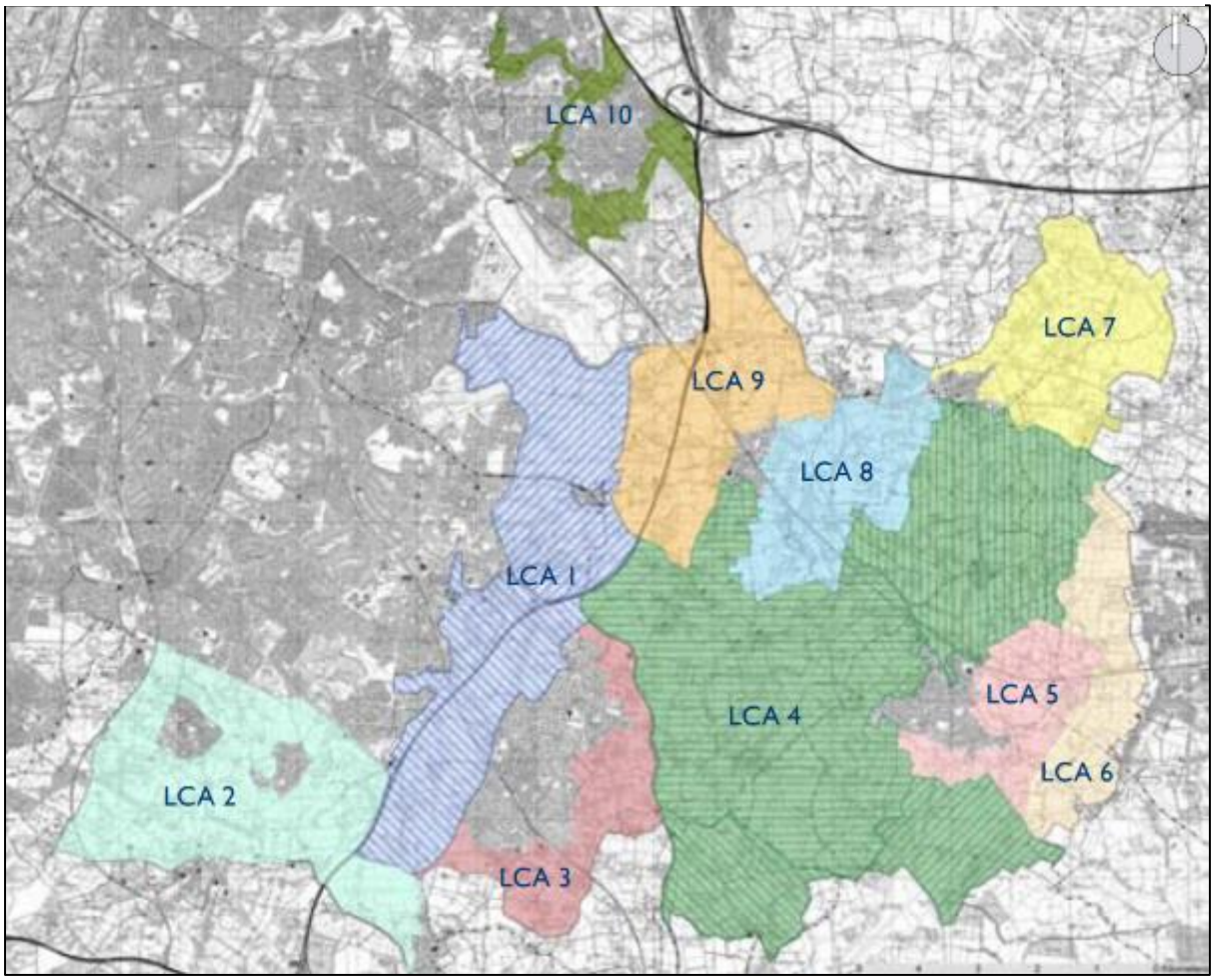
Additionally, at a county level, the Warwickshire Historic Landscape Characterisation Project looks at the whole landscape from the present day back to the medieval period and characterises areas into a number of standard types such as fields, settlement and designed

landscapes. Detailed information about the Historic Landscape Character (HLC)[19] of each mapped area and its development over time is recorded in a linked database. HLC is used to inform the management, conservation and understanding of an area, helping to ensure well designed and sustainable places.

Solihull Landscape Character Assessment (2016)

The Solihull Landscape Character Assessment (LCA)[20] follows on from the Arden character area in the Warwickshire Guidelines (see above) and divides the Borough into ten broad character areas. Three of these broad areas are further sub-divided.

Figure 5 Solihull Borough Landscape Character Areas Map



1. **Solihull Fringe (LCA 1)** – undulating landform with very mixed land use. Strong tree cover, including ancient woodland.
2. **Southern Countryside (LCA2)** – Predominantly pastureland. Irregular field patterns with strong hedgerow boundary structure with mature oaks.
3. **Knowle & Dorridge Fringe (LCA 3)**– Varied land use with no major settlements. Well wooded water corridors dominated with willow trees. Pockets of woodland scattered across the area.
4. **Rural Centre (LCA 4)** – Predominantly agricultural land use. Pockets of woodland and plantation. Field boundary hedgerows of varying condition. River Blythe (SSSI) and associated Blythe valley.
5. **Balsall Common Eastern Fringe LCA 5)**– Arable land with irregular historic field pattern and established hedgerows.

[19] https://timetrail.warwickshire.gov.uk/exhibitionsview.aspx?eid=15&page=129
[20] https://www.solihull.gov.uk/sites/default/files/2020-12/Landscape-Character-Assessment-2016.pdf

6. **Eastern Fringe (LCA 6)** – predominantly arable fields interspersed with deciduous woodland and coniferous plantations.
7. **Northern Upland (LCA 7)** – Predominantly agricultural land with extensive woodland blocks. Includes local wildlife sites, nature reserves and ancient woodland. Narrow single-track roads with high bracken hedgerows.
8. **Blythe Lowland (LCA 8)** – Varied land use with large parts used for mineral extraction resulting in lakes and ponds. Scattered woodland blocks and copses. River Blythe and associated open river meadows.
9. **Motorway Corridor (LCA 9) –** Major transport links including the A45, M42 and railway line. Pockets of deciduous and plantation woodland, with arable and pastoral fields forming majority of remaining area.
10. **Urban Green Space (LCA 10)** – Managed green spaces including parks, recreation grounds, cemetery, allotments and woodland typical of the peri-urban fringe. Ancient woodlands and mature oak trees provide evidence of the former Arden landscape.

More details about the assessment and the broad areas can be accessed using the hyperlink provided.

Coventry Historic Landscape Characterisation Report (2013)

The Coventry HLC divides the city into 46 character areas by linking areas that are similar and adjoin each other. Each area is described in terms of its historical development but also its overall modern character. Full details of the HLC areas are available at https://www.coventry.gov.uk/downloads/download/2996/coventry_historic_landscape_characterisation_report.

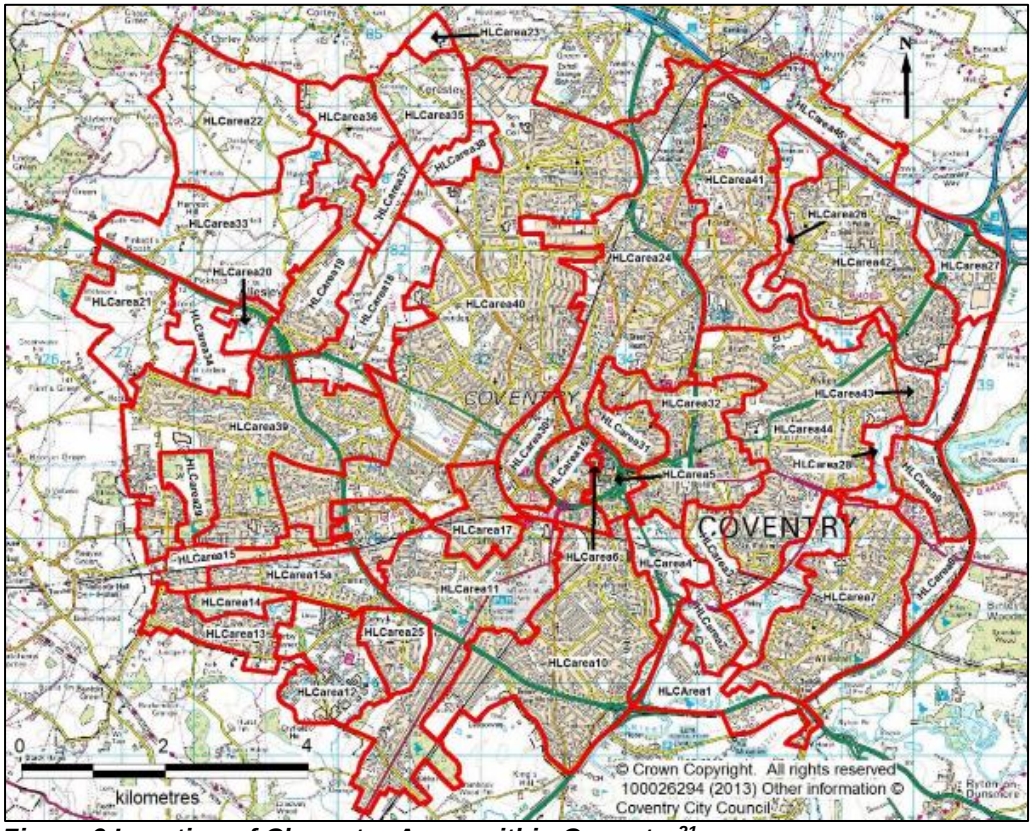


Figure 6 Location of Character Areas within Coventry[21]

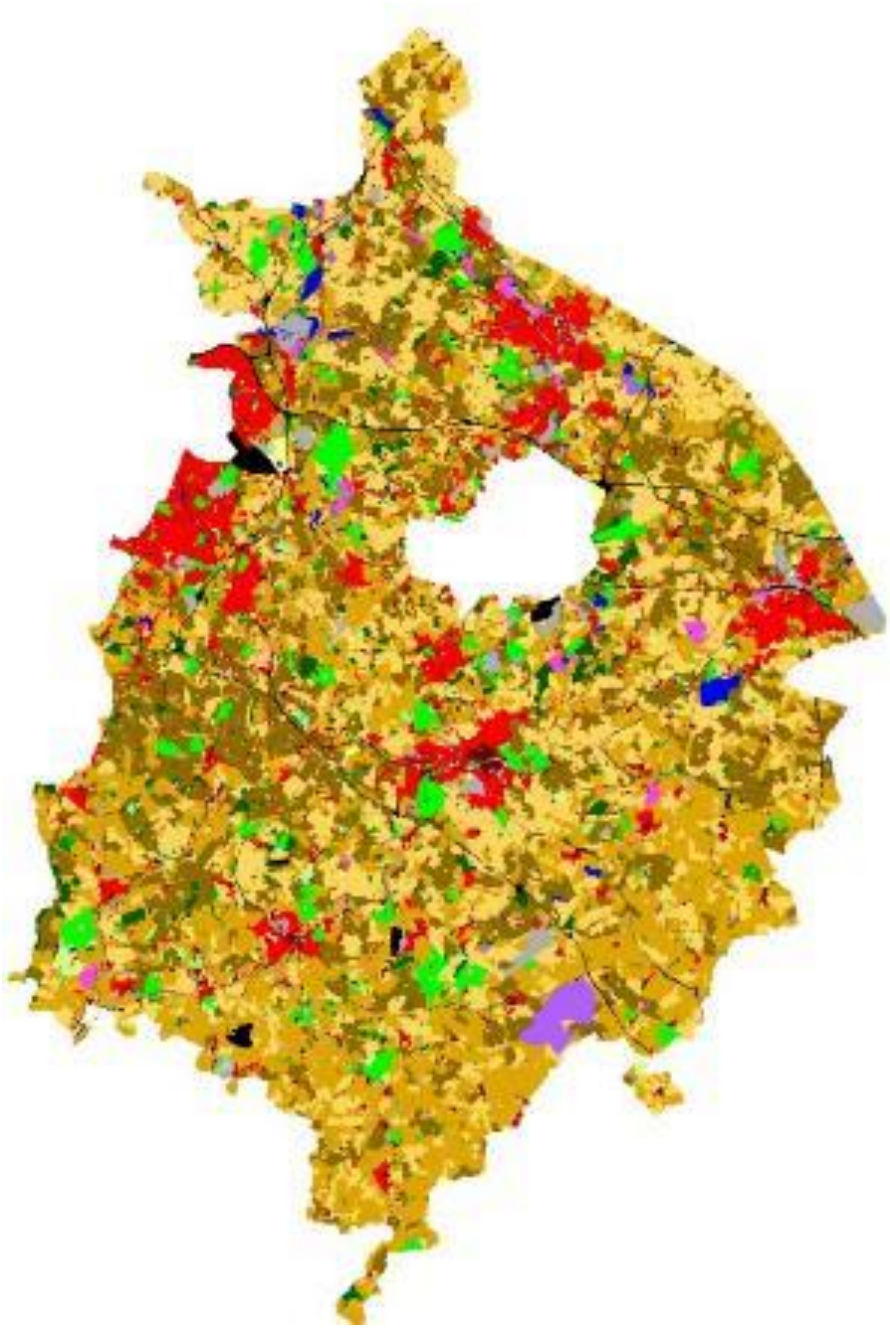
[21] From the Coventry HLC report, Figure 7

Warwickshire Historic Landscape Characterisation (2010)

Historic Landscape Characterisation (HLC) looks at the whole landscape from the present day back to the medieval period and characterises areas into a number of standard types such as fields, settlement and designed landscapes. Detailed information about the historic character of each mapped area and its development over time is recorded in a linked database.

The Warwickshire HLC project was carried out between May 2006 and August 2010 by the Warwickshire Historic Environment Record (HER), part of Warwickshire County Council.
It has mapped over 18,000 individual Historic Landscape Character areas forming over 209,000 hectares in size covering Warwickshire, Solihull and some parts of Coventry and Birmingham. All this information is actively managed and available from the Warwickshire HER.

Figure 7: Warwickshire Historic Landscape Characterisation map



The information has proved useful to a wide variety of people from members of the public and researchers interested in the past of their area to commercial organisations and local authorities to help in development control and strategic planning.

A report with more information about the project including detailed analysis of the results together with maps and photographs is available online[22].

Urban Forestry Strategies

Both Coventry and Solihull have produced tree strategies based around these authorities being predominantly urban. The concept of an urban forest describes "the ecosystem containing all of the trees, plants and associated animals in the urban environment, both in and around the city".[23]

The *Coventry Urban Forestry Strategy 2022-2032* aims to "protect, promote, sustain and enhance our urban forest and to recognise its contribution towards the character, appearance and economy of Coventry."[24]

The *Solihull Urban Forestry Strategy 2019-2029*[25] aims to reflect the borough's heritage as a focal point of the historical Forest of Arden, and to ensure its forest character is maintained and enhanced.

Objectives in both strategies related to GI include:

- Use the existing GI guidance to plan mass tree planting where possible.
- Develop protocols for 'offsetting' within the urban forest of Coventry and explore developing a natural capital ethos to manage trees.
- Enhance the biodiversity of the urban forest using long term quantifiable measures.
- Develop operational policies for 'right tree, right place'.
- Integrate with existing GI, open space and tree strategies and policies.

A Warwickshire Tree and Woodland Strategy is in preparation at the time of writing this strategy.

Local

Districts and Boroughs have produced local landscape studies that refresh and update the Warwickshire Landscape Guidelines. These are important documents that must be taken into consideration during decision-making.

Some of the studies can be found at www.warwickshire.gov.uk/landscapeguidelines and include:

- Nuneaton and Bedworth Borough Council Landscape Character Assessment (2004)
- Options for Future Urban Expansion in Warwick District – Considerations for Sustainable Landscape Planning (2012)
- Stratford-on-Avon District Landscape Sensitivity Assessment (2011)
- Landscape Assessment of the Borough of Rugby

[22] https://www.warwickdc.gov.uk/download/downloads/id/2405/he01_-warwickshire_historic_landscape_characterisation_web_-_2010.pd

[23] Treeconomics London, 2015. 'Valuing London's Urban Forest'

[24] https://www.coventry.gov.uk/heritage-ecology-trees/coventry-urban-forestry-strategy-2022-2032/2

[25] https://www.solihull.gov.uk/sites/default/files/migrated/StrategiesPlansPolicies_LeisureandParks_Solihull-Urban-Forestry-Strategy.pdf

Biodiversity/Natural Capital

Biodiversity / Natural Capital Vision

A Warwickshire, Coventry and Solihull where biodiversity thrives alongside humans within a resilient landscape; where natural and built environments are managed positively for biodiversity, and where biodiversity is embedded into all development, contributing to the extension and joining up of existing biodiversity assets,

Background

Natural Capital refers to the stock of natural resources and ecosystems that provide various benefits to humans. It encompasses both living and non-living elements such geology, soils, minerals, air, water, biodiversity, and other components of the natural environment. Natural capital is crucial because it underpins the functioning of our societies and economies in several ways:

- *Provision of Resources*: Natural capital provides essential resources that support human well-being and economic activities. For example, forests supply timber, clean water, and non-timber forest products, while oceans offer fish and seafood. These resources are used in industries, agriculture, and energy production.

- *Ecosystem Services*: Natural capital provides a wide range of ecosystem services that are vital for human survival and quality of life. These services include water purification, air filtration, soil fertility, pollination, climate regulation, flood control, and waste decomposition. They are essential for agriculture, human health, and the overall functioning of ecosystems.

- *Economic Value*: Natural capital has significant economic value. It forms the basis of numerous industries, such as forestry, agriculture, fishing, tourism, and pharmaceuticals. The goods and services derived from natural capital contribute to economic growth, employment, and trade.

- *Climate Change Mitigation and Adaptation*: Natural capital plays a critical role in mitigating climate change. Forests, for instance, absorb carbon dioxide and help regulate the climate. Wetlands act as carbon sinks and provide protection against storms and coastal erosion. Preserving and restoring natural capital can contribute to climate change mitigation and enhance our resilience to its impacts.

