

| 1 Introduction and Background | 4 |
|---|--------------|
| 1.1 Introduction | 4 |
| 1.2 What is Green Infrastructure? | 5 |
| 1.3 The Role of Green Infrastructure in Delivering Sustainable Development | 6 |
| 2 Vision, Aims, Objectives and Key Benefits | 8 |
| 2.1 Vision to 2026 | 8 |
| 2.2 Aim of the Study | 8 |
| 2.3 Objectives of the Study | 9 |
| 2.4 Benefits | 9 |
| 2.4 belients | 9 |
| 3 Methodology | 11 |
| 3.1 Establising the Scope of the Study | 11 |
| 3.2 Plan Review | 11 |
| 3.3 Establishing the Existing Green Infrastructure Resource | 11 |
| 3.4 Identifying Issues and Opportunities | 11 |
| | |
| 3.5 Establishing Strategic Green Infrastructure Guidelines | 11 |
| | |
| 4 The Context and Framework for Green Infrastructure Planning | 12 |
| 4 The Context and Framework for Green Infrastructure Planning 4.1 National Policy | 12 12 |
| 4 The Context and Framework for Green Infrastructure Planning | 12 |

Contents

| 4.4 District Policy | 14 |
|--|----|
| 5 The Future Development of the District | 16 |
| 5.1 Regional Spatial Strategy | 16 |
| 5.2 Local Development Framework | 16 |
| 6 The Existing Green Infrastructure Resource | 17 |
| 6.1 Landscape | 17 |
| 6.2 Historic Environment | 30 |
| 6.3 Biodiversity Features | 34 |
| 6.4 Geodiversity Features | 43 |
| 6.5 Natural Processes | 44 |
| 6.6 Derelict, Vacant and Unused Land | 46 |
| 6.7 Strategic Open Space, Open Areas, and Recreational Areas | 46 |
| 6.8 Connectivity | 46 |
| 7 Issues and Opportunities | 50 |
| 7.1 Landscape | 50 |
| 7.2 Historic Environment | 50 |
| 7.3 Biodiversity | 50 |
| 7.4 Climate Change | 50 |
| 7.5 Development | 51 |

| 7.6 Strategic Open Spaces and Recreational Areas | 55 |
|--|----|
| 7.7 Connectivity | 55 |
| 7.8 Strategic Green Infrastructure | 55 |
| 7.9 Healthy Lifestyles | 56 |
| 7.10 Flood Relief | 56 |
| 7.11 Existing Plans and Strategies | 58 |
| 7.12 Promoting healthier Lifestyles and Sustainable Travel | 58 |
| 7.13 Tourism | 58 |
| | |
| 8 Developing Strategic Green Infrastructure | 59 |
| 8.1 Identification of Priorities | 59 |
| 8.2 Green Infrastructure Guidelines | 60 |
| 8.3 The Strategic Green Infrastructure Network | 61 |
| | |
| 9 Implementation Plan | 62 |
| Appendices | |
| | |
| A Policy Review | 65 |