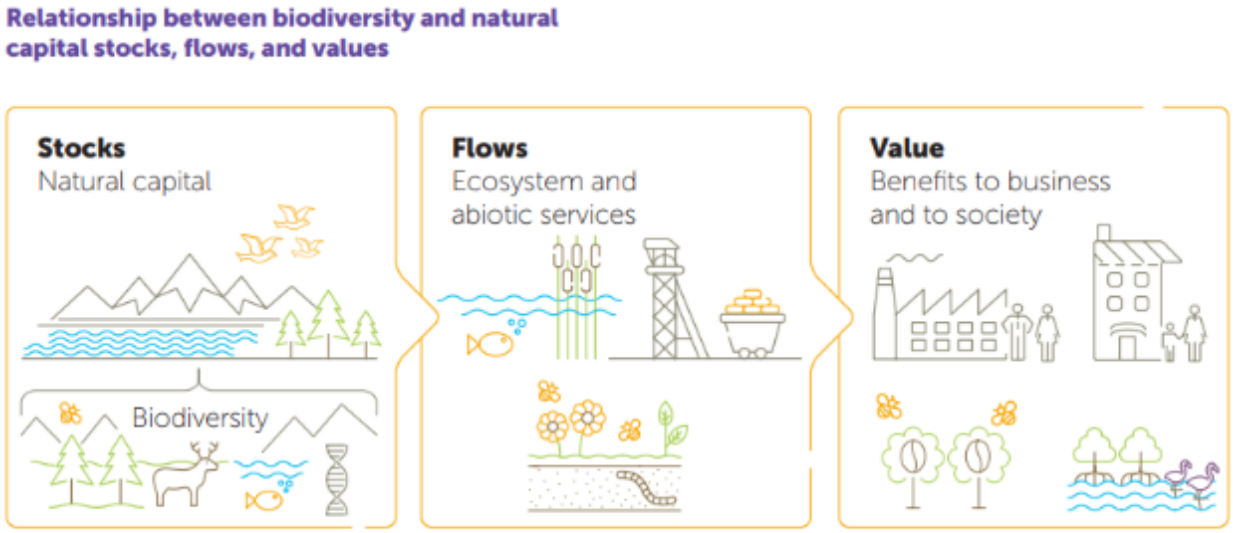
- *Cultural and Aesthetic Value*: Natural capital holds cultural and aesthetic significance. People derive enjoyment, inspiration, and recreational opportunities from natural environments, including national parks, beaches, mountains, and wildlife. These intangible values contribute to human well-being, spiritual fulfilment, and mental health.

Biological Diversity (Biodiversity) describes the variety of life on Earth, encompassing the whole of the natural world and all living things on the planet. It includes genetic diversity, species diversity and ecosystem diversity and is the result of billions of years of evolution, and it is crucial to maintaining the health and functioning of the planet. As mentioned above, biodiversity forms part of the Earth's Natural Capital.

Biodiversity is important for maintaining the health and functioning of the planet, supporting human well-being, and preserving the intrinsic value of life on Earth.

Both biodiversity and natural capital are stocks of natural assets which, if preserved and maintained, facilitate the flow of ecosystem services which ultimately results in benefits to society and businesses, as demonstrated within the figure below.

Figure 8: The Relationship Between Biodiversity/ Natural capital, Flows and Values[26]



Source: Permission to use modified image provided by Capitals Coalition and Cambridge Conservation Initiative. 2020. Origin: "Integrating biodiversity into natural capital assessments". (Online) Available at: Defra (2018). Net Gain Consultation Proposals. [Online] Available at: https://consult.defra.gov.uk/land-use/net-gain/supporting_documents/netgainconsultationdocument.pdf

International

Biodiversity is being lost on a global, national and local scale. Figure 9 below shows the nine planetary boundaries which are a framework that identifies nine critical Earth system processes that regulate the stability and resilience of the Earth's environment. It is considered that if the nine planetary boundaries are respected, it would likely ensure that the Earth remains sustainable for human life for generations to come. The nine planetary boundaries are:

1. **Climate Change** - The level of atmospheric carbon dioxide (CO^2) that should not exceed 350 parts per million (ppm) to avoid dangerous climate change.

2. **Biodiversity Loss** - The extinction rate that should not exceed 10 times the background rate.

3. **Land Use Change** - The conversion of natural ecosystems to human-dominated systems that should not exceed a loss of 15% of the Earth's land surface.

4. **Freshwater Use** - The amount of water withdrawal that should not exceed 4,000 km3 per year.

5. **Ocean Acidification** - The pH of the oceans that should not decrease by more than 0.2 units from pre-industrial levels.

6. **Ozone Depletion** - The amount of stratospheric ozone that should not decrease by more than 5% from pre-industrial levels.

[26] https://app.clickdimensions.com/blob/iemanet-ay0iq/files/iemabiodiversitybuzzwordbuster-december20221.pdf?1670404521248

7. **Environmental Pollutants and other 'Novel Entities'** - The amount of synthetic chemicals released into the environment that should not exceed a safe operating space i.e., organic pollutants, radioactive materials, microplastics etc.

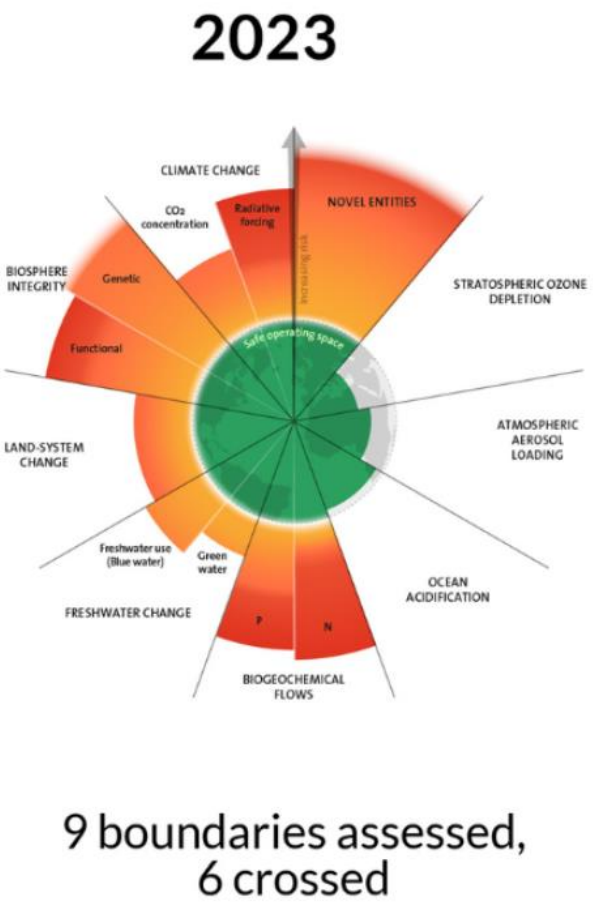
8. **Atmospheric Aerosols** - The level of atmospheric aerosols that should not cause a significant negative impact on human health or the environment.

9. **Nitrogen and Phosphorus Cycles** - The amount of nitrogen and phosphorus that should not be added to the environment beyond what can be naturally absorbed, to avoid negative impacts on ecosystems and human health.

These nine boundaries are interlinked and interact with each other in complex ways. When these thresholds are crossed, the likelihood of large-scale, sudden or permanent environmental changes increases. Transgressing one boundary can lead to cascading effects that can destabilize other boundaries, leading to irreversible environmental damage.

It is estimated that six of the planetary boundaries, including climate change, nutrient cycling, biodiversity loss, and land use change, have already been surpassed. Additionally, in January 2022, a group of 14 scientists published a study in Environmental Science and Technology [27]stating that humanity has exceeded the planetary boundary for environmental pollutants and other "novel entities," such as plastics. Furthermore, a reassessment of the planetary boundary for freshwater in April 2022 indicates that it has now been transgressed, primarily due to the inclusion of "green water" (water available to plants) in the assessment. Additionally, several other boundaries are approaching transgression [28].

Figure 9 The Nine Planetary Boundaries



[27] https://www.stockholmresilience.org/research/planetary-boundaries.html
[28] Planetary Boundaries: Exploring the Safe Operating Space for Humanity, Rockström, J. et al, 2009

Dasgupta report 2021

The Dasgupta Review[29] is an independent, global review of the economics of biodiversity commissioned by the UK Treasury and published in 2021. It was led by Professor Sir Partha Dasgupta.

The report highlighted the economic significance of biodiversity and nature, and the need to address the ongoing biodiversity loss, which is deemed a global crisis. It provides a comprehensive analysis of the ways in which economic activity is currently affecting the natural world, and the extent to which these effects threaten human well-being and argues that current economic models do not properly account for the value of nature and the scale of environmental risks.

The report argues that the decline in biodiversity is a market failure, and therefore requires systemic change to address. It calls for the establishment of a new global framework for biodiversity that accounts for the value of natural capital, and advocates for the adoption of transformative policies, including changes to accounting systems, subsidies, taxes, and regulations.

The report has been widely recognised as a landmark contribution to the field of environmental economics, and has been widely discussed among policymakers, academics, and the media. It has been endorsed by the UK government and has led to a renewed focus on the importance of biodiversity and nature in economic policymaking, both in the UK and internationally.

COP15

The United Nations Biodiversity Conference (COP15) concluded in Montreal, Canada, on December 19, 2022, with a deal to protect a third of the world's biodiversity. It resulted in the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF)[30]. The GBF aims to address the loss of biodiversity, restore ecosystems and protect the rights of indigenous communities. It outlines concrete measures to halt and reverse the decline in nature. The GBF features 23 targets to be achieved by 2030, some of the relevant targets include:

- Effectively conserving and managing at least 30% of the world's land, coastal areas, and oceans (currently at 17% and 8% respectively).
- Restoring of 30% of terrestrial and marine ecosystems,
- Reducing the loss of areas with high biodiversity and ecological integrity,
- Halving global food waste,
- Phasing out or reforming harmful subsidies by at least $500 billion annually,
- Mobilising $200 billion per year for biodiversity-related funding,
- Increasing international financial flows to developing countries by at least $30 billion per year, and
- Requiring transnational companies and financial institutions to monitor and disclose their impacts on biodiversity.

It was proposed that the Global Environment Facility establish a Special Trust Fund, called the GBF Fund, to support the implementation of the GBF and ensure a steady flow of adequate and predictable funds.

[29] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf

[30] https://www.cbd.int/gbf

In addition to the adoption of the GBF, countries also approved a series of related agreements pertaining to planning, monitoring, reporting, and review processes. These agreements are crucial to ensure progress is made in line with the GBF's objective of preventing further acceleration in the global rate of species extinction, which currently exceeds historical averages by tens to hundreds of times over the past 10 million years.

National

The John Lawton Review 2010

The John Lawton Review[31], officially titled "Making Space for Nature: A Review of England's Wildlife Sites and Ecological Network," was a report commissioned by the UK government in 2010. The review aimed to assess the effectiveness of existing policies for protecting and enhancing biodiversity in England and to make recommendations for improving them.

The report concluded that existing policies and legislation were not sufficient to halt the decline of biodiversity in England and that a new approach was needed. It proposed the creation of a more connected and resilient network of habitats to support wildlife, which it referred to as an "ecological network." The report called for greater protection of existing wildlife sites and for the creation of new habitats, including "stepping stones" between existing sites, to enable species to move and adapt to changing conditions.

The review also recommended the establishment of a new independent advisory body to oversee the development of the ecological network and ensure that policies were implemented effectively. It emphasised the need for a holistic approach to conservation, which considered the wider benefits of biodiversity for people and the environment.

Overall, the John Lawton Review was a significant contribution to the debate around biodiversity conservation in England. Its recommendations have since been taken up by the UK government and have influenced the development of policy and legislation in this area.

The Natural Environment White Paper (NEWP) The Natural Choice: securing the value of nature (2011)

The Natural Environment White Paper: The Natural Choice: securing the value of nature[32] was published by the UK government in 2011. It aimed to provide a comprehensive strategy for the conservation and enhancement of the country's natural environment. The white paper recognised the importance of the natural environment for various aspects of society, including health, economy, and well-being.

Some key objectives and themes addressed in the white paper included:

- *Ecosystem Services*: Emphasising the value of ecosystems and their services, such as clean air and water, flood prevention, and climate regulation. The white paper suggests increasing the protection and enhancement of these services through effective management.

- *Biodiversity*: Recognising the importance of biodiversity and aiming to halt the loss of habitats and species. The paper set out goals to protect and restore ecosystems, promote sustainable land management practices and create ecological networks.

- *Natural Capital*: Highlighting the economic value of the natural environment and integrating it into decision-making processes. The white paper aimed to assess and account for the economic benefits provided by nature.

[31] John Lawton et al (2010) Making Space for Nature: A review of England's Wildlife Sites and Ecological Network
[32] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

- *Access and engagement*: Promoting public access to nature and encouraging people to connect with and enjoy the outdoors. The white paper outlined initiatives to improve access to green spaces, support environmental education, and engage communities in nature conservation.

- *Environmental Legislation*: Recognising the need for strong legal frameworks and effective governance to protect the environment. The paper highlighted reforms to streamline environmental legislation and enhance enforcement mechanisms.

The Natural Environment White Paper was an important policy document that influenced the UK government's approach to nature conservation and environmental management.

National Planning Policy Framework (NPPF) 2023

The National Planning Policy Framework (NPPF) is a document produced by the UK government that sets out the policies and guidance for the planning system in England. The NPPF provides a framework for how planning decisions should be made, and it sets out the government's priorities for sustainable development.

In terms of environmental considerations and those most relevant to this Strategy, the most pertinent aspects of the NPPF include:

- **Para 34**: *Water Management*: Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure).
- **Para 158**: Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures
- **Para 159a**: New development should be planned for in ways that avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure
- **Para 181***:* distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- **Para 180d**: Biodiversity Net Gain minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures
- **Para 180e**: preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans
- **Para 193***: Sustainable Transport*: Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and

Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement.

Overall, the NPPF aims to ensure that planning decisions are made in a way that protects and enhances the natural environment, while also promoting sustainable development and economic growth.

25-Year Environment Plan (2018)

The UK government's 25 Year Environment Plan[33] is a long-term strategy document that was published in 2018. It sets out the government's vision for the environment in the UK over the next 25 years and outlines the actions that will be taken to achieve this vision.

The plan covers a wide range of environmental issues, including air and water quality, waste reduction, biodiversity, climate change, and sustainable land use. It emphasises the importance of protecting and enhancing the natural environment for the benefit of both people and wildlife.

The 25 Year Environment plan highlights several significant objectives and measures relevant to the GI strategy, including:

- Improving air and water quality through the development of new policies and regulations,
- Protecting and restoring natural habitats, such as woodlands, wetlands, and peatlands,
- Enhancing biodiversity by creating new wildlife habitats and improving connectivity between existing habitats, and,
- Encouraging sustainable land use practices, such as reducing soil erosion and improving soil health.

Environment Act 2021

The Environment Act[34] operates as the UK's new framework of environmental protection. Given that the UK has left the EU, new laws that relate to nature protection, water quality, clean air, as well as additional environmental protections that originally came from Brussels, needed to be established.

The Environment Act allows the UK to enshrine some environmental protection into law. It offers new powers to set new binding targets, including for air quality, water, biodiversity, and waste reduction.

Biodiversity Net Gain

As of November 2023, Biodiversity Net Gain (BNG) will be required, as mandated within the Environment Act, which sets a minimum requirement for a 10% net gain for biodiversity for all planning permissions (with some minor exemptions). BNG is designed to secure habitat protection, enhancement, and creation on-site and/or in the local area, which will in turn help to support GI. Managers of urban parks and other green infrastructure will be able to become providers of biodiversity units provided they are able to create new or enhance existing habitat on their land and meet the relevant eligibility criteria.

The DEFRA Biodiversity Metric[35] is used to calculate biodiversity gains and losses. Included within the metric are many GI habitat features, such as urban GI features including Sustainable

[33] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
[34] https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted
[35] Natural England (2023) Biodiversity Metric 4.0; https://nepubprod.appspot.com/publication/6049804846366720

Drainage Systems (SuDS), green roofs and walls etc., the inclusion of which into a scheme design can contribute towards meeting BNG requirements. This Strategy can help to enhance the functionality of habitat delivered as a requirement of BNG.

Nature Recovery Networks (NRN)

The Environment Act 2021 has also introduced Nature Recovery Network (NRN). To support the establishment of a NRN that spans across urban, urban-fringe and rural areas, and enhances landscape character, this Strategy can be utilised. The implementation of the new Green Infrastructure Standard for Urban Nature Recovery can aid in creating and restoring habitats that are rich in wildlife. The GI Mapping Database can provide data that informs the identification of areas significant for nature recovery, including wildlife corridors, and this data can contribute to the LNRSs.

Agriculture Act 2020

The Agriculture Act 2020[36] is a piece of legislation in the United Kingdom that sets out policies and regulations related to agriculture and land use, that originally came from Brussels. The act includes provisions for supporting the development of sustainable agriculture, promoting innovation and productivity and ensuring fair treatment of farmers and landowners. It also sets out measures to improve environmental protections, such as incentivising farmers to engage in conservation practices and to reduce greenhouse gas emissions.

The act also includes provisions for establishing a new scheme to support farmers after the UK's departure from the European Union's Common Agricultural Policy (CAP).

Environmental Land Management

Environmental Land Management (ELM) is a new agricultural policy in the United Kingdom that is set to replace the European Union's CAP.

ELM is a government scheme in England that aims to reward land managers for taking actions that improve the environment, such as planting trees, restoring wetlands, reducing greenhouse gas emissions, improving soil health, reducing chemical use, restoring habitats, and mitigating climate change. By providing financial incentives for these types of activities, ELM is intended to encourage more sustainable land management practices and support the transition to a low-carbon, nature-friendly economy.

Both ELM and GI are important components of efforts to promote sustainable land use and protect natural resources. By incentivising land managers to adopt more environmentally friendly practices, ELM can help to reduce the environmental impacts of farming and land use. Meanwhile, GI can help to enhance the resilience of urban areas to environmental challenges such as climate change and biodiversity loss, while also providing important benefits to human health and well-being.

The ELM scheme is currently under development and is expected to be implemented in 2024.

England Tree Strategy (2021)

The England Trees Action Plan[37] for the period of 2021 to 2024 presents the government's overarching vision for the desired treescape in England beyond 2050. The plan provides a strategic framework for implementing the Nature for Climate Fund and outlines over 80 policy actions the government is taking over this Parliament to help deliver this vision.

It builds on ambitions outlined in the 25 Year Environment Plan and recognises the importance of nature recovery, the role trees and woodland play in climate change mitigation, levelling up through thriving forest economy, valuing and utilising trees and woodland to improve water and soil quality etc.

[36] https://www.legislation.gov.uk/ukpga/2020/21/contents/enacted

[37] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/987432/england-trees-action-plan.pdf

The Green Infrastructure Standards Framework also showcase the benefits trees can provide for health and wellbeing when delivered close to people and these two strategies in combination help to provide a joined-up approach to tree planting to achieve multiple benefits.

Pollinator Strategy (2014)

The Pollinator Strategy[38], published in 2014, refers to a comprehensive plan developed by the UK government to address the decline in pollinator populations and safeguard their crucial role in supporting ecosystems and agricultural productivity. The strategy aimed to protect and enhance the populations of bees, butterflies, hoverflies, and other pollinating insects.

Key objectives and initiatives outlined in the Pollinator Strategy (2014) included:

- *Monitoring and Research*: Implementing comprehensive monitoring programs to track pollinator populations and understand the factors affecting their decline. This involved collaborative research efforts and sharing of data among scientists, policymakers, and stakeholders.

- *Habitat Creation and Management*: Promoting the creation and improvement of pollinator-friendly habitats across various landscapes, including farmland, urban areas, gardens, and transport corridors. The strategy encouraged the planting of wildflowers, creating nesting sites, and reducing pesticide use in these areas.

- *Agriculture and Land Management*: Working with farmers and land managers to adopt pollinator-friendly practices within agricultural systems. This involved promoting the use of sustainable farming techniques, agri-environment schemes, and providing guidance on pesticide use and timing to minimise harm to pollinators.

- *Public Awareness and Engagement*: Raising public awareness about the importance of pollinators and encouraging individuals, communities, and organizations to take actions to support them. This included educational campaigns, citizen science initiatives, and promoting pollinator-friendly gardening practices.

- *International Collaboration*: Collaborating with international partners to address pollinator declines and protect migratory pollinators that play a vital role in global ecosystems. The strategy aimed to exchange knowledge, share best practices, and support international efforts to conserve pollinators.

The Pollinator Strategy (2014) represented a significant step in recognizing the value of pollinators and taking action to reverse their decline. Since its publication, subsequent initiatives and updates may have been implemented to further support pollinator conservation in the UK.

The Levelling Up and Regeneration Bill (2023)

One of the significant changes is a review of the current Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) regime with a new system of environmental assessment known as Environmental Outcomes Reports (EORs). This section of the Bill empowers the Secretary of State to create regulations that specify environmental outcomes against which plans and consents will be assessed and revise or abolish the current environmental assessment laws.

The Secretary of State must consider the 25 Year Environment Plan and its related Environmental Improvement Plans, including the legally binding long-term environment goals and interim targets established under it, when determining the outcomes. Additionally, the

[38] https://www.gov.uk/government/publications/national-pollinator-strategy-2014-to-2024-implementation-plan

government will produce guidelines on how plans and consents demonstrate their support for environmental outcomes. The EOR evaluate the impact of proposed mitigation or compensation and examine alternatives to the consent or plan in addition to assessing against outcomes.

It's unclear at this stage how this will affect Local Nature Recovery Strategies introduced through the Environment Act.

Regional

West Midlands Combined Authority (WMCA)

The West Midlands Combined Authority (WMCA) is a regional governance body in England that oversees the West Midlands metropolitan area. It was established in 2016 and consists of 18 local authorities, including Birmingham City Council, Coventry City Council, Dudley Metropolitan Borough Council, Sandwell Metropolitan Borough Council, Solihull Metropolitan Borough Council, Walsall Metropolitan Borough Council, and Wolverhampton City Council. The WMCA is responsible for coordinating and implementing policies and strategies on issues including the environment.

The WMCA have a shared vision for Green Infrastructure in the region including, improving access to green and blue spaces, promoting tree and hedgerow planting, and creating and improving wildlife corridors[39]

Sub-regional

Local Nature Recovery Strategies

The Environment Act 2021 has also introduced new mandatory spatial strategies called Local Nature Recovery Strategies (LNRSs). LNRSs aim to coordinate efforts to protect and enhance nature, while also establishing a Nature Recovery Network (NRN). LNRSs work alongside other measures in the Act, such as BNG, and strengthen the duty of all public authorities to conserve and enhance biodiversity. They will also facilitate partnerships and the integration of nature into land management activities and incentives.

LNRSs will provide a shared spatial framework for improving environments within the sub-region, drawing on other relevant plans and strategies. It will be crucial to link this Strategy with the Local Nature Recovery Strategy to ensure they work together and support each other. In the future, Local Nature Recovery Strategies will also provide an important framework for promoting urban nature conservation through green infrastructure policies.

Warwickshire County Council is the 'Responsible Authority' tasked by government to prepare the Warwickshire LNRS. We will be working closely with the Local Nature Partnership to consult, engage and prepare the strategy that brings together all the hard work that is being carried out in the county by partners. It will focus on the future and how to secure enough habitat for species recovery.

It is also expected that the WMCA will also be the 'Responsible Authority' for delivering the West Midlands LNRS. This will likely cover Solihull and Coventry and therefore, the two LNRS for Warwickshire and the wider West Midlands will need to be cohesive to ensure nature recovery is delivered in way that is most beneficial, particularly in areas such as Solihull and Coventry where there may be areas of commonality.

[39] West Midlands Combined Authority (2022) West Midlands Natural Environment Plan: 2021- 2026

Local Biodiversity Action Plans

Regarding species and habitats at the local level, there have been varying outcomes. Table 3 depicts the progress of the 2010 Local Biodiversity Action Plan (LBAP), which is based on the assessment of targets and actions undertaken by the LBAP partnership from 2008 to 2010. It is worth noting that Action Plans are reviewed and reported on in a three-year cycle, and the "Year" column pertains to the most recent reporting period for that plan.

Table 3: Local Biodiversity Action Plan Report 2007 - 2010

Species Action Plans	Progress 2007	Progress 2008-2010	Habitat Action Plans	Progress 2007	Progress 2008-2010
Adder	↓	↓	Allotments	↔	↔
Argent & Sable Moth	↔	↑	Canals	↑	↑
Barn Owl	↑	↑	Churchyards & Cemeteries	↑	↔
Bats	↔	↔	Disused Industrial & Railway Land	↓	↑
Bittern	↔	↔	Fen & Swamp	↔	↑
Black Poplar	↑	↑	Field Margins	↑	↑
Bloody-nosed Beetle	↑	↓	Gardens	↔	↑
Chalk Carpet Moth	↑	↑	Hedgerows	↔	↔
Common Dormouse	↓↓	↔	Lowland Acid Grassland	↔	↑
Cuckoo Bee	↑	↑	Lowland Calcareous Grassland	↑	↑
Dingy Skipper Butterfly	↑	↑	Lowland Heathland	↔	↔
Dotted Bee-fly	↑	↑	Lowland Neutral Grassland	↑	↑
Farmland Birds	↔	↔	Parks & Public Open Spaces	↑	↑
Great Crested Newt	slight ↓	slight ↓	Ponds, Lakes & Reservoirs	↔	slight ↑
Lapwing	↓	↑	Quarries & Gravel Pits	↑	↑
Leaf-rolling Weevil	↑	↔	Reedbeds	↑	↑
Otter	↑	↑	Rivers & Streams	↓	↑
Rare Bumblebees	↑	↑	Roadside Verges	↓	↔
Red Wood Ant	slight ↑	↑	School Grounds	↓	↔
Scarce Arable Plants	↑	↑	Scrub & Carr	↓	↓
Small Blue Butterfly	↑	↑	The Built Environment	↔	↓
Snipe	↓	slight ↑	Traditional Orchards	↑	↔
Song Thrush	↑	↑	Woodlands	↑	↑
Water Vole	↓	↓	Wood-pasture, Parkland & Veteran Trees	↔	slight ↑
White-clawed Crayfish	↓	↔			
Wood White Butterfly	↑	↑			

A green, upward arrow indicates that positive progress has been made towards achieving the targets set out within the Local Biodiversity Action Plan for that species or habitat. Two horizontal orange arrows indicate that no progress has been made, but there has been no loss to that species/habitat either. A downward red arrow indicates that the species/habitat has suffered a loss, therefore there has been negative progress towards achieving the LBAP targets.

Table 4 below provides an overview of habitat distribution within the sub-region. The data can only be used as broad indicators of habitat change and cannot be compared directly between the two time points. This is because survey techniques have changed over time making it difficult to draw any definitive conclusions as to habitat change. Table 4 suggests that the area of heathland habitat has increased from 0.1ha to 3.7ha over 7 years. This apparently large increase of an incredibly rare habitat in the region is potentially linked to the fact that the scale at which habitats have been mapped has changed over time. Prior to 2012, tiny patches of heathland may have been mapped as a different habitat category. Nonetheless, heathland remains one of the rarest habitats in the region, along with others such as mire. Cultivated and disturbed land which, among other categories, includes arable land and amenity grassland, remains the most extensive broad habitat type, followed by grassland / marsh. Much of the grassland is improved grassland.

The limited extent of woodland habitat, albeit increasing within the subregion, is a particular concern, especially considering the cultural, heritage, and landscape significance of Warwickshire's Forest of Arden landscape.

Table 4: The area of broad Phase 1 habitats and the proportion of the surveyed area that they represent in 2012 and 2019[40]

Broad Habitat	Area 2012 (Ha)	Percentage surveyed area 2012 (%)	Area 2019 (Ha)	Percentage surveyed area 2019 (%)
Woodland & Scrub	3545.6	8	4405.6	10
Grassland & Marsh	14848.1	33	14177.6	32
Tall Herb & Fern	260.9	1	194.8	< 1
Heathland	0.1	< 1	3.7	< 1
Mire	0.7	< 1	0.5	< 1
Swamp, Marginal & Inundation	44.4	< 1	82.5	< 1
Open Water	807.8	2	912.9	2
Rock Exposure & Waste	316.7	1	196.2	< 1
Cultivated & Disturbed Land	25084.7	56	24957.7	56

Note: The data can only be used as broad indicators of habitat change and cannot be compared directly between the two time points. This is because survey techniques have changed over time making it difficult to draw any definitive conclusions as to habitat change.

Warwickshire Coventry and Solihull Local State of Nature reports produced by the Natural Capital Assessment Programme will detail the rarer habitat and the importance for their protection and retention.

The Warwickshire Avon Catchment Partnership (WACP)

The Warwickshire Avon Catchment Partnership (WACP) is a group of organisations that collaborate to improve the health of the River Avon catchment in Warwickshire, England. It was established in 2014 and is led by the Environment Agency.

The main goals of the WACP include enhancing water quality, restoring natural habitats, reducing pollution, managing invasive species, and adapting to changes in the climate. The partnership is involved in various projects and activities to achieve these goals. These include creating and implementing the Warwickshire Avon Catchment Plan[41], offering grants to support local projects, raising awareness about the importance of the River Avon catchment, and working with landowners and businesses to improve water quality.

The WACP is a significant organization that is making a real positive impact on the health of the River Avon catchment. By working together with different stakeholders, the partnership has been successful in improving water quality, restoring habitats, and decreasing pollution. In essence, the WACP is a group of organizations collaborating to protect and enhance the River Avon catchment. This effort is contributing to the well-being of the river and its wildlife, and it plays an important role in the local community.

The River Mease Partnership

The River Mease holds significant importance as a lowland clay river situated in the Midlands region of England. Its course traverses Leicestershire, Derbyshire, and Staffordshire before meeting the Trent River between Lichfield and Burton upon Trent. Notably for this Strategy, a portion of the river's catchment area lies within North Warwickshire.

[40] State of the Environment report, Habitat Biodiversity Audit, 2024
[41] https://www.catchmentbasedapproach.org/wp-content/uploads/2023/06/Warwickshire-Avon-Catchment-Plan-v5-2023.pdf

Despite its recognition as a designated river for nature conservation, the condition of habitats along its route has faced degradation in recent times. The biodiversity value of the Mease has been compromised due to various factors, including:

- Urban and housing development
- Wastewater
- Runoff from urban and agricultural areas
- Alterations to habitats

The species and ecosystems within this region are particularly vulnerable to the negative impacts of pollution and inadequate water quality, primarily attributed to elevated phosphorus levels and drainage activities.

The River Mease Partnership[42] unites individuals, farmers, government agencies, and local authorities in collaborative efforts aimed at safeguarding and enhancing the River Mease Special Site of Scientific Interest (SSSI) and Special Area of Conservation (SAC). The core objective of this partnership revolves around diminishing phosphate levels within the River Mease SSSI/SAC, thereby facilitating the achievement of Conservation Objectives for this distinctive conservation area.

Through concerted endeavours, the River Mease Partnership aspires to attain nutrient neutrality throughout the River Mease catchment. In pursuit of this goal, the partnership engages a diverse array of stakeholders, ranging from landowners to businesses and governmental bodies, in the implementation of an array of measures designed to curtail nutrient pollution[43].

Local

Warwickshire County Council COVID-19 Recovery Plan

Since the COVID-19 pandemic, national perspectives on the value of open spaces and physical activity to health and wellbeing have become even more prominent and recognized. The pandemic has highlighted the importance of having access to green spaces, parks, and other outdoor areas, as these provide opportunities for people to engage in physical activity and maintain their mental and physical health during times of restricted indoor gatherings and activities.

The pandemic has also led to an increase in the number of people using these spaces for exercise, with many turning to outdoor activities such as walking, cycling, and running to stay active and relieve stress. As a result, there has been a growing recognition of the role that open spaces and physical activity can play in improving public health, and an increased emphasis on the need to provide safe and accessible green spaces in communities.

In response, governments and local authorities have been investing in and prioritising the development of green infrastructure, such as parks and greenways, to support physical activity and promote health and wellbeing. Many have also implemented policies and initiatives to encourage active travel, such as cycling and walking, as a means of transportation, in order to further promote physical activity and reduce greenhouse gas emissions from transportation. Overall, there has been a greater recognition of the importance of open spaces and physical activity to public health, and a renewed commitment to creating and maintaining these spaces for the benefit of all.

[42] https://www.rivermease.co.uk/
[43] https://www.rivermease.co.uk/activity/nutrient-reduction/

The Warwickshire County Council COVID-19 Recovery Plan[44] outlines the council's priorities for economic recovery and overall resilience of communities in the wake of the pandemic. The plan was developed in consultation with a wide range of stakeholders, including businesses, community groups, and individuals.

Of particular relevance to the GI Strategy is that one of the Council's key priorities is to protect the environment: The council will invest in green infrastructure and sustainable transport to protect the environment and create a healthier county.

Warwickshire County Council Plan

The Warwickshire County Council Plan[45] was published in 2022 and sets out the strategic priorities and focus areas to direct our work over the next five years.

Our three key strategic priorities are as follows:

- Fostering a thriving economy and creating vibrant communities with ample employment opportunities, strong educational institutions, and well-developed infrastructure.
- Ensuring that Warwickshire is a place where all individuals and communities can flourish, with support systems in place to promote safety, health, happiness, and independent living.
- Building a sustainable future for the county by addressing climate change, adapting to its impacts, and fulfilling our commitment to achieve net zero emissions.

In 2019, the Council declared a Climate Emergency. There is widespread backing and dedication throughout the County to tackle climate change. The goal is to eliminate the Council's carbon emissions entirely by 2030. Moreover, the Council will collaborate with all our partners and residents in Warwickshire to assist the County in achieving the same objective by 2050 at the latest.

The County Council is dedicated to biodiversity and environmental stewardship, which will result in the creation of pleasant green spaces and the preservation of trees throughout the County. Additionally, these efforts will contribute to achieving net-zero targets and offsetting carbon emissions.

It will, amongst others, accomplish this by:

- Promoting biodiversity and protecting natural species, habitats, and areas. We will implement our commitment to plant a tree for every resident by 2030, while also striving for a net gain in biodiversity.
- Incorporating sustainable practices into our local economy by encouraging local shopping, promoting active travel, and implementing sustainable transportation systems.
- Adopting waste reduction strategies that prioritize minimizing waste, increasing re-use, and expanding recycling efforts.
- Aligning with the UN Sustainable Development Goals by integrating relevant targets into our Climate Action Plan and monitoring our progress towards achieving them.

North Warwickshire

[44] https://democracy.warwickshire.gov.uk/mgConvert2PDF.aspx?ID=8436
[45] Warwickshire County Council (2022) The Warwickshire County Council Council Plan 2022-2027

North Warwickshire contains just less than half of the acid grassland and dry heath, as well as acid grassland mosaic habitat types in the sub-region. It also encompasses significant areas of marshy grassland and inundation grassland, which are habitats that are vulnerable. These habitats are likely linked to the River Tame and Anker corridors, which could explain why North Warwickshire has a considerable amount of open water habitat resulting from mineral extraction, compared to the rest of the sub-region.

The Spatial Vision for the North Warwickshire Borough Council Local Plan[46] includes: "Existing communities will retain their distinctiveness and identity through good quality, inclusive design. New development will be designed to a high quality following urban design, sustainable development and construction principles and giving high importance to the public realm as well as good access and provision of Green Infrastructure, open space, sports and recreational facilities". One of these targets is:

7 To protect and enhance the quality of the natural environment and conserve and enhance the historic environment across the Borough

5.15 This will be achieved through securing good sustainable design that addresses environmental issues, including flood risk and the creation and restoration of habitats, enhancing local distinctiveness and safeguarding important environmental, historic and archaeological assets.

5.16 This will be achieved by: addressing adverse impacts arising from flood risk, contaminated land and other forms of pollution, safe-guarding designated environmental Historic and archaeological sites, protecting and improving green infrastructure including wildlife habitats, managing new development so as to integrate with its setting, linking new development to the enhancement of the local natural and historic assets.

Policy LP16 Natural Environment references the ecological significances to GI. Policy LP17 Green Infrastructure of the adopted North Warwickshire Local Plan focuses exclusively on Green Infrastructure. To summarise, development proposals must, when relevant, demonstrate their contribution to the preservation and improvement of a comprehensive and strategically planned Green Infrastructure network.

Nuneaton & Bedworth Borough

The Nuneaton and Bedworth Borough is situated on a geological foundation of hard rock, making it ideal for extensive quarrying operations. This type of industry often creates habitats, which include exposure rock, short-ephemeral vegetation and scrub, which can be particularly important for invertebrates such as butterflies and insects.

The Nuneaton and Bedworth Borough Council Local Plan (2011-2031)[47] has Objective 5: To ensure that all new development and investment contributes to a significant improvement in infrastructure and facilities that serve the borough. In particular: A green infrastructure network of high quality, well connected, multifunctional open spaces, corridors and links that deliver benefits to the landscape, wildlife and the public (paragraph 4.6). The plan also makes reference to the following:

- Extreme weather events, such as those experienced in Warwickshire in 1998, 1999, 2005, 2007, 2008, and 2012, are becoming more frequent.
- Future growth will need to be accommodated outside the existing urban area and therefore potentially impact on sensitive landscapes and biodiversity.

[46] https://www.northwarks.gov.uk/forward-planning/local-plan-north-warwickshire
[47] https://www.nuneatonandbedworth.gov.uk/downloads/download/103/adopted-borough-plan-2011-2031 .

- The legacy of coal mining, quarrying, and heavy engineering has had a negative impact on the landscape. The borough has over 100 hectares of derelict land and more than 3000 potentially contaminated sites.

Policy SA1 referenced GI as a development principle on strategic sites and thereafter within specific site policies. It also contains Policy NE1 Green Infrastructure that focuses exclusively on Green Infrastructure. To summarise, the borough is committed to establishing, safeguarding, overseeing, and enhancing its GI assets and new development proposals must aim to create and improve existing green infrastructure assets.

Rugby Borough

Rugby Borough has no significantly high percentage of any of the sub-region's habitat types. However, it does have a range of agricultural habitats, which include a significant amount of the sub-region's arable land and improved grassland. It also contains relatively high proportions of neutral grassland and poor semi-improved grassland.