Contents

1 Introduction and Background

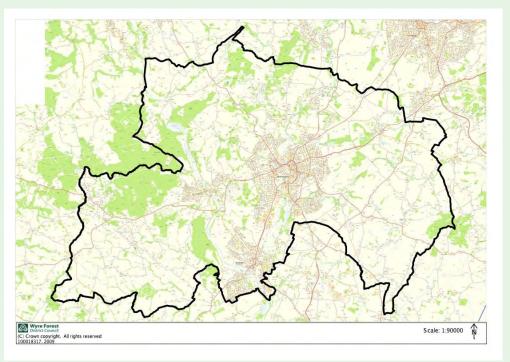
1.1 Introduction

- **1.1.1** Wyre Forest District is located in North Worcestershire and is made up of the three towns of Kidderminster, Stourport-on-Severn and Bewdley and the surrounding rural areas. The population of the District is approximately 98,700 (June 2008)⁽¹⁾, over half of whom (approx 56,000) live within Kidderminster, the District's main town. The three towns form a triangle within the District and are separated from each other by the West Midlands Green Belt.
- 1.1.2 The objective of this study is to map all existing areas of Green Infrastructure within Wyre Forest District and to identify the issues and opportunities relating to green infrastructure within the District. This study will then be further developed into a Green Infrastructure Strategy for the District which will set out proposals for the protection and enhancement of existing green infrastructure and the creation of further multi-functional green spaces and corridors in order to create a network of green infrastructure throughout the District. There will be a particular emphasis on the District's three towns and on linking them with each other and the surrounding countryside.
- 1.1.3 In order to progress the study further a Green Infrastructure Strategy will be developed (based on this study) which will set out a detailed plan for the delivery of a comprehensive network of Green Infrastructure across the District up until 2026. This network will be based on the inter-connection of existing green spaces across the District. The Green Infrastructure study will form a valuable aspect of the evidence base required to underpin the Local Development Framework(LDF). The LDF, particularly the Core Strategy Development Plan Document (DPD) and the Site Allocations and Policies DPD will act as the key delivery vehicle for any improvements identified.

Within Kidderminster, the Kidderminster Central Area Action Plan (KCAAP DPD) will help to deliver the Green Infrastructure Strategy as a central part of the regeneration process.

1.1.4 The sustainable regeneration of the District's two main town centres, Kidderminster and Stourport-on-Severn is a key objective within the LDF Core Strategy DPD. Green Infrastructure will play a key role in the delivery of this and could help to tackle issues such as climate change and promoting healthier lifestyles.

Wyre Forest District



http://www.neighbourhood.statistics.gov.uk

1.2 What is Green Infrastructure?

1.2.1 Although there are a number of definitions of Green Infrastructure available, it was considered most appropriate for this study to take its definition from the West Midlands Green Infrastructure Prospectus⁽²⁾ which states that:

"Green Infrastructure is the network of green spaces and natural elements that intersperse and connect our cities, towns and villages. It is the open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, street trees, natural heritage and open countryside. Green infrastructure provides multiple benefits for the economy, the environment and people.

Green infrastructure may also be seen as the life support system of an area; providing functions and environmental services to a community, such as employment, recreation, physical health and mental well-being, social interaction, contact with nature, drainage and flood management, climate change adaptation and pollution control. It may be considered the essence of local character and sense of place, the very heart of a community, or dear to the hearts of many thousands some distance away.

It spans administrative and political boundaries; it is publicly and privately owned, and it may be semi-natural or man-made in its origins. It may be green, brown or blue - think of canals, derelict land, woodlands in winter or ploughed fields. It may be wrapped around by houses, schools, factories and commercial properties.

In urban situations it complements and balances the built environment; in rural settings it provides a framework for sustainable economies and biodiversity; in between it links town and country and interconnects wider environmental processes". (3)

- **1.2.2** Local authorities already maintain a network of open spaces, however, this is often at the local level. Green Infrastructure planning looks at open spaces as a strategic resource. For this reason, green infrastructure planning is often carried out at the regional level. Within the West Midlands, consultants were commissioned by the West Midlands Regional Assembly to produce a Green Infrastructure Prospectus for the West Midlands which identifies the key issues and priorities to be addressed in green infrastructure planning across the West Midlands region. The Wyre Forest District Green Infrastructure Study will provide the local detail needed to take this concept forward. Green Infrastructure planning addresses many cross-cutting themes and issues and the delivery of the study will help to:
- Ensure development is of the highest quality;
- Safeguard landscape and townscape character and local distinctiveness;
- Achieve the local and national Biodiversity Action Plan objectives and targets;
- Promote healthy lifestyles;
- Adapt to an already changing climate as well as mitigating against further changes.
- **1.2.3** All of these themes are central to sustainable development and are key issues for the LDF to address.