The Rugby Borough Council Local Plan[48] (2011-2031) references a specific Green Infrastructure Strategy[49] that supports a spatial vision that includes: "The sustainable growth of the town and Borough to meet the needs of the community will be balanced with protection and enhancement of the Borough's historic environment and existing natural assets through the creation of a strategic green infrastructure network. Development will be accommodated in ways which reduces our carbon footprint as well as protecting and enhancing the area".

Figure 10: RBC Green Infrastructure Strategy 20 year Vision

Box 4 A GI Vision for Rugby Borough

Over the next 20 years the existing strategic network of multi-functional GI will be developed to provide a better quality of life for those who live or work in the Borough, together with an enhanced biodiversity resource and improved flood control. This network will include more and higher quality GI 'nodes', focused on both existing and newly created GI assets. Where these assets are linked by linear or other areas of habitat or greenspace, the linkages will be strengthened to facilitate species movements between existing habitats and in response to climate change, and, where appropriate, improve flood control and public access provision.

Complementing the strategic GI network will be a series of local GI networks, focused on existing and new built-up areas, which will incorporate valued features of the historic environment, landscape features, habitats and species populations, together with high quality public access provision. Where possible, there will be links to other local GI networks and also to the strategic network both within the Borough and within adjacent local authority areas.

The strategic and local GI networks will sit within the wider network comprising the remainder of the Borough's GI resource, which will be managed to conserve and, where appropriate, enhance its landscape and historic character, biodiversity and access provision.

By protecting and enhancing the functionality and extent of GI within the Borough, as well as creating new GI, the associated environmental, economic and social benefits to the Borough's community will also increase.

Policy DS5 Comprehensive Development of Strategic Sites requires GI considerations and thereafter within specific site policies. It also contains Policy NE2 Strategic Green and Blue Infrastructure that focuses exclusively on GI. To summarise, the borough is committed:

- The protection, restoration and enhancement of existing and potential Green and Blue Infrastructure assets within the network as shown on the Policies Map; and
- The introduction of appropriate multi-functional corridors between existing and potential Green and Blue infrastructure assets

New developments, where appropriate, are required to incorporate suitable Green and Blue Infrastructure corridors throughout the development, linking to adjacent strategic and local Green and Blue Infrastructure networks or assets if present.

Warwick District

Warwick District contains a relatively large proportion of the sub-region's woodland. This is consistent with the Forest of Arden Landscape Character, which is associated with the west

[48] https://www.rugby.gov.uk/w/local-plan-2011-2031
[49] https://www.rugby.gov.uk/w/green-infrastructure-study

of Warwickshire. However, the Natural Capital Assessment Programme (NCAP)[50] does not report on the management of this woodland, therefore the quality of this habitat is unknown. Aside from woodland, this area has a similar agricultural landscape to Rugby.

The Warwick District Local Plan[51] (2011-2029) references the Green Infrastructure Study and Delivery Assessment (2012) that supports the Local Plan policy formation and is included as part of Policy CC1 Planning for Climate Change Adaptation where "optimising the use of multi-functional green infrastructure (including water features, green roofs and planting) for urban cooling, local flood risk management and to provide access to outdoor space for shading"; Policy FW2 Sustainable Drainage; NE2 Protecting Designated Biodiversity and Geodiversity Assets and DM1 Infrastructure Contributions.

The Local Plan also has a specific Policy NE1 Green Infrastructure that is dedicated to GI and stipulates the Council will continue working with partners to plan for landscape-scale green infrastructure. This includes preserving habitats, improving access to green spaces, and enhancing landscape character.

Stratford-on-Avon District

Stratford District has almost all of the sub-region's calcareous grassland plus a large proportion of the sub-region's neutral grassland. Stratford also holds the majority of the sub-region's traditional orchard habitat, which is a highly valuable and vulnerable habitat.

The Stratford-on-Avon District Core Strategy (2011-2031) references GI as part of Policy CS.2 Climate Change and Sustainable Construction; Policy CS.4 Water Environment and Flood Risk; Policy CS.9 Design and Distinctiveness; specific site policies; and Policy CS.27 Developer Contributions

Policy CS.7 of the Core Strategy is dedicated to GI. It stipulates that the District will promote the existing Green Infrastructure network through protection, enhancement, restoration, and creation. Furthermore, development proposals must demonstrate how they contribute to the comprehensive Green Infrastructure network by maintaining and enhancing existing assets, creating links between assets within the District and neighbouring areas, and addressing specific needs for new assets. The provision of Green Infrastructure features, such as open spaces, waterways, and green corridors, will be maintained and improved to enhance quality of life, biodiversity, landscape character, non-vehicular modes of movement, and climate change mitigation and adaptation. Access to these features within settlements and the countryside will be facilitated through local nature reserves, green and waterway corridors, allotments, woodlands, and connections between built-up areas and the countryside. The Council will actively seek opportunities to align with the priorities of the Sub-Regional Green Infrastructure Strategy and implement projects outlined in the Area Strategies. Additionally, the Council will support the creation of new routes for walking, cycling, and horse-riding to improve access to the countryside.

Coventry

Coventry is mainly an urban habitat. Other habitats mostly comprise amenity grassland and improved grassland. At the fringes of the urban areas are arable land, neutral grassland, and some areas of broadleaved woodland. The district also contains a moderate amount of scrub habitat, which can be particularly important for a range of wildlife including birds and invertebrates such as butterflies and insects. Woodland habitats appear to be increasing through natural regeneration (lack of management) of scrub or targeted planting schemes such as community woodlands, allotments and parkland. Species-rich grassland including acid, neutral and marshy are declining. These are important habitat types for wildlife and there are both local and national targets to reduce their loss. Improved grassland is also declining.

[50] Formerly known as the Habitat Biodiversity Audit
[51] https://www.warwickdc.gov.uk/downloads/file/4623/new_local_plan

The only grassland type increasing is poor semi-improved. This habitat type often results from lack of appropriate management of species-rich and improved grasslands, potentially inferring that less grassland management is being carried out within Coventry than in other areas.

The Coventry Local Plan (2011-2031)[52] references Coventry Green Infrastructure Study (2008) that supports the Local Plan policy for Chapter 8 Design and subsequent Policy DE1 Ensuring High Quality Design. Additional GI policy references are Policy EM1 Planning for Climate Change Adaption; and Policy IM1 Developer Contributions for Infrastructure.

Policy GE1 is dedicated to GI. It states that the Council will safeguard and enhance GI by analysing existing assets and incorporating the Green Infrastructure Study, Green Space Strategy, and Green Space Standards. New development proposals should integrate with the landscape and contribute to connectivity, biodiversity, landscape conservation, design, archaeology, and recreation. Coventry's green infrastructure network will be utilised to adapt to climate change by managing and improving existing habitats, creating new habitats, promoting sustainable travel routes, providing shade, and enhancing public health and well-being.

Solihull

Solihull district is also fairly urbanised but has a greater proportion of rural habitats than Coventry. Arable, amenity grassland and improved grassland are the dominant habitats, followed by semi-natural neutral grassland. The district also has a relatively large area of broad-leaved woodland for its size, which correlates with its position within the Arden Landscape Character Area. As with Warwick District however, the Natural Capital Assessment Programme (NCAP)[53] does not report on the management of this woodland, therefore the quality of this habitat is unknown.

The Solihull Local Plan (2013)[54] has GI referenced in its Challenges and Objection: F-Climate Change with a Spatial Strategy aim of “Protecting, conserving, enhancing and restoring the Borough’s environmental assets and green infrastructure for their contribution to health and well-being, environmental quality and climate change mitigation and adaptation, and ensuring that development protects and improves the quality of the water environment through the timely provision of foul water infrastructure and the use of sustainable drainage techniques”. (paragraph 5.4.10). GI is subsequently referenced in Policy P9 Climate Change; P10 Natural Environment; P11 Water Management; P13 Minerals; P14 Amenity; P15 Securing Design Quality; P18 Health and Well Being; and P21 Developer Contributions and Infrastructure Provision.

[52] https://www.coventry.gov.uk/planning-policy/coventry-local-plan-2011-2031
[53] Formerly known as the Habitat Biodiversity Audit
[54] https://www.solihull.gov.uk/Planning-and-building-control/Solihull-local-plan

Accessibility

Accessibility Vision

To create accessible greenspaces throughout the Warwickshire, Coventry and Solihull landscape where residents, workers and visitors of all identities can enjoy the natural world, be it in an urban, suburban or rural setting.

Background

Accessibility refers to the design and provision of products, services, environments, or information that can be accessed, understood, and used by individuals of diverse abilities, including those with disabilities. It involves removing barriers and creating inclusive conditions that allow all people, regardless of their physical, sensory, cognitive, or other characteristics, to fully participate in and benefit from various aspects of society.

In terms of physical accessibility, it means ensuring that spaces, buildings, transportation, and infrastructure are designed and constructed in a way that enables individuals with mobility impairments to move around independently and safely. This can include features such as ramps, elevators, accessible parking, tactile paving, and wider doorways.

Social accessibility involves promoting an inclusive and welcoming environment where individuals of all abilities can fully participate and interact without facing discrimination, stigma, or exclusion. It encompasses attitudes, policies, and practices that foster equal opportunities, respect, and dignity for everyone.

Overall, accessibility aims to create a society that values diversity and inclusivity by removing barriers and providing equitable access to opportunities, services, information, and physical spaces. It recognises and respects the rights and needs of individuals with disabilities, ensuring their full and meaningful participation in all aspects of life.

The 'Green Infrastructure Standards for England – Summary[55]' define Accessible Greenspaces as;

'*Greenspace which is available for the general public to use free of charge and without time restrictions (although some sites may be closed to the public overnight and there may be fees for parking a vehicle). Accessible greenspaces are available to all, meaning that every reasonable effort is made to comply with the requirements of the Equality Act 2010 Accessible Greenspaces are areas of vegetation set within a landscape or townscape, often include blue space (i.e. lakes, rivers and wetlands)'.*

International

The United Nations (UN) has several policies and strategies related to accessibility and the rights of persons with disabilities. The following are some key initiatives and frameworks:

- **World Programme of Action concerning Disabled Persons[56]:** Adopted by the UN General Assembly in 1982, this program provides a set of guidelines and

[55] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/downloads/Green%20Infrastructure%20Standards%20for%20England%20Summary%20v1.1.pdf

[56] https://www.un.org/development/desa/disabilities/resources/world-programme-of-action-concerning-disabled-persons.html

recommendations for governments, organisations, and stakeholders to promote the full participation and equality of persons with disabilities. It covers various areas, including accessibility, education, employment, and social integration.

- **United Nations Convention on the Rights of Persons with Disabilities (CRPD)[57]**: Adopted in 2009 in the UK, the CRPD is an international human rights treaty that sets out the rights of persons with disabilities and promotes their full inclusion and participation in society. It addresses various aspects of accessibility, including physical, information, communication, and transportation accessibility.
- **Sustainable Development Goals (SDGs)[58]**: The SDGs, adopted by the UN General Assembly in 2015, include a dedicated goal, Goal 11: Sustainable Cities and Communities, which emphasises the importance of inclusive and accessible cities. This goal aims to make cities and human settlements inclusive, safe, resilient, and sustainable, with specific targets related to accessibility and universal design.
- **UN Disability Inclusion Strategy[59]**: Launched in 2019, the Disability Inclusion Strategy aims to ensure that the UN system becomes more accessible, inclusive, and responsive to the rights and needs of persons with disabilities. It focuses on key areas such as accessibility of physical infrastructure, inclusive policies and practices, and disability-inclusive programming.

National

The Public Rights of Way Act 1990

This legislation[60] provides the public with the right to access and enjoy public footpaths, bridleways, and byways. It aims to ensure that people can access and explore the countryside and nature on designated paths.

The Countryside and Rights of Way Act 2000 (The CROW Act)

The Countryside and Rights of Way Act 2000 (the CROW Act)[61], through section 60, places a duty on highway authorities to publish a plan which considers local rights of way (defined as including cycle tracks but excluding footways). This act also introduced the "right to roam" in certain areas, allowing the public to access and enjoy open spaces, including mountains, moors, heaths, and common land. However, some areas, such as cultivated land and gardens, are excluded from this right.

The Equality Act 2010

The Equality Act 2010[62] in the UK is a comprehensive piece of legislation that consolidates and strengthens previous laws related to discrimination, including the Race Relations Act, the Sex Discrimination Act, and the Disability Discrimination Act. Its purpose is to provide a legal framework to protect individuals from discrimination based on protected characteristics and to promote equality of opportunity for all.

Accessible Natural Greenspace Guidance (ANGSt) 2010

The Accessible Natural Greenspace Standard (ANGSt)[63] is a methodology used in the United Kingdom to assess the accessibility and provision of natural greenspaces. It is a framework developed by Natural England. The ANGSt methodology takes into account various factors, including population density, travel time, and the size and quality of greenspaces, to determine the provision of accessible greenspace in an area. It aims to ensure that communities have adequate access to natural areas, regardless of their location or socio-economic status.

[57] https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html
[58] https://sdgs.un.org/goals
[59] https://unsdg.un.org/sites/default/files/2021-11/UN_Disability_Inclusion_Strategy_english.pdf
[60] https://www.legislation.gov.uk/ukpga/1990/24
[61] https://www.legislation.gov.uk/ukpga/2000/37/contents
[62] https://www.legislation.gov.uk/ukpga/2010/15/contents
[63] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx

The ANGSt framework sets out a standard of provision for accessible greenspace. The purpose of ANGSt is to guide planning decisions, policy-making, and the management of greenspaces to enhance accessibility and promote health and well-being by providing opportunities for people to connect with nature. It can be used to inform the planning and development of new greenspaces, as well as the enhancement of existing ones.

ANGSt was developed in the early 1990s and is based on research into minimum distances people would travel to the natural environment. ANGSt recommends that everyone, wherever they live, should have accessible natural greenspace:

- of at least 2 hectares in size, no more than 300 metres (5 minutes' walk) from home;
- at least one accessible 20 hectare site within two kilometres of home;
- at least one accessible 100 hectare site within five kilometres of home; and
- at least one accessible 500 hectare site within ten kilometres of home; plus
- a minimum of one hectare of statutory Local Nature Reserves per thousand population.

Encouraging access to high-quality green and blue spaces within a 15-minute walk from homes is a key objective. According to the People and Nature Survey by Natural England[64], 82% of adults strongly believe that being in nature brings them immense happiness. However, over a third of people in England lack access to green spaces within this proximity. To address this issue, the Governments GI Framework[65] incorporates an acclaimed mapping tool that identifies areas in greatest need of green spaces. Notably, the government has already utilized this tool to ensure that the £9 million Levelling Up Parks fund is directed toward low-income areas with limited access to green spaces.

National Planning Policy Framework (NPPF) 2023

The National Planning Policy Framework (NPPF)[66] is a document produced by the UK government that sets out the policies and guidance for the planning system in England. The NPPF provides a framework for how planning decisions should be made, and it sets out the government's priorities for accessible development.

In terms of considerations regarding accessibility and those most relevant to this Strategy, the most pertinent aspects of the NPPF include:

- Paragraph 92 (a and b): The NPPF emphasises the need for developments to be located where they are easily accessible by a choice of sustainable transport modes, including walking and cycling. It encourages the provision of well-connected and safe networks of routes for pedestrians, cyclists, and equestrians.
- Paragraph 92 (c): The NPPF promotes the concept of green infrastructure, which includes parks, green spaces, and natural areas. It encourages the identification, protection, and enhancement of green infrastructure networks to improve environmental quality, access to nature, and recreational opportunities.
- Paragraph 103 (f): The NPPF highlights the importance of creating inclusive and accessible communities. It emphasises the need for developments to be designed to be inclusive, safe, and accessible for everyone.

The Levelling Up and Regeneration Bill

The Levelling Up White Paper 2022[67], suggests that one of the key objectives of the Levelling Up and Regeneration Bill is ensuring natural beauty is accessible to all. It aims to achieve this

[64] https://www.gov.uk/government/collections/people-and-nature-survey-for-england
[65] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx
[66] https://www.gov.uk/government/publications/national-planning-policy-framework--2
[67] https://www.gov.uk/government/publications/levelling-up-the-united-kingdom

by bolstering Green Belts surrounding urban areas, incorporating Local Nature Recovery Strategies into planning processes, and promoting woodland creation throughout the UK.

Regional

West Midlands Combined Authority (WMCA)

"Green deprivation"[68] refers to the lack of access to green spaces, such as parks, forests, and other natural environments, particularly in urban areas or disadvantaged communities. It highlights the unequal distribution of green spaces and the associated benefits they provide, including opportunities for recreation, physical activity, mental well-being, and environmental quality. Green deprivation can have negative impacts on the health and quality of life of individuals and communities, as they are deprived of the positive effects of nature and the opportunities for outdoor activities.

Many areas of the WMCA are in the 20% of UK areas worst affected by 'Green Deprivation'. This includes significant areas of Coventry and large areas of both Coventry and Solihull have 'moderate levels of Green Deprivation'.

Sub-regional

The Coventry, Solihull and Warwickshire area contains attractive and distinctive landscapes with several significant visitor attractions and areas of historic importance, including Shakespeare's Stratford-upon-Avon, Warwick and Kenilworth Castles and the Cotswolds Area of Outstanding Natural Beauty. This landscape is accessible to both people who live in the area as well as those visiting from outside through a number of ways:

- Paths – e.g., Public Rights of Way and canal towpaths;
- Estates – e.g., Country Parks and publicly accessible estates; and
- Open Spaces – e.g., Parks and Gardens, village and urban greens and accessible Nature Reserves.

The primary attraction for visitors to the sub-region lies in its rich history and heritage. However, the presence of existing accessible GI, such as canals, country parks, cycling, and walking trails, expands the range of experiences available to visitors, encouraging them to extend their stays/ make return visits. This not only diversifies the tourism opportunities but also generates economic advantages that can be shared with a wider array of local communities.

As well as tourism, Green Infrastructure improves accessibility to greenspace for residents, and helps to enhance quality of life within the sub-region and make this an attractive place to live.

There are a number of national documents which relate to the rights of way and recreational highway network. These have been delivered at a local level and are described below:

Warwickshire, Solihull and Coventry Local Access Forum

In 2002 Warwickshire, Solihull and Coventry authorities agreed to set up a joint Local Access Forum[69], or 'LAF', LAFs are established under sections 94 and 95 of the Countryside and Rights of Way Act 2000 and are governed by The Local Access Forums (England) Regulations 2007. LAFs exists to advise the Appointing Authorities and other organisations on the improvement of public access to the countryside and public rights of way – both rural and urban – for the purpose of open-air recreation and enjoyment of the area. The membership of

[68] https://www.wmca.org.uk/what-we-do/environment-energy/natural-environment/
[69] https://www.warwickshire.gov.uk/democracy/local-access-forum

the LAF includes a Councillor from each of the three authorities (upper tier or unitary), as well as individuals representing various interests from across the three authority areas.

Rights of Way and Recreational Highway Strategy (ROWRHS) 2011-2026

Warwickshire County Council has produced a Rights of Way and Recreational Highway Strategy[70] 2011-2026[71] (ROWRHS) that covers:

- All rights of way;
- Cycle routes where they are part of the rights of way network; and
- Unclassified county roads, which are managed in a similar way to the rights of way network and which have mainly recreational use.

The Natural England Good Practice Note on Rights of Way Improvement Plans (ROWIP) and Local Transport Plans (LTP)[72] integration states that 'The new Local Transport Plan guidance recognises the role of active travel solutions such as walking and cycling. There is now an opportunity for local authorities to take a broader, more holistic approach to transport and address the rights of way network as an integral part of urban and rural transport systems and in contributing to the achievement of all the national transport goals'. It also states that 'Integration gives local authorities an advantage in delivering positive benefits for people and the natural environment – a more active lifestyle in a greener, healthier, low carbon, quieter and safer environment'.

Warwickshire County Council has integrated the ROWRHS into their Local Transport Plan, which is shown in Figure 11 below.

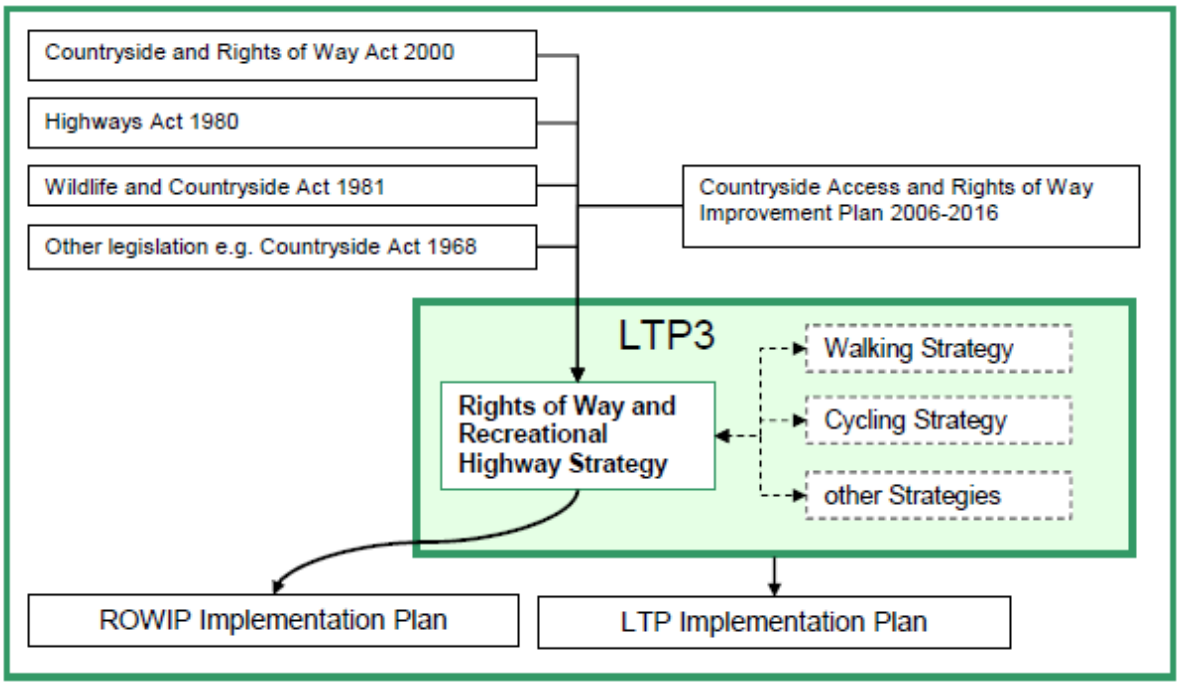


Figure 11 Integration between WCC's Rights of Way Improvement Plan and Local Transport Plan 3

The ROWRHS vision is "To ensure that the public gain maximum use and enjoyment of the network, whilst protecting and improving it for future generations of residents and visitors'. The overall objectives in implementing the Strategy are to achieve:

[70] https://www.warwickshire.gov.uk/directory-record/2153/rights-of-way-improvement-plan
[71] https://api.warwickshire.gov.uk/documents/WCCC-914-289
[72] https://www.warwickshire.gov.uk/ltp3

- A well-managed and maintained asset;
- A sustainable network which meets the needs of modern users;
- A network which is accessible to, and used by, a wide variety of people from different backgrounds and with differing abilities;
- Responsible users who respect the countryside as a working environment and as an investment for the future; and
- A better rights of way network for all.

Green Social Prescribing

Green social prescribing combines the principles of social prescribing and green prescribing to create interventions that leverage both social and environmental factors for improved health and well-being. It recognises that both social connections and engagement with the natural environment play vital roles in promoting overall wellness. It involves prescribing or referring individuals to nature-based activities and community resources that address their social needs while incorporating the healing benefits of the natural world.

When social prescribing and green infrastructure are combined, it means utilising the natural environment, particularly publicly accessibly green and blue spaces as part of the prescribed interventions for individuals' health and well-being. This approach recognises the positive impact that exposure to nature and engaging with the natural environment can have on physical and mental health.

Green infrastructure can provide numerous opportunities for social prescribing activities. For example, a healthcare professional may prescribe outdoor group activities such as walking or cycling in a nearby park or nature reserve. This not only encourages physical activity but also allows individuals to connect with nature and can facilitate ecotherapy, all of which has been shown to reduce stress, improve mood, and enhance overall well-being. Moreover, green spaces can also be utilised for horticultural therapy programs, where individuals engage in gardening activities as a therapeutic intervention. Gardening has been proven to have numerous health benefits, including reducing symptoms of anxiety and depression, improving physical fitness, and promoting social interaction.

By incorporating green infrastructure into social prescribing, individuals have the opportunity to experience the positive effects of nature on their health and well-being. It helps foster a sense of connection to the environment, encourages physical activity, reduces social isolation, and provides a platform for community engagement. By connecting individuals to green spaces and activities, social prescribing can harness the benefits of nature for holistic well-being.

The NHS Long Term Plan[73] commits to significantly expanding the number of social prescribing link workers in primary care. Social prescribing and community-based support enable GPs, other health and care practitioners and local agencies to refer people to a link worker who can advise the individual on which form of green social prescribing would be the most beneficial for them. There are several different social prescribing schemes already operating throughout Warwickshire.

Warwickshire's Active Travel schemes

Warwickshire County Council has received funding from Active Travel England to support active travel schemes in the county[74]. The funding will be used to implement several planned projects, including the A47 Hinckley Road Walking, Wheeling and Cycling Scheme in Nuneaton, the Kenilworth to Leamington Spa Cycle Route (K2L), and the Leamington Spa to Rugby cycle route (Lias Line). The funding will enable the construction of new cycling

[73] https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf
[74] https://www.warwickshire.gov.uk/news/article/4204/more-fantastic-news-for-the-delivery-of-warwickshire-s-active-travel-ambitions

infrastructure, enhancements to existing routes, and the connection of communities in the area. The projects aim to promote active travel for everyday trips and improve cycling infrastructure for key destinations within Warwickshire.

The Lias Line greenway[75] in Warwickshire is an excellent example of how green infrastructure and improved accessible infrastructure assets connects people with nature. The cycleway is 37.8km long, starting from Rugby station, it follows a dismantled railway, leading to Ashlawn Cutting and Cock Robin Wood, known for rare plants and butterflies. Cyclists can enjoy on-road sections, bridleways, and reach Draycote Water with its visitor centre and a cycle route around the reservoir. The journey includes picturesque spots like Draycote Meadows, Birdingbury, and Long Itchington. The greenway features biodiversity ponds and a raised boardwalk for wildlife protection. Along the way, they pass Newbold Comyn Country Park and the Leam Valley Local Nature Reserve. The Lias Line greenway offers a nature-filled experience in Warwickshire which connects already established green infrastructure assets.

Local

North Warwickshire

The North Warwickshire Local Plan[76] highlights that the Borough already has higher than average accessibility to woodland providing an excellent basis from which to develop a Borough wide network. However, there are still local deficiencies which need to be tackled as well as the creation of further woodlands helping to extend corridors. The Council has a specific spatial vision:

8 To establish and maintain a network of accessible good quality Green Infrastructure, open spaces, sports and recreational facilities.

p.5.17 This will promote well-being, social inclusion and community cohesion, in addition to both economic and environmental benefits

p.5.18 This will be achieved by: protecting existing and promoting community facilities, providing and promoting healthy and safe ways to relax and play through the design and layout of new developments, enhancing the overall well-being of the community, linking new development to the enhancement of local facilities, seeking sustainable design which minimises environmental impacts

Policy LP22 Open Spaces and Recreational Provision focuses on improved availability and accessibility of recreation provision.

Policy LP27 Walking and Cycling focuses states that all developments should consider what improvements can be made to encourage safe and fully accessible walking and cycling and that encouragement will be given to establishing and promoting responsible access to the natural environment, for example in the Tame Valley Wetlands NIA.

Nuneaton & Bedworth Borough

Policy NE1 of the Nuneaton and Bedworth Borough Council Plan[77] focuses exclusively on Green Infrastructure. It explicitly includes improving accessibility throughout the borough including footpaths and cycle paths. With regard to blue infrastructure (waterbodies including canals) the plan states; '*they can also be used to improve accessibility to watercourses, support regeneration and improve opportunities for leisure, economic activity and biodiversity.*'

[75] https://www.sustrans.org.uk/find-a-route-on-the-national-cycle-network/lias-line
[76] North Warwickshire Borough Council (2021) North Warwickshire Local Plan 2021
[77] https://fs-filestore-eu.s3.eu-west-1.amazonaws.com/nuneaton/Documents/Borough%20PlanFINAL120619.pdf

Rugby Borough

Policy HS4: Open Space, Sports Facilities and Recreation of the Rugby Borough Council Local Plan[78] supports the improvement of the quality and accessibility of existing open space within the borough.

Warwick District

Policy HS1 "Healthy, Safe and Inclusive Communities," of the Warwick District Council Local Plan[79] considers the creation of communities that prioritize health, safety, and inclusivity. It supports proposals that provide homes for older individuals and people with disabilities, promote energy efficiency, minimise crime and anti-social behaviour, enhance walking and cycling networks, create attractive public spaces, encourage healthy lifestyles, improve green infrastructure, provide access to essential services, and preserve community buildings.

Policy BE1 Layout and design is dedicated to new development and stipulates that all new developments 'meet the highest standards of accessibility and inclusion for potential users regardless of disability, age or gender'.

Policy TR3 Parking also enforces that developments must have regard to the location and accessibility of sites by means other than by private car.

Stratford-on-Avon District

Policy CS.24 'Tourism and Leisure Development' of the Stratford-on-Avon District Core Strategy 2011-3031[80] refers to ensuring sites are accessible by existing public transport and including scope to improve services.

Coventry

The Coventry City Council Local Plan 20211-2031[81] has several policies dedicated to accessibility within the city. The most pertinent policies are described below.

Policy AC1, "Accessible Transport Network," promotes development proposals that integrate with existing transport networks, consider the needs of all residents, support high-quality local transport networks, and facilitate the integration of intelligent mobility infrastructure.

Policy AC4, "Walking and Cycling," requires development proposals to provide safe and convenient access to walking and cycling routes. It encourages the creation of a connected network of Quiet Streets to prioritise pedestrian and cycling transportation. High-quality cycle parking and facilities should be included in new developments.

Further guidance will be provided in the Coventry Connected SPD[82].

Solihull

There is a whole chapter on Improving Accessibility and Encouraging Sustainable Travel within the Solihull Local Plan- Shaping a Sustainable Future[83]. The most prominent policies with reference to accessibility is Policy P7, "Accessibility and Ease of Access," which prioritises new development in accessible locations and encourages improved access. It sets criteria for housing, offices, retail, and public facilities to be within walking distance of amenities and well-connected to transport services. Change of use proposals must maintain or improve accessibility. Development not meeting criteria should contribute to transportation improvements. Access to developments should be safe and attractive, following design quality guidelines.

[78] Rugby Borough Council (2019) Rugby Borough Council Local Plan 2011-31
[79] Warwick District Council (2017) Warwick District Local Plan 2011 - 2029
[80] Stratford-on-Avon (2016) Stratford-on-Avon District Core Strategy 2011-3031
[81] Coventry City Council (2017) Coventry City Council Local Plan 20211-2031
[82] https://www.coventry.gov.uk/downloads/file/27653/coventry-connected-spd
[83] Solihull Metropolitan Borough Council (2013) Solihull Local Plan- Shaping a Sustainable Future

PART B – ASSESSMENTS and RECOMMENDATIONS

Landscape

The original landscape guidelines[84] for Warwickshire pioneered the development of an objective and systematic method for mapping the physical and cultural character of landscapes in England. These landscape character assessments will be used to help inform the provision and management of future Green Infrastructure networks. They will also be supported by National Character Area assessments and environmental opportunities promoted by Natural England, and the pioneering work by Warwickshire County Council on Biodiversity Offsetting and Connectivity/Opportunity Mapping, in partnership with the University of York[85].

Strategic Landscape Opportunities

This Study highlights the need for a more strategic approach to Green Infrastructure planning in Warwickshire, Coventry and Solihull. This approach should be considered in the context of the sub-region and its aspirations for environmental transformation and strategic landscape improvements. Green Infrastructure planning will be key to the delivery of Local Plans and will complement other regional initiatives such as Nature Recovery Networks and Local Nature Recovery Strategies. Green Infrastructure planning offers a unique opportunity for strategic landscape conservation and enhancement to be at the forefront of all development and land-use initiatives and accorded the same importance as other forms of infrastructure.

Landscape Character

The intrinsic character of the sub-region's landscapes has remained largely intact since the publication of the Warwickshire Landscape Guidelines in the mid-nineties. The maintenance and enhancement of the character of the landscape has been encouraged by the adoption of management strategies and sensitive countryside management schemes, in partnership with the local community, farmers and conservation organisations.

Landscape Condition

The condition of a landscape, which should be clearly distinguished from its character, is a measure of how far removed that landscape is from an 'optimal' state, where all the key characteristics are present and functional. Condition, therefore, has a visual as well as a functional dimension. Visual refers to how broken the existing landscape pattern appears possibly due to the loss of associated feature (e.g. hedgerows) or the appearance of new features that appear 'out of place' in that landscape (e.g. a tall building). Functional refers to a range of issues related to the ecological quality of the countryside and how the present land uses enables species to thrive as well as how people see the cultural (accessibility) identity of the land (e.g .leafy Warwickshire lanes).

The pastoral character of the landscape survives in places, but in many areas, there has been a shift to a more intensive system of mixed arable farming, a long-term trend that has affected many parts of formerly mixed farming in lowland agricultural landscapes in the UK. This shift towards a more arable farming system has been associated with the loss of semi-improved grasslands and hedgerow boundaries; a process that has slowed since the introduction of legislation to retain hedgerows and Countryside Stewardship schemes. There is evidence of the decline in hedgerow function resulting in 'gappy' and thinning hedgerows, especially in

[84] Warwickshire Landscape Guidelines available at https://www.warwickshire.gov.uk/landscapeguidelines
[85] Connectivity/Opportunity Mapping layers available at https://maps.warwickshire.gov.uk/greeninfrastructure/

areas of intensive arable farming, and the urban fringe where horse grazing has increased significantly, as traditional farming has declined.

Management Priorities

Much has been achieved at the landscape scale as a result of initiatives to retain and, where possible, enhance the character of the landscapes in the sub-region. While many of these initiatives have been small-scale, at the broader scale, initiatives to work with landowners to maintain and restore permanent grassland, and to plant new woodlands and hedgerows, is also evident. However, the region is suffering from the loss of tree cover, hedgerows and wildflower meadows, which is evident across large areas of lowland England as farming changes.

Warwickshire is largely a rural county with very strong historical connections and an image of a *'leafy Warwickshire'* with strong tree cover. The south of Warwickshire comes closest to this traditional image, supported by initiatives such as *The Heart of England Forest Project*[86], which aims to "plant and preserve a large native forest in the heart of England." However, farming changes, Dutch elm disease, new developments, and associated light and noise pollution have fundamentally changed the appearance of the countryside. Ancient woodlands, together with ancient/veteran trees, represent irreplaceable semi-natural habitat that hold both ecological and cultural significance and efforts should be made to preserve and enhance these where they occur in the region.

Warwickshire also contains a significant number of ancient trees, of which many may not be formally recorded. The Woodland Trust's Ancient Tree Inventory[87] and Ancient Tree Forum run a national project – the Ancient Tree Hunt – to identify and map ancient trees, so that they can be protected and enhanced for the benefit of all.

Solihull has seen greater land-use change with large settlement expansion occurring in the twentieth century. However, it still retains a 'leafy' character through its rich and mature treescape, reflective of Solihull's roots as a focal point of the historical Forest of Arden. Maintaining and enhancing Solihull's tree stock as both a key GI feature in the region and contributor to the borough's distinctive character and sense of place is therefore highly important.

Similarly, Coventry's urban character means maintaining and improving its existing GI features, while also looking to introduce landscape features such as green walls and green roofs. Sensitive landscape schemes as part of new developments in the urban fringe can also help integrate the urban and rural GI and reduce any impacts on landscape character at the edge of Coventry.

[86] https://heartofenglandforest.org/
[87] Locations of recorded trees can be viewed at https://ati.woodlandtrust.org.uk/

Recommendations

1. Landscape management

1a. Prioritise strategic landscape improvements, having regard to the Warwickshire Landscape Guidelines, and other sub-regional and local landscape character assessments and studies.

Hedgerows and Field Boundaries

- Enhance the structure of the landscape through replanting and regeneration of primary hedgerow boundaries[88], particularly along roadsides, bridleways, footpaths and parish boundaries.
- Reintroduce mixed native species hedgerows along primary boundaries.
- Enhance the age structure of hedgerow tree cover, particularly hedgerow oaks.
- The removal of hedgerows, including those along footpaths, bridleways and woodland edges should be avoided and the management of hedgerows should be promoted.

Hedgerow and field corner tree planting in the Feldon landscape.

Woodlands

- Conserve and enhance the biodiversity of Ancient Woodlands and veteran trees, through sensitive woodland management.
- Identify opportunities for restoring Ancient Woodland on former ancient woodland sites.
- Identify opportunities for new woodland planting, to strengthen the sense of landscape cohesion and connectivity.
- Strengthen, through restocking, existing woodland to enhance the character of the area and increase diversity of woodland edge with native planting.
- Protect woodland and proactively manage in line with tree and woodland strategies.
- Review and revise the tree species list in the Warwickshire Landscape Guidelines to create more resilient woodlands in the face of challenges from climate change and increased pest and disease risks.