² Green Infrastructure - A prospectus for the West Midlands Region, WMRA

³ Green Infrastructure - A Prospectus for the West Midlands Region, WMRA

Introduction and Background

Green Infrastructure Background

- 1.2.4 Green Infrastructure has always been a consideration within Planning Policy, but not necessarily under this phrase. The current Wyre Forest District Adopted Local Plan (2004) contains a number of policies to safeguard and enhance open spaces and the wider natural environment, which form an important element of the network. The Adopted Local Plan (2004) also has policies to protect and enhance the historic environment. It is not just the Adopted Local Plan (2004) that provides a good starting point for considering green infrastructure. There are a number of plans/policies and studies which can be utilised to create a holistic picture of Green Infrastructure within the District. The most pertinent study to consider is the Wyre Forest District Open Space, Sport and Recreation Assessment (2008), which actually identified that a Green Infrastructure Study should be undertaken for the District. A number of other studies, including the Worcestershire Landscape Character Assessment, the Worcestershire Historic Landscape Character Assessment and the Worcestershire Habitat Inventory also provide an important baseline for consideration.
- **1.2.5** This Study will therefore seek to build on this existing information and will look to map the existing network of green infrastructure throughout the District and also identify opportunities to enhance sites and linkages between areas, especially links within and between the town centres and from the town centres to the wider countryside.

Green Infrastructure Strategy

1.2.6 This Study will provide the base information for considering Green Infrastructure within the District. This Study will provide the strategic vision, aims and objectives for future Green Infrastructure requirements. In order to realise the strategic vision of this Study a Green Infrastructure Strategy will subsequently be developed which will provide the delivery process for implementing the ideas and concepts of this Study. The recommendations

of this study and the focus of the Strategy will be delivered through the LDF, particularly the Site Allocations and Policies DPD and the KCAAP DPD which will allocate specific sites for specific uses.

Growth within the District

- 1.2.7 A key aspect of considering Green Infrastructure requirements is to understand the future demands for growth within the District. The levels of housing growth which the District needs to achieve are set out within the West Midlands Regional Spatial Strategy Phase Two Revision. The Panel Report from the Examination in Public was issued in September 2009. The Panel Report recommended that within the Wyre Forest District a total of 4,000 new dwellings would need to be built over the plan period (2006 2026). Additionally, the Panel recommended that a total of 44ha of employment land would be required within the District up until 2026.
- **1.2.8** The District Council is currently looking to accommodate the new growth on brownfield sites primarily within the existing urban areas of Kidderminster and Stourport-on-Severn. However, it may also be necessary to consider the release of small-scale greenfield sites in rural areas specifically to deliver affordable housing. Therefore, the context for developing Green Infrastructure through the plan-led system must take account of the proposed strategy for future development.

1.3 The Role of Green Infrastructure in Delivering Sustainable Development

1.3.1 The West Midlands Economic Strategy (WMES)⁽⁴⁾ sets out the desire for the Region "to maintain and enhance its attractiveness as a location in which people and businesses choose to invest, work, learn, visit and live". Environmental quality will play an important role in the achievement of this. A comprehensive network of Green Infrastructure, made up of high quality green spaces and other environmental features will make the District a more

⁴ Connecting to Success, Advantage West Midlands, December 2007

attractive place to live and should help to attract businesses to the area. The strategic enhancement and development of green infrastructure will enhance the 'liveability' of the District, as well as promoting healthier lifestyles.

- **1.3.2** The Regional Sustainable Development Framework (RSDF) ⁽⁵⁾ sees economic growth, social cohesion and environmental protection as being developed hand-in-hand. New growth provides an opportunity to embrace sustainable development and to extend and enhance Green Infrastructure to complement and balance the built environment, link wider environmental processes and deliver a high quality of life for all.
- **1.3.3** The West Midlands Green Infrastructure Prospectus identifies a number of economic benefits associated with green infrastructure. These are set out below:
- It provides climate change mitigation and adaptation, for example flood alleviation and micro-climate attenuation.
- Increases property and land values.
- Helps attract and retain people ensuring stable populations and labour supply.
- Provides opportunities for education and training, including lifelong learning for adults.
- Delivers urban and rural policy, renaissance and regeneration objectives through robust and cost-effective means.
- Sustains environmental tourism providing employment opportunities and boosting local economies.
- Provides an inspiring setting for economic growth and investment.
- **1.3.4** A wider selection of benefits of green infrastructure and details of how these relate specifically to Wyre Forest District are set out later in this document.