Grasslands

- Conserve neutral grasslands and enhance species diversity.
- Maintain and restore areas of older permanent pasture, including ridge and furrow meadows.

[88] "Primary Boundary" means the boundary line, or part, which is directly in front of the primary address, entry of the ownership area/estate.

- Conserve the ecological character of wet grasslands.
- Identify opportunities for sensitive grassland management, to strengthen the sense of landscape cohesion and connectivity.
- Identify opportunities for conversion of arable land back to pasture.

Wetlands

- Maintain the special character and continuity of river and canal corridors.
- Enhance the unity and wetland character of river valley wetlands, through habitat creation and management.
- Restore pond networks for species and water security.

Rural Character

- Maintain strong local rural character.
- Restrict and, where possible, reverse the sub-urbanisation of the landscape, for example native hedge planting for boundary treatments.
- Identify opportunities to strengthen 'local distinctiveness' and a 'sense of place'.
- Identify opportunities for new tree planting to soften the impact of buildings and 'grey' infrastructure.
- Landscape character assessment to be a major consideration at the inception, planning and design of all major development and infrastructure projects.

Urban Character

- Protect and enhance open spaces, and where appropriate consider non-native planting where this will increase climate resilience and adaptability, particularly in parks and public open spaces.
- Conserve and maintain the existing treescape, and enhance tree cover through tree planting.
- Investigate opportunities to diversify roadside character through the creation and management of flower rich grasslands on verges.
- Manage access for recreation at the urban edge, promoting the enhancement of the footpath network.

A mix of native and non-native new tree planting, and an area of ground prepared for seeding with a wildflower meadow mix at The Dingle public open space in Nuneaton.

1b. Identify woodland creation opportunities, including Ancient Woodland restoration, at a landscape scale, choosing appropriate and climate resilient tree species.

Woodland opportunity mapping

Woodland opportunity mapping should be utilised to target woodland creation opportunities. In addition to any localised studies, some of the opportunity mapping resources currently available include:

- Warwickshire, Coventry and Solihull Green Infrastructure Woodland Strategic Grid mapping layer[89]
- Friends of the Earth Woodland Opportunity map (by Terra Sulis)[90]
- Forestry Commission Forester tool - Land Sensitivity layer[91]

Tree species selection

Choosing appropriate tree species will be crucial to ensure the success of the implementation of green infrastructure and to enhance the landscape character of the region. Woodland creation schemes should adhere to the UK Forestry Standard. The Forest Research Ecological Site Classification[92] tool should also be utilised for identifying climate resilient tree species based on site conditions, with priority given to native species, whilst also making reference to the species lists contained in the Warwickshire Landscape Guidelines to ensure landscape character is retained and enhanced.

Any revisions and updates to the species lists within the Warwickshire Landscape Guidelines, along with technical advice will be available on the Warwickshire County Council webpages[93].

A diverse range of species will help with climate resilience and threats from pests and diseases. A useful guide for species selection for woodland mixes is that it should contain no more than:

- 10% of the tree stock in the area being of one species
- 20% of the tree stock in the area being of one genus[94]
- 30% of the tree stock in the area being of one family[95].

Tree and Woodland Strategies

National government is aiming for all local authorities to have a Tree and Woodland Strategy (TAWS). A TAWS should set "out a vision for how a local treescape will be managed now and for the future…The ultimate aim of a TAWS it to help local stakeholders to protect, grow and manage a healthy and resilient treescape across public and private land."[96] A TAWS can bring together information around opportunity mapping and species selection and help steer where and how tree planting can take place across the area, as well as what trees should go where.

[89] https://maps.warwickshire.gov.uk/greeninfrastructure/
[90] https://friendsoftheearth.uk/nature/trees-map-where-could-we-create-woodland-england
[91] https://www.forestergis.com/Apps/MapBrowser/
[92] http://www.forestdss.org.uk/geoforestdss
[93] https://www.warwickshire.gov.uk/landscapeguidelines
[94] A genus is a class of similar things, especially a group of animals or plants that includes several closely related species
[95] A family is a taxonomic group that shares a common attributes or features.
[96] *Trees and Woodland Strategy Toolkit*, Tree Council (2022), p.7. Available at (https://treecouncil.org.uk/what-we-do/science-and-research/tree-strategies/#:~:text=A%20Trees%20and%20Woodland%20Strategy%20is%20a%20key%20tool%20for,a%20more%20resilient%20future%20treescape

Warwick District has a TAWS[97] (1999, to be revised) and Rugby Borough Council has a Tree Policy (2021)[98]. A TAWS is currently being developed for Warwickshire, while Solihull has in place an Urban Forestry Strategy 2019-2029[99], and Coventry likewise has an Urban Forestry Strategy 2022-2032[100]. These documents should be referred to when developing tree and woodland planting schemes.

2. Strategic enhancements

Green Infrastructure provision and development should strengthen landscape character, reflecting locally distinctive natural and cultural landscape patterns, and integrating with natural processes and systems and land-use change, contributing to their long-term protection, conservation and enhanced management. Proposals should be informed by the guidance contained in the Warwickshire Landscapes Guidelines, Connectivity/Opportunity Mapping and complementary landscape character assessments produced by local authorities. Targeted enhancement should include urban fringe landscapes and growth areas, strategic transport corridors and agricultural landscapes.

Urban greening

Opportunities should be sought to introduce green infrastructure into the sub-region's urban areas wherever possible. This will help to provide connected green corridors that link to the urban fringe and the wider countryside beyond. Landscape interventions could range from small-scale green roofs on bus shelters, to green walls / roofs on buildings or larger scale urban planting schemes, parks and gardens.

Urban tree planting, Coventry city centre.

Regeneration schemes in town / city centres should take the opportunity to include planting, including street trees, and sustainable drainage wherever possible. This will help to combat air and noise pollution, soak up rainwater that may otherwise create flooding, create wildlife habitats, offset carbon emissions, benefit people's health and wellbeing, act as traffic calming, help to lessen urban crime and create places that are more attractive for residents, businesses and visitors. Urban planting should respect the character of its setting, for example trees should not obstruct important vistas, but could be used to screen less-desirable views, to provide shade or to define spaces. While priority should be given to native species, non-native species and cultivars may be more suitable or appropriate, such as within the public realm or where space is restricted.

[97] https://www.warwickdc.gov.uk/downloads/file/656/tree_and_woodland_strategy
[98] https://www.rugby.gov.uk/w/tree-policy
[99] https://www.solihull.gov.uk/sites/default/files/migrated/StrategiesPlansPolicies_LeisureandParks_Solihull-Urban-Forestry-Strategy.pdf
[100] https://www.coventry.gov.uk/heritage-ecology-trees/coventry-urban-forestry-strategy-2022-2032/5

SuDS

The sub-region's rivers, canals and other water bodies are an important GI asset which aid in water management and flood alleviation and provide opportunities for recreation and valuable wildlife habitats. New development near to existing blue infrastructure features should respect their character and any local designations, for example Warwick District Council's Canal Conservation Area, as well as the landscape character guidelines for river valleys and wetlands. New developments should incorporate sustainable drainage features where possible. These are often a more cost-effective solution for water management, as well as providing valuable wildlife habitat and recreational opportunities.

Grand Union Canal, Hatton

Urban greening and SuDS, Warwick town centre

Sustainable drainage for road improvement scheme near Gaydon.

Countryside In and Around Towns

The landscape quality of the urban fringe countryside is a key influence on how the overall characters of the region's landscapes are perceived and enjoyed. Rural urban fringe landscapes close to the main towns are widely recognised as highly important to people's experiences and quality of life. Opportunities should be sought to reinforce and enhance landscape character, by creating new and maintaining existing Green Infrastructure, linking urban areas with the wider countryside. For example, this could include establishing new community woodlands and wildflower meadows. New development on the edges of settlements has the potential to be visually intrusive, particularly in the early years before landscape mitigation schemes mature. In responding to the planned expansion of settlements, particular attention will need to be given to the manner in which new developments can be sensitively accommodated into the rural urban-fringe landscape in terms of their siting, materials and design, including scale, layout and landscape mitigation.

New development visually prominent on the skyline with little in the way of a landscape buffer to assimilate it into its surroundings, Hatton Park.

Transport Corridors

The strategic transport routes are a primary means by which many people see and experience Warwickshire, Coventry and Solihull, including visitors, tourists and investors. These routes include motorways and major road corridors, as well as the railway network. Opportunities exist to enhance these corridors in order to improve the overall visual experience, strengthening landscape character and a sense of place. Such enhancements may include the ecological management of roadside verges for wildflowers and wildlife habitats, the extension of roadside verge tree and shrub planting, clearing litter, reducing unnecessary clutter and limiting standardised treatments during highway improvement schemes. Landscape enhancement can help contain the impact of transport corridors and conserve landscape features. Mitigation and enhancement of these transport corridors, to strengthen landscape character, should be a priority in the future planning of strategic Green Infrastructure.

Creation of flower-rich grassland on highway verge in the Feldon landscape (WLG management strategy)

Working Agricultural Landscapes

While not mapped for any specific area, it is recognised that the quality and appearance of the working agricultural landscape is crucial as a framework for more specific environmental enhancement. Conservation and enhancement of traditional features of the farmed landscape is a common theme within the Warwickshire Landscapes Guidelines, particularly for landscapes assessed as being in poor condition and where intensive farming practices dominate.

Due to the intensification of agricultural practices, coupled with the loss of many hedgerows, and field trees through Dutch elm disease, the landscape has become much more open and fragmented over the past 30-40 years. Opportunities exist to enhance the landscape, restore connectivity and so enrich the visual experience of the countryside through the Environmental Stewardship and other agri-environmental grant schemes - for example, by restoring hedgerows and field patterns, reintroducing hedgerow trees and establishing new copses, woodlands and wildflower meadows on farmland. In addition, opportunities exist to create

Field corner tree planting in the Feldon landscape

richer green lanes through a mixture of tree and hedge planting beside rights of way, in order to 'break up' views across large areas of open farmland. These types of enhancements would help create a richer and more varied complex of views and vistas across the area. The use of Connectivity and Opportunity Mapping will be critical to this process.

Infrastructure Delivery Mechanisms

The delivery of this strategy will be through a variety of mechanisms, including Biodiversity Net Gain and other ecosystem markets (see Annexe A for more details).

Grants

Landscape priorities can be delivered through various grants such as Heritage Lottery Fund (HLF) funding and Government funding (e.g. Forestry Commission) grant schemes. Bids that are coherent with the aims of this strategy should be supported.

Local Planning Authority

The mechanism to deliver Biodiversity priorities within the planning system is through site landscape and restoration plans, local Infrastructure Delivery Plans (IDPs), Community Infrastructure Levies, Public Open Space contributions, legal agreements, and planning compensation mechanisms through nature-based solutions and the creation of Nature Markets (e.g. Biodiversity Net Gain[101] and Net Zero Carbon policies*)*. The procedure and governance models for enacting Nature Markets through planning and other regulatory functions is detailed in Annex A – Warwickshire, Coventry and Solihull Ecosystem Services Trading Protocol of this strategy.

Annex A of this strategy, essentially, will be guide nature-based solutions to put "the right habitat in the right place". Annex A identify the strategic areas for compensation relevant to each compensation mechanism. For example Annex A is to be used to determine the Strategic Significance category within the Defra Biodiversity Metrics[102]. These locations are influenced by this strategy and the Local Nature Recovery Strategies.

Other Land Management Systems

For example:

- Agri-Environment schemes – e.g. Environmental Land Management schemes – Sustainable Farming Incentive, Local Nature Recovery, Landscape Recovery
- Local Authority land management – e.g. of highway verges, Country Parks etc;
- Environment Agency management and capital spend – e.g. flood alleviation works;
- Non-Government Organisational land management – e.g. canal works, Wildlife Trust Reserves;
- Voluntary Nature Markets (e.g. voluntary carbon market)
- Outdoor sporting provision – e.g. golf courses, sports grounds
- Voluntary land management - including agricultural;
- Neighbourhood Plans – e.g. village greens, community orchards, Local Green Space Designations; and
- Local amenity groups, e.g. tree planting bodies.

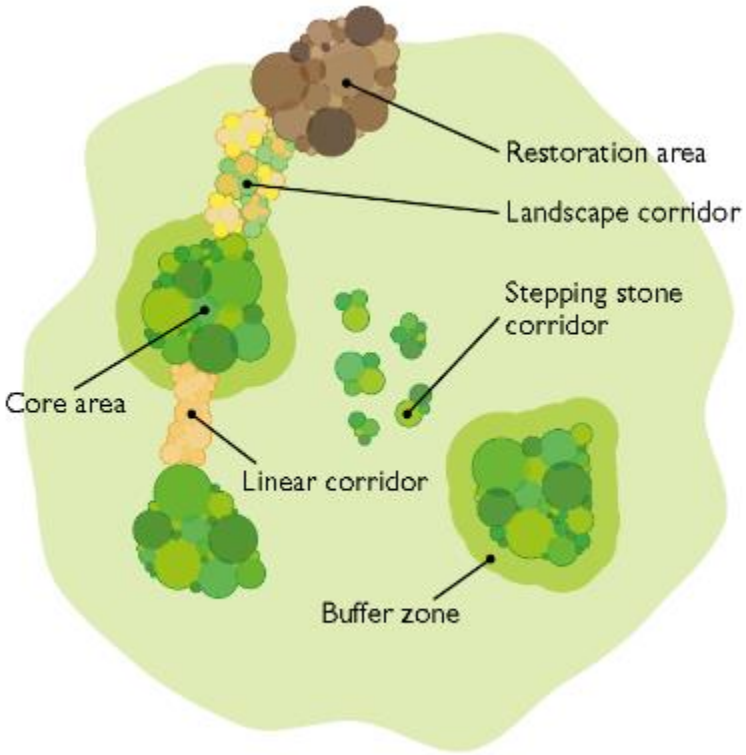
[101] https://www.gov.uk/government/collections/biodiversity-net-gain
[102] https://publications.naturalengland.org.uk/publication/6049804846366720

Biodiversity / Natural Capital

Strategic Biodiversity and Natural Capital Opportunities

The principles of conserving the biodiversity within the sub-region are based on the Lawton Review of Making Space for Nature[103]. Professor Sir John Lawton concluded unequivocally that England's collection of wildlife areas is fragmented and does not represent a coherent and resilient ecological network capable of responding to the challenges of climate change and other pressures. The review called for 'a step-change in nature conservation [...] a new, restorative approach which rebuilds nature and creates a more resilient natural environment for the benefit of wildlife and ourselves'. The review summarised what needed to be done in just four words: **more**, **bigger**, **better** and **joined**. This has been summarised into Figure .

Figure 12 The components of ecological networks (from Making Space for Nature)



The figure shows that natural areas can be increased by habitat creation ('**more**'), extended, for example through adding protected buffer zones to existing natural areas ('**bigger**'), enhanced through habitat restoration ('**better**') and connected by stepping stone corridors, landscape corridors and linear corridors such as road verges or railway embankments ('**joined**').

The findings of this review will be used to identify Habitat Core Areas, corridors, steppingstones and restoration areas based on the major Habitat Categories used within the DEFRA BNG metric 4.0 and UK Habitat Classification system (UKHab)[104]:

- Grassland;
- Heathland and shrub,
- Lakes

[103] http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf
[104] The UK Habitat Classification system (also referred to as UKHab) is a coding system used for surveying and classifying habitats when conducting a habitat assessment.

- Wetlands;
- Woodlands and Forest,
- Watercourses and
- Hedgerows

Appendix 1 includes details of the habitat classification for each of these habitat categories.

Habitat Core Areas

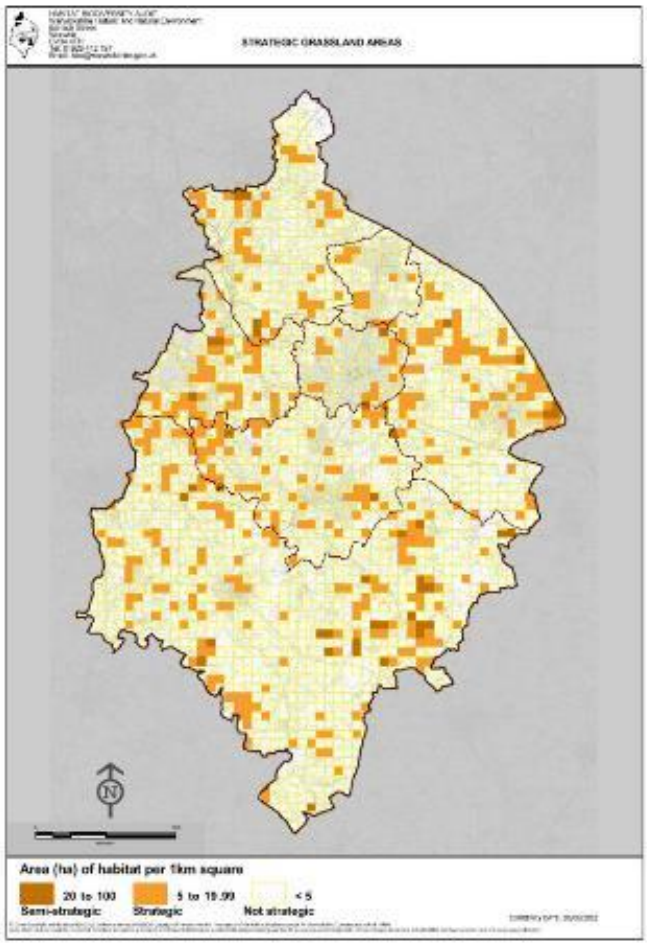
Habitat Core Areas are identified by sub-dividing the subregion into a 1km^2 grid and then calculating the quantity of each habitat category (listed above) in each 1km^2 square, based on the evidence captured within the Natural Capital Assessment Programme[105]. Each square is then categories by the amount of the habitat category found within that square. The categories are as follows:

Habitat Core Area: Where there is equal to or greater than 20 hectares of a habitat category within a 1km^2 square.

Habitat Enhancement Area: Where there is equal to or greater than 5 hectares but less than 20 hectares of a habitat category within a 1km^2 square.

Habitat Creation Area: Where there is less than 5 hectares within a 1km^2 square.

Figure 13: Sub-regional Habitat Core Area Mapping for the Grassland Category



[105] Formally known as the Habitat Biodiversity Audit

The hectare thresholds are adapted on woodland functionality modelling and adjusted to include connective features such as hedgerows, roadside verges and railways lines. The theory being that species that rely on the habitat category evaluated can move freely between the habitats within the 1km^2 square. Thus, for example, a woodland species will thrive in a Woodland Core Area. However, habitat enhancement is not to be restricted to Core and Enhancement Areas, opportunities to create new features and core areas should not be overlooked. Indeed, large landscape recovery should be focused within these areas, where they complement that area's Landscape Character.