⁵ A Sustainable Future for the West Midlands - West Midlands Regional Sustainable Development Framework, Version Two, Sustainability West Midlands (July 2006)

2 Vision, Aims, Objectives and Key Benefits

2.1 Vision to 2026

Green Infrastructure Vision:

In 2026 a comprehensive network of green infrastructure will have been created across Wyre Forest District linking the three towns of Kidderminster, Stourport-on-Severn and Bewdley to each other and to the surrounding open countryside. New residential, commercial and industrial developments will have contributed towards the delivery of green infrastructure and this will have delivered a range of benefits for the District's residents and visitors. The District will be a more attractive place to live, work and invest.

Local biodiversity will have been enhanced particularly the three principal habitat types: woodland, wetland and heathland; open spaces and green corridors will have been developed, leading to enhanced recreational opportunities, improved walking and cycling routes and lower obesity levels.

In Kidderminster, the River Stour will have been opened up as part of the town centre's regeneration and will form a green corridor and be home to a number of the District's protected species. The Staffordshire and Worcestershire Canal will continue to provide pedestrian and cycle linkages through the town and onto Stourport-on-Severn and the surrounding rural areas. Kidderminster will be an attractive town with street trees and green roofs helping to enhance biodiversity and reduce the impacts of climate change, including surface water run-off and the urban heat island effect.

Stourport-on-Severn will be enhanced to provide strong linkages between open spaces along the riverside and around the canal basins. The riverside itself will have been transformed into a diverse open space which provides opportunities for outdoor events, recreation and play, biodiversity, leisure walks, and cycling.

Bewdley will continue to develop as a thriving riverside town, attracting tourists all year round. The town will retain and develop strong links with the Wyre Forest itself, particularly by exploiting the opportunities that the forest offers for biomass. The town will retain its traditional riverside green infrastructure and a community orchard will be developed within the town.

In the District's rural areas, key sites such as the Wyre Forest itself will continue to provide recreational opportunities alongside the other significant benefits of green infrastructure. Walking and cycling links will be enhanced between rural sites and the District's three towns.

2.2 Aim of the Study

2.2.1 The green infrastructure study has been prepared to raise the profile of green infrastructure and to ensure that it becomes embedded within the planning policy for the District. By bringing together details of the existing green infrastructure network and identifying green infrastructure opportunities, the study provides the basis for preparing a green infrastructure strategy which will provide a detailed delivery plan for achieving a comprehensive network of green infrastructure across the District. Together, the study and the strategy will provide the context for LDF documents including the Core Strategy DPD and the Site Allocations and Policies DPD.

2.3 Objctives of the Study

The objectives of this study are:

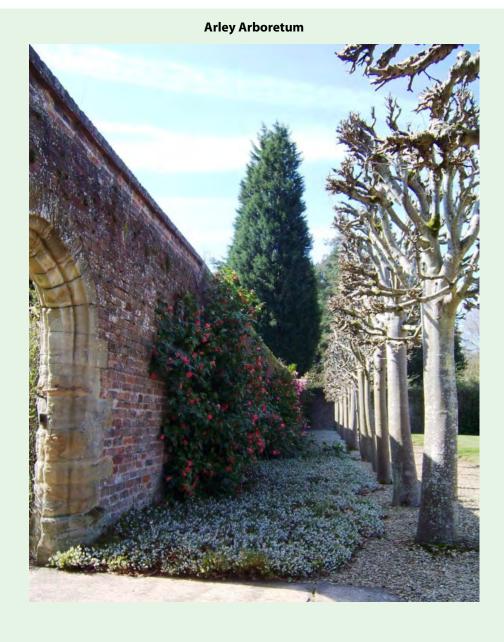
- To understand and set out the policy background to green infrastructure.
- To establish the vision, aims and objectives for green infrastructure across the District.
- To establish a methodology for the Green Infrastructure Study.
- To identify and map the key attributes which contribute to green infrastructure within the District.
- To identify issues associated with green infrastructure provision and identify opportunities to address these.
- To identify gaps in green infrastructure provision across the District.