Habitat Connectivity

In 2015 The University of York has produced maps showing areas of good-to-poor connectivity (Molianen & Neiminen, 2002) for the three Woodland, Grassland and Wetland categories based on:

- **connectivity** of habitat patches (including hedgerows);
- **distance** between patches;
- **average dispersal distance** of an indicative species; and
- **suitable habitat area** of patch.

Connectivity Maps have been developed for both 500m and 1000m average dispersal distances to compliment the Biodiversity Rich Area mapping and illustrate potential opportunities at a 'field' level. Figure 14 shows an example of a Connectivity Map for 1000m dispersal.

These maps will be reproduced for the Habitat Categories. They will identify Green Infrastructure Assets that are to be considered within development and project proposals based on their importance in maintaining a functional landscape. The maps will also be an invaluable tool for land manager to help re-connect habitats within their land holdings.

Figure 14 Example Woodland Connectivity Map at 1000m dispersal for Princethorpe, Warwickshire (woodland areas shown without hedges)

Habitat Distinctiveness

Based on The Biodiversity Metric - User Guide[106] habitat distinctiveness is '*a measure based on the type of habitat and its distinguishing features. This includes consideration of species richness, rarity, the extent to which the habitat is protected by designations and the degree to which a habitat supports species rarely found in other habitats'*.

To summarise The Biodiversity Metric 4.0 - Technical Annex 2 - Technical Information[107], habitat distinctiveness is determined by four characteristics: species richness, rarity, protected status, and species that are not found in other habitats. Each characteristics is assigned a score from 1 to 5, with 1 being the least distinctive and 5 being the most distinctive. The overall distinctiveness score for a habitat is calculated by averaging the scores for each of the characteristics. Habitats with a high distinctiveness score are considered to be more valuable for biodiversity than habitats with a low distinctiveness score.

The distinctiveness scoring, as set out in The Biodiversity Metric 4.0 - Technical Annex 2 - Technical Information, is provided below:

Very High – Habitats considered to be "very high" distinctiveness are characterised as Priority Habitats as defined in Section 41 of the Natural Environment and Rural Communities (NERC) Act that are highly threatened, internationally scarce and require conservation action, for example blanket bog. This category also includes small amount of remaining habitat with a high proportion unprotected by designation and Critically Endangered European Red List habitats.

High - Habitats considered to be "high" distinctiveness are characterised as Priority Habitats as defined in Section 41 of the NERC Act requiring conservation action, for example lowland fens. This category also includes remaining Priority Habitats not in very high distinctiveness band and other Near Threatened and Vulnerable Red List habitats.

Medium – Habitats considered to be "medium" distinctiveness are characterised as semi-natural habitats not classed as a Priority Habitat but with significant wildlife benefit, for example mixed scrub and arable field margins (that qualify as Priority Habitat).

Low - Habitats considered to be "low" distinctiveness are characterised as habitat of limited biodiversity value for example temporary grass and clover ley, intensively managed agricultural land and urban green spaces of lower biodiversity value.

Very Low - Habitats considered to be "very low" distinctiveness are characterised as habitat with little or no biodiversity value, for example, hard standing or sealed surface.

In short, habitat distinctiveness is a measure of how unique a habitat is, and it is an important consideration in conservation planning. Habitats with a High or Very High distinctiveness score are to be avoided within development and project proposals.

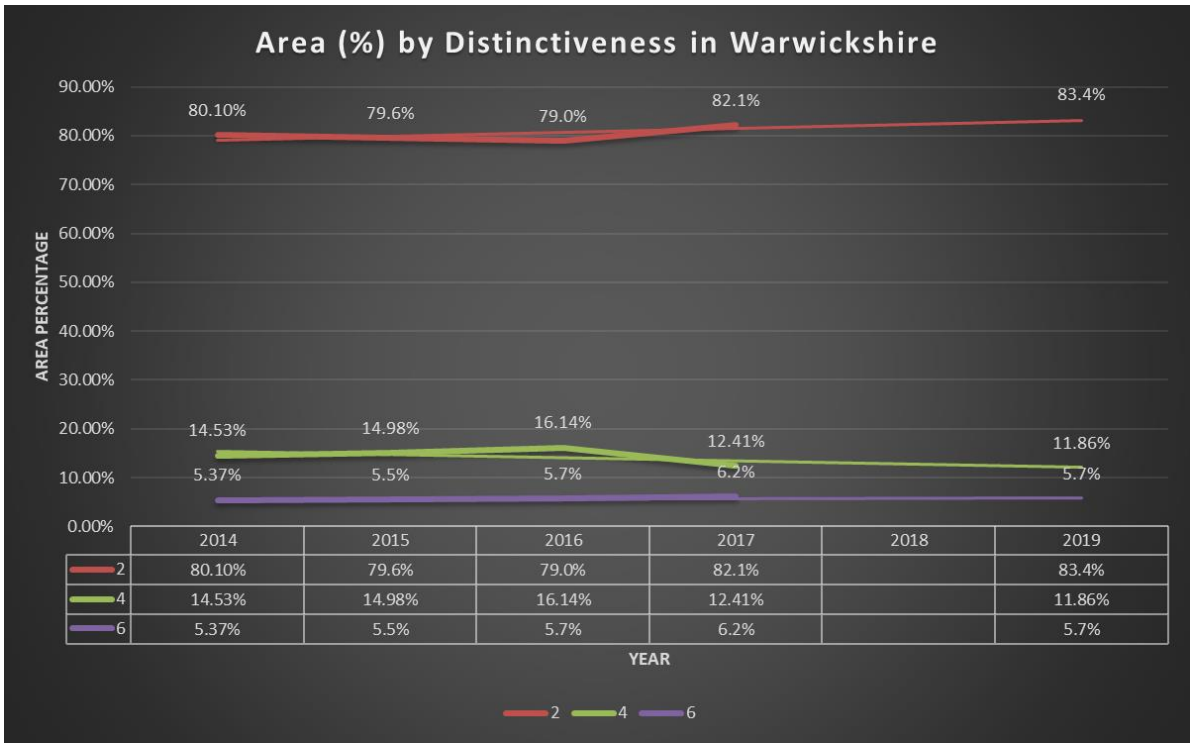
Management Priorities

Since the first publication of the GI Strategy in 2103, the sub-region has made meaningful progress in retaining and enhancing biodiversity and natural capital, particularly through the biodiversity offsetting scheme that has been operational since 2012. However, Figure 15 shows that the subregional Natural Capital Assessment Programme (NCAP)[108] indicates that the sub-region continues to be on a Biodiversity Net Loss trajectory. This is despite the data

[106] https://publications.naturalengland.org.uk/publication/6049804846366720
[107] https://publications.naturalengland.org.uk/publication/6049804846366720
[108] Formal known as the Habitat Biodiversity Audit (HBA)

indicating that higher habitats are increases at the potential expense medium value habitats, whilst low value habitat is increasing.

Figure 15: Area by percentage by Distinctiveness in Warwickshire, Coventry and Solihull



Note: Defra Distinctiveness Scores as Low (value 2), Medium (value 4) and High (value 6)

It will take time for nature to recover and there is still much to be done, as the region is suffering from neglect of trees and woodland areas, ponds, hedgerows, and wildflower meadows along with other types of habitats.

Despite the continual decline, Warwickshire and Solihull are particularly rich in biodiversity, with core woodlands and wildflower grasslands of varying richness. However, these habitats are under threat from changes to farming practises (namely intensification), Dutch elm disease, and new development. It is important to preserve, enhance and create these habitats, as they provide essential ecosystem services such as pollination, water purification, and flood mitigation. Furthermore, ancient woodlands and ancient/veteran trees, represent irreplaceable semi-natural habitat that need to be protected and enhanced due to their ecological and cultural importance.

Coventry is an urban area and has important green infrastructure features with many green corridors reaching into the city centre. Managing these features and establishing new GI features, such as green walls, sustainable drainage and green roofs, will provide several benefits, such as improving air quality and reducing the urban heat island effect. It is important to create, maintain and improve these features, as they contribute to the city's biodiversity and natural capital.

By taking action across the sub-region to preserve and enhance biodiversity and natural capital, the sub-region can improve its environmental health and resilience and provide a better quality of life for its residents.

Recommendations

Although this strategy is primarily to be used within Local Plan Documents and decisions, the approaches are to be used to identify sub-regional GI Assets and Strategic Areas that need to be considered for protection, enhancement, restoration and creation to deliver the actions within the relevant Local Nature Recovery Strategies that envelope the sub-region[109]. It is to be used to guide nature's recovery by all influencing sectors of the community to enhance and reconnect habitats throughout the sub-region.

To fulfil these objectives the recommendations are:

1. Safeguard and Enhance existing GI Habitat Assets

GI Habitat Assets that are identified as a High or Very High Distinctiveness category or have a significant Habitat Connectivity function (i.e. join two or more ecological sites[110]) are to undergo rigorous scrutiny within development and project proposals. Similarly, GI Habitat Assets that contribute to the identification of Habitat Core Areas are to undergo rigorous scrutiny within development and project proposals. It will be expected that Habitat of Medium Distinctiveness category will be retained and enhanced within development and project proposals.

Additionally, the following general recommendations for nature recovery are:

Hedgerows and Field Boundaries

- The removal of hedgerows, including those within farmlands, along footpaths, bridleways and woodland edges should be avoided and their management promoted.
- Encourage the enhancement of shelter belts, lines of trees and hedgerow margins to increase connectivity between ecological habitats.

Woodlands

- Conserve and enhance the sub-regions stock of ancient woodlands and veteran/ ancient trees, through sensitive woodland management,
- Protect woodland and proactively manage in line with Tree and Woodland Strategies, and
- Encourage the creation of woodland, respectful of the Landscape Guidelines, and the replenishment of future veteran trees.

Grasslands

- Protect and enhance semi-natural grassland,
- Conserve and enhance other neutral grassland to increase species diversity,
- Maintain and restore areas of remnant permanent pasture, including ridge and furrow meadows, and
- Conserve and enhance the ecological character of wet grasslands.
- Enhance the species diversification of roadside verges through the enhancement and management of wildflower rich grasslands.

[109] There are two Local Nature Recovery Strategies (LNRS) covering the sub-region, the Warwickshire LNRS and the West Midlands Combined Authorities LNRS.
[110] Ecological site infers a Natura 2000, SSSI, LWS, potential LWS or an area of particular ecological richness.

Wetlands

- Protected ponds that score equal to or greater than 0.7 of the Habitat Sustainability Index[111]
- Identity ponds that are in neglect or in an unfavourable ecological condition for restoration and enhancement to create pond networks and cluster of at least 4 in number[112].
- Encourage and facilitate wetland habitat restoration and appropriate management of river valley wetlands

Rivers and Canals

- Increase the water quality of Rivers, stream and watercourses to good ecological and good chemical status in accordance with Water Framework Directive standards[113].
- Enhance the ecological value of Canals and their associated habitats.
- Maintain enhance and promote the ecosystem services provided by river and canal corridors,.

Urban GI Assets

- Protect and enhance open spaces, and where appropriate consider non-native planting where this will increase climate resilience and adaptability, particularly in parks and public open spaces.
- Conserve and maintain the existing urban treescape and continue to enhance tree cover through supplementary tree planting in urban areas.
- Manage access for recreation at the urban edge, promoting the enhancement of the footpath and cycle path network.

2. Create New Areas of GI

To create new Habitat Core Areas that function independently. This could be to increase habitat within a Habitat Enhancement Area to reach the threshold to be reclassified it as a Habitat Core Area or the creation of individual sites or a functional cluster of larger and smaller sites where there is a distinct local need or deficiency in a habitat category to create a new Habitat Core Area.

Hedgerows and Field Boundaries

- Encourage new species rich hedgerow planting, particularly within farmland, along roadsides, bridleways, footpaths, and parish boundaries, and
- Encourage the formation of field banks (e.g. beetle banks), field margins and infield ecological strips to enhance ecological resilience and other ecosystem service functions.

Woodlands

- Encourage tree planting to create new woodland, and
- Promote the re-creation of woodland on previous ancient woodland sites.

Grasslands

- Encourage the creation of new, high quality grassland habitats, and

[111] The Habitat Suitability Index is a method for determining whether habitat is suitable for newts. https://www.arguk.org/get-involved/projects-surveys/great-crested-newt-habitat-suitability-index
[112] A pond cluster being a group of 4 or more ponds within 250m of each other.
[113] https://www.gov.uk/guidance/river-basin-management-plans-updated-2022-summary-programmes-of-measures-mechanisms/1-introduction

- Encourage the creation of species rich grassland through the enhancement of existing semi-improved grassland.
- Increase the ecological diversification of roadside verges through the creation and management of flower rich grasslands.

Wetlands

- Promote and facilitate the creation of new ponds to create pond networks and cluster of at least 4 in number[106].
- Create ephemeral ponds (e.g scrapes) to form a variety of wetland features.
- Encourage and facilitate wetland habitat creation and appropriate management of river valley wetlands

Urban GI Assets

- Encourage new tree planting within urban and semi-urban areas, and
- Support the retrofitting GI assets into urban areas.

3. Maintain Green Infrastructure Mapping

To maintain and publish habitat mapping throughout the subregion and explore scientifically accepted mechanisms to map connectivity corridors and pathways at a local and subregional levels to support the delivery of the Strategy.

Infrastructure Delivery Mechanisms

The delivery of this strategy will be through a variety of mechanisms including the following:

Grants

Biodiversity priorities can be delivered through various grants such as Heritage Lottery Fund (HLF) and Government funding (e.g. Forestry Commission, English Heritage) grant schemes. Bids that are coherent with the aims of this strategy should be supported.

Local Planning Authority

The mechanism to deliver Biodiversity priorities within the planning system is through site landscape and restoration plans, local Infrastructure Delivery Plans (IDPs), Community Infrastructure Levies, Public Open Space contributions, legal agreements, and planning compensation mechanisms through nature-based solutions and the creation of Nature Markets (e.g. Biodiversity Net Gain[114] and Net Zero Carbon policies*)*. The procedure and governance models for enacting Nature Markets through planning and other regulatory functions is detailed in Annex A – Warwickshire, Coventry and Solihull Ecosystem Services Trading Protocol of this strategy.

Annex A of this strategy, essentially, will be guide nature-based solutions to put “the right habitat in the right place”. Annex A identify the strategic areas for compensation relevant to each compensation mechanism. For example Annex A is to be used to determine the Strategic Significance category within the Defra Biodiversity Metrics[115]. These locations are influenced by this strategy and the Local Nature Recovery Strategies.

Neighbourhood Area Plans / Parish Plans

[114] https://www.gov.uk/government/collections/biodiversity-net-gain
[115] https://publications.naturalengland.org.uk/publication/6049804846366720

The inclusion of biodiversity in Neighbourhood and Parish plans will help in creating and enhancing local GI Assets that could build into the sub-regional objectives.

Other Land Management Systems

For example:

- Agri-Environment schemes – e.g. Environmental Land Management (ELM) schemes – Sustainable Farming Incentive, Local Nature Recovery, Landscape Recovery
- Local Authority land management – e.g. of highway verges, Country Parks etc;
- Environment Agency management and capital spend – e.g. flood alleviation works;
- Non-Government Organisational land management – e.g. canal works, Wildlife Trust Reserves;
- Voluntary Nature Markets (e.g. voluntary carbon market)
- Outdoor sporting provision – e.g. golf courses, sports grounds
- Voluntary land management - including agricultural;
- Neighbourhood Plans – e.g. village greens, community orchards, Local Green Space Designations; and
- Local amenity groups, e.g. tree planting bodies.

Accessibility

Strategic Accessibility Opportunities

The importance of Green Infrastructure assets to people at different geographical scales is central to this study. A set of criteria was established to systematically define and identify those Green Infrastructure assets in the study area that could be considered to be of sub-regional importance, i.e. assets that have importance to people beyond their own local authority boundaries. Green Infrastructure assets would be considered if they fell within the sub-region itself or outside of the sub-region.

The criterion is based on Natural England's Accessible Natural Greenspace Standard[116] and the Accessible Greenspace Standard (AGS) outlined in the Green Infrastructure Standards for England - Summary Green Infrastructure Framework - Principles and Standards for England[117] (Natural England, 2023). AGSs uses distance thresholds and defines the maximum distance that any resident should have to travel from their home to reach accessible natural or semi-natural greenspace. Figure 15 illustrates the AGS in a diagrammatic form.

Figure 16: Accessible Greenspace Standards - size-proximity

Table 5 lists the AGS in by category, actual and approximate walking/cycling distances and the minimum size criteria.

The sub-region has very few large assets of sites over 100ha. In addition, significant linear assets, including all the canals, main rivers and large water bodies, and the long-distance walking and cycling routes of national, regional and county level importance are also important. There are also clusters of sites that are within 500m of each other that collectively are over 100ha should be considered as sub-regional assets.

[116] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/GIStandards.aspx

[117] https://designatedsites.naturalengland.org.uk/GreenInfrastructure/downloads/Green%20Infrastructure%20Standards%20for%20England%20Summary%20v1.1.pdf

Table 5: Accessible Greenspace Standards

Category of Accessible Greenspace	Actual walking distance	Name of criterion	Accessible Natural Greenspace	Size criteria (minimum)	Approximate walking / cycling time
1. Small greenspace close to home: either a Doorstep or Local Greenspace	200m	Doorstep Greenspace	N	0.5 ha	Less than 5 minutes
As above	300m	Local Natural Greenspace	Y	2 ha	5 minutes
2. Medium sized greenspace within 1km	1km	Neighbourhood Natural Greenspace	Y	10 ha	15 minutes
3. Medium large Greenspace within 2km	2km	Wider Neighbourhood Natural Greenspace	Y	20ha	35 minutes
4. Large greenspace within 5km from home	5km	District Natural Greenspace	Y	100 ha	15 – 20 minutes cycling from home
5. Very large Greenspace within 10km from home	10km	Sub-regional Natural Greenspace	Y	500 ha	30 - 40 minutes cycling from home

Notes:

- Distances given are actual walking distances.
- Actual walking distance will be measured though network analysis in due course. However, in the meantime, the Green Infrastructure Mapping uses a straight line distance from home to the boundary of the greenspace in analyses of the AGS standards.
- Where possible all greenspaces should be accessible by public transport and or safe active travel routes.
- The Accessible Greenspace Standards do not cover formal sports provision, for which Sport England is responsible; nor play provision, which is covered by Play England.
- The above diagram uses a walking speed of 60 metres per minute, which is the average for people of 60 years and teenagers. It uses a cycling speed of 20 kilometres per hour as an average for inexperienced cyclists

The original 2013 GI Strategy considered the following sites listed in Table 6 as sub-regional Green Infrastructure assets.

The final criterion for identifying sub-regional assets proved to be the most difficult to define. It was felt that there were a number of sites that, whilst they were under 100ha in size, may still be considered a sub-regional asset. Each planning authority identified any additional assets that are below 100ha in size that they felt warranted being included as sub-regional assets.

Table 6: Summary of the criteria for identifying sub-regional Green Infrastructure assets

Criteria for identifying Sub Regional Green Infrastructure Assets
1) Sites over 100ha
2) Canals, main rivers, large water bodies;
3) Long distance walking and cycling routes of national, regional or county level importance.
4) Clusters of sites that are within 500m of each other that collectively are over 100ha.
5) Sites that are under 100ha that may still be considered a sub-regional asset as nominated by each local planning authority.

In order to identify the Green Infrastructure assets in the 2013 study area the data sets listed below were used and then the outputs were reviewed to help ensure that no significant assets had been missed. Each authority within the sub-region then identified and provided data for any assets that would fall under criterion number five.

The datasets that were used in identifying sub-regional assets are listed below.

- Access Land (under the Countryside and Rights of Way Act)
- Registered Common Land
- Section 15 land (S.15 of the Countryside and Rights of Way Act 2000 – pre-existing public rights of access that on CROW land apply instead of CROW rights)
- Section 16 land (land voluntarily dedicated for public access under the Countryside and Rights of Way Act)
- Special Area of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)
- National Nature Reserves
- Local Nature Reserves
- Country Parks
- Parks and Gardens
- National Trust sites
- Royal Society for the Protection of Birds (RSPB) Reserves
- Warwickshire Open Spaces
- Bancroft Gardens / Recreation Ground
- Coventry Green Belt
- Nuneaton & Bedworth Woodland Grant Scheme
- Rugby Core Strategy proposed urban extensions
- Warwickshire Coventry & Solihull Natural Capital Assessment Partnership[118]

Management Priorities

Access to natural greenspace has become increasingly important. This was especially understood during the COVID-19 pandemic where the ‘natural health service’ benefits from visiting a local park or a walk in the countryside became important in coping with isolation and

[118] Previously known as the Habitat Biodiversity Audit partnership

many other aspects of mental health and wellbeing. Contact with nature within these open spaces was also realised, moving away from 'manicured' aesthetics to a more 'wilder' sense of being part of a natural world. This societal change has affected how people wish to see nature within the traditional 'grey' urban fabric and the importance of trees and the greening of urban environment in climate change mitigation and adaption through dissipating heat island affect and reducing flood risk events.

Thus, a lot of progress in 'greening the grey' has been made over recent years highlighted by schemes within Solihull, Coventry and Warwickshire. In Solihull the award winning Greening the Grey[119] European funded project improved green connections, wildlife sites and public open spaces. It opened and enhanced existing routes and carry out verge habitat improvements across the existing cycle network and created new shared paths, delivering sixteen hectares of enhanced habitat. It also delivered ten woodlands, three wetlands and ten grassland projects within parks and open spaces and improved the habitat and value of a further fifty-five hectares of council-owned land.

Yet, there is still a lot more that can be achieved to enable all residents and workers in the subregion to have access to all the AGS thresholds. To enable them to access the natural health services that biodiversity has to offer as well as the other ecosystem services and wider benefits nature delivers.

Recommendations

To enable residents, visitors and workers to maximise the benefits from green infrastructure and natural capital the sub-region can improve its environmental health and resilience and provide a better quality of life. This is to be achieve through the following recommendations:

1 Information Collation and Mapping

To map areas with GI Accessibility Asset deficiency throughout the sub-region making use of the national Green Infrastructure mapping webpages and thereby following Natural England AGSs.

2 Increase and Enhance Accessibility and Promotion

- To increase accessibility to existing GI assets and create or enhance new GI Accessibility Assets in those areas of deficiency.
- Increase access to the countryside for the whole community;
- Enabling people to learn about the opportunities that public open spaces, country parks and the countryside and rights of way network offer can act to make the countryside more accessible to all, as well as reducing the potential for conflict;
- Promote and encourage walking, cycling and other forms of exercise such as running and horse riding to contribute to people's ongoing health and fitness.
- To Increase and enhance connections to the existing path networks that enables people to find greener transport links for walkers and cyclists between settlements and destinations as well as their use for recreation;
- Promote Green tourism and leisure to expand the subregion's tourist destination offer to include the countryside to bring additional visitors to the County and to extend the stay of current visitors.

[119] https://cieem.net/2022-awards-winners-spotlight-large-scale-nature-conservation/

3 Social Prescribing

- Promote GI as a mechanism to support Social Prescribing as an all-age, whole population approach.
- To develop a Social Prescribing market that enables both the medical and commercial sectors to invest in accessible green space as an alternative of additional prescriptive treatment for certain medical conditions[120] or relieving work stress and anxiety during the working day.

Infrastructure Delivery Mechanism

The delivery of the recommendation will be through a variety of mechanisms, including Biodiversity Net Gain and other ecosystem markets (see Annexe A for more details).

Grants

Biodiversity priorities can be delivered through various grants such as Heritage Lottery Fund (HLF) and Government funding (e.g. Forestry Commission, English Heritage) grant schemes. Bids that are coherent with the aims of this strategy should be supported.

Local Planning Authority

The mechanism to deliver Accessibility priorities within the planning system is through site landscape and restoration plans, local Infrastructure Delivery Plans (IDPs), Community Infrastructure Levies, Public Open Space contributions, legal agreements, and planning compensation mechanisms through nature-based solutions and the creation of Nature Markets (e.g. Biodiversity Net Gain[121] and Net Zero Carbon policies*)*. The procedure and governance models for enacting Nature Markets through planning and other regulatory functions is detailed in Annex A – Warwickshire, Coventry and Solihull Ecosystem Services Trading Protocol of this strategy.

The Countryside and Rights of Way Improvement Plan also set out intentions on improving accessibility to the countryside through the Community Access Forum.

Social Prescribing

Social Prescribing investment markets can be established to fund pubic open space or other accessible green space alternative, such as roof gardens to enable patients and worker to achieve a better health and wellbeing.

Other Land Management Systems

For example:

- Local Authority land management – e.g. of Country Parks etc;
- Environment Agency management and capital spend – e.g. flood alleviation works;
- Non-Government Organisational land management – e.g. canal works, Wildlife Trust Reserves;
- Outdoor sporting provision – e.g. golf courses, sports grounds
- Voluntary land management;
- Neighbourhood Plans – e.g. village greens, community orchards, Local Green Space Designations; and
- Local amenity groups, e.g. tree planting bodies.

[120] More information on who could benefit from social prescribing can be found on the NHS webpages: https://www.england.nhs.uk/personalisedcare/social-prescribing/
[121] https://www.gov.uk/government/collections/biodiversity-net-gain

PART C – ASSETS & MAPS

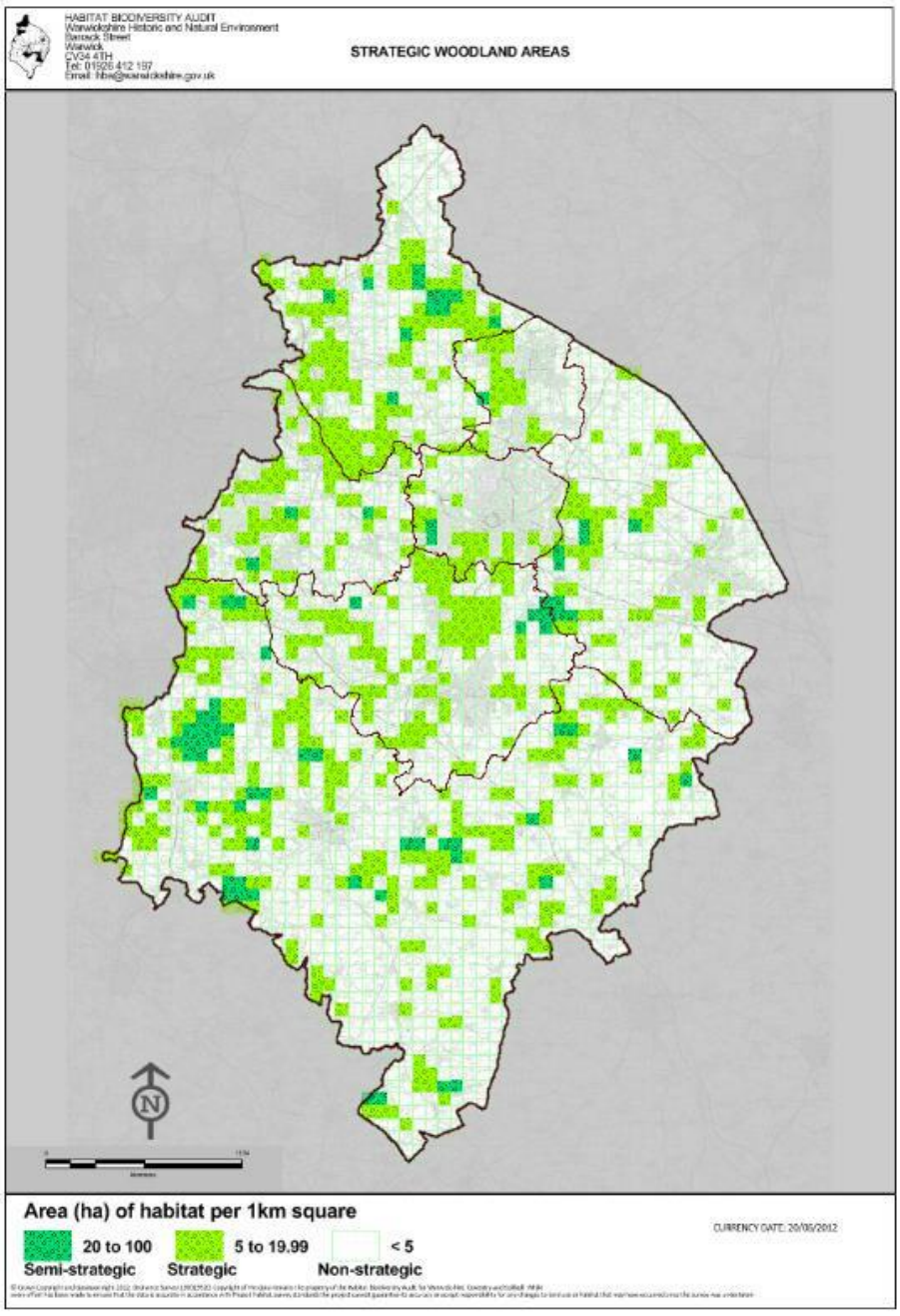
Landscape

This evidence can be found at www.warwickshire.gov.uk/greeninfrastructure with guidance documents at https://www.warwickshire.gov.uk/landscapeguidelines

Biodiversity/ Natural Capital

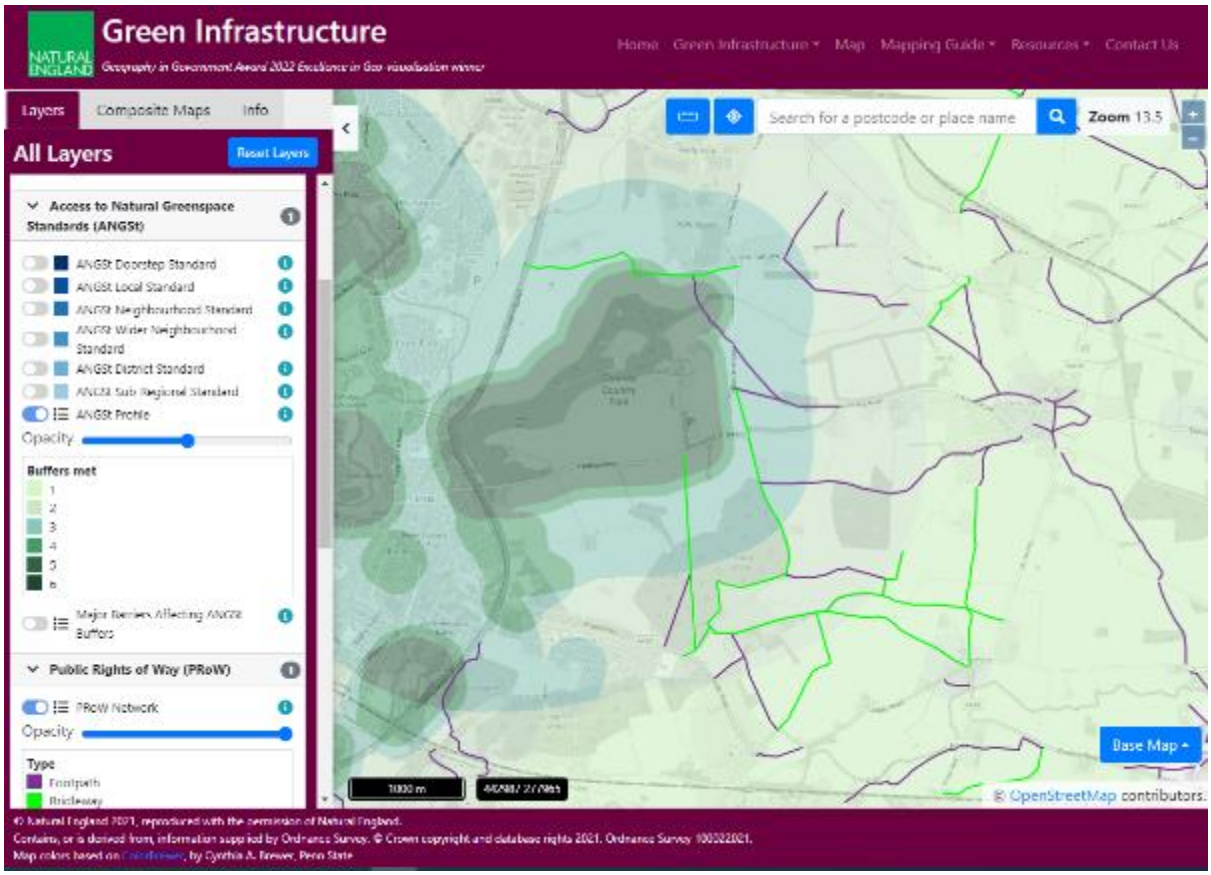
This evidence can be found at www.warwickshire.gov.uk/greeninfrastructure

Figure 17 Example Map for Strategic Woodland Areas



Accessibility

This evidence can be found at
https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Map.aspx



APPENDIX 1

Habitat Connectivity Categories

Habitats that have been used to generate the Core Areas and Strategic Mapping for compensation purposes within the Warwickshire Ecosystem Services trading Protocol.

All Habitats Based on UKHab			
UK Habitat Classification	**Level 2 Label**	**Distinctiveness Category**	**Distinctiveness Score**
Arable field margins cultivated annually	Cropland	Medium	4
Arable field margins game bird mix	Cropland	Medium	4
Arable field margins pollen and nectar	Cropland	Medium	4
Arable field margins tussocky	Cropland	Medium	4
Cereal crops	Cropland	Low	2
Winter stubble	Cropland	Low	2
Horticulture	Cropland	Low	2
Intensive orchards	Cropland	Low	2
Non-cereal crops	Cropland	Low	2
Temporary grass and clover leys	Cropland	Low	2
Traditional orchards	Grassland	High	6
Bracken	Grassland	Low	2
Floodplain wetland mosaic and CFGM	Grassland	High	6
Lowland calcareous grassland	Grassland	High	6
Lowland dry acid grassland	Grassland	V.High	8
Lowland meadows	Grassland	V.High	8
Modified grassland	Grassland	Low	2
Other lowland acid grassland	Grassland	Medium	4
Other neutral grassland	Grassland	Medium	4
Tall herb communities (H6430)	Grassland	High	6
Upland acid grassland	Grassland	Medium	4
Upland calcareous grassland	Grassland	High	6
Upland hay meadows	Grassland	V.High	8
Blackthorn scrub	Heathland and shrub	Medium	4
Bramble scrub	Heathland and shrub	Medium	4
Gorse scrub	Heathland and shrub	Medium	4
Hawthorn scrub	Heathland and shrub	Medium	4
Hazel scrub	Heathland and shrub	Medium	4
Lowland heathland	Heathland and shrub	High	6
Mixed scrub	Heathland and shrub	Medium	4
Rhododendron scrub	Heathland and shrub	Low	2
Dunes with sea buckthorn (H2160)	Heathland and shrub	High	6
Other sea buckthorn scrub	Heathland and shrub	Low	2
Willow scrub	Heathland and shrub	Medium	4
Upland heathland	Heathland and shrub	High	6
Aquifer fed naturally fluctuating water bodies	Lakes	V.High	8
Ornamental lake or pond	Lakes	Low	2
High alkalinity lakes	Lakes	High	6

All Habitats Based on UKHab			
UK Habitat Classification	**Level 2 Label**	**Distinctiveness Category**	**Distinctiveness Score**
Low alkalinity lakes	Lakes	High	6
Marl lakes	Lakes	High	6
Moderate alkalinity lakes	Lakes	High	6
Peat lakes	Lakes	High	6
Ponds (priority habitat)	Lakes	High	6
Ponds (non-priority habitat)	Lakes	Medium	4
Reservoirs	Lakes	Medium	4
Temporary lakes ponds and pools (H3170)	Lakes	High	6
Ruderal/Ephemeral	Sparsely vegetated land	Low	2
Tall forbs	Sparsely vegetated land	Low	2
Inland rock outcrop and scree habitats	Sparsely vegetated land	High	6
Limestone pavement	Sparsely vegetated land	V.High	8
Maritime cliff and slopes	Sparsely vegetated land	High	6
Other inland rock and scree	Sparsely vegetated land	Medium	4
Allotments	Urban	Low	2
Artificial unvegetated, unsealed surface	Urban	V.Low	0
Bioswale	Urban	Low	2
Intensive green roof	Urban	Low	2
Built linear features	Urban	V.Low	0
Cemeteries and churchyards	Urban	Medium	4
Developed land; sealed surface	Urban	V.Low	0
Other green roof	Urban	Low	2
Facade-bound green wall	Urban	Low	2
Ground based green wall	Urban	Low	2
Ground level planters	Urban	Low	2
Biodiverse green roof	Urban	Medium	4
Introduced shrub	Urban	Low	2
Open mosaic habitats on previously developed land	Urban	High	6
Rain garden	Urban	Low	2
Actively worked sand pit quarry or open cast mine	Urban	Low	2
Sustainable drainage system	Urban	Low	2
Unvegetated garden	Urban	V.Low	0
Vacant or derelict land	Urban	Low	2
Bare ground	Urban	Low	2
Vegetated garden	Urban	Low	2
Urban tree	Individual trees	Medium	4
Rural tree	Individual trees	Medium	4
Blanket bog	Wetland	V.High	8
Depressions on peat substrates (H7150)	Wetland	V.High	8

All Habitats Based on Phase 1				
HABCODE	Linear Habitat description	Woodland	Wetland	Grassland
A21	Linear Scrub	X		X
A3	Linear Trees	X		
J21	Intact hedge	X		X
J211	Native species-rich intact hedge	X		X
J22	Defunct hedge			
J23	Hedge with trees	X		X
J231	Native species-rich hedge with trees	X		X
J25	Wall (if drystone)			X
J26	Dry ditch			
J28	Earth bank			X