2.4 Benefits

- **2.4.1** A well-planned strategic network of green infrastructure will offer a number of benefits for the District:
- Active lifestyles green infrastructure will raise the profile of green space and provide enhanced opportunities for sport and recreation
- Biodiversity enhancement enhancing linkages will provide valuable nature corridors and help to sustain and enhance biodiversity.
- Carbon reduction/carbon sinks greenspaces absorb CO₂ reducing the District's contribution to climate change. Greenspaces can also help to mitigate the urban heat island effect and trees can provide shade in warmer summers.
- More attractive environment leading to increased inward investment enhancing the attractiveness of the urban environment by providing high quality green spaces and linkages will make the District more attractive to inward investment. Regeneration is a key issue in the

- traditional carpet manufacturing towns of Kidderminster and Stourport-on-Severn. Part of the District also falls within the Rural Regeneration Zone.
- Enhanced community pride a more attractive environment will lead to enhanced community pride.
- Enhanced walking and cycling provision/opportunities enhancing green linkages will provide opportunities for attractive cycle and pedestrian routes away from main roads. This could lead to increased numbers of people walking and cycling to work and walking and cycling for recreational purposes.
- Opportunities to recreate/manage landscapes providing opportunities to safeguard, enhance and recreate elements of the historic landscape. The Forest of Wyre has secured funding for a £3.8million project, Grow with Wyre. The project is an amalgamation of a number of schemes which aim to improve the natural environment of the forest.
- Flood alleviation safeguarding the natural floodplain, reducing run-off through safeguarding green spaces. This is particularly important for Wyre Forest District as all of the three main towns have rivers flowing through them and suffer from some degree of flooding.
- Ecosystem Service these are the services which natural ecosystems provide to humans. There are four types of ecosystem services:
 - Provisioning including providing food and energy
 - Regulating including climate regulation, cleaning of air and water, and crop pollination
 - Supporting including nutrient dispersal and cycling, and seed dispersal
 - Cultural including recreational experiences and scientific discoveries.
- Strengthening the tourism economy enhancing the attractiveness of the environment will lead to an increased number of visitors. Tourism makes a substantial contribution to the District's economy and employs

- 3,600 people (10.5% of the workforce) within the District ⁽⁶⁾. A high quality environment is vital to sustaining the tourism element of the local economy.
- Opportunities for improved education/lifelong learning Educational attainment in Wyre Forest District is comparatively low within the County; therefore, this is particularly important.



⁶ Wyre Forest District LDF Annual Monitoring Report, 2009

3 Methodology

3.0.1 This section sets out the approach taken to developing the Green Infrastructure Study. The methods used to research and prioritise green infrastructure within the District include a review of current plans and guidance; and an amalgamation of all existing data related to green infrastructure. The information has then been used to identify issues and opportunities for the District's green infrastructure network and some guidelines for developing new green infrastructure. Each of these elements is described in more detail below.

3.1 Establising the Scope of the Study

3.1.1 The initial stage involved setting out the scope and parameters of the study and establishing the methodology. The key consideration at this stage was the level of detail which would be included within the Green Infrastructure Study and how this would then be developed into a Green Infrastructure Strategy to enable the delivery of a comprehensive network of green infrastructure.

3.2 Plan Review

3.2.1 The plan review involved reviewing a large number of plans, policies and programmes at national, regional, County and District level in order to identify proposals and opportunities of relevance to the Green Infrastructure Study. This information was collected mainly via an internet search but also drew on information collected for the Sustainability Appraisal review of plans, policies and programmes. This identified a large number of issues for consideration within the Green Infrastructure Study. The full results of this exercise can be found at Appendix A.

3.3 Establishing the Existing Green Infrastructure Resource

3.3.1 One of the main objectives of the study is to map the existing green infrastructure network within the District. This is made up of a number of elements and each element was mapped and analysed individually. The Green Infrastructure Strategy will take this a stage further by identifying gaps in the strategic green infrastructure network and identifying how these gaps can be addressed and where connectivity can be improved. The Strategy will set out how the vision will be delivered.

3.4 Identifying Issues and Opportunities

3.4.1 The issues and opportunities set out within the study have been identified from the research undertaken into green infrastructure and the mapping of green infrastructure within the District. Green infrastructure is associated with a large number of benefits and the issues and opportunities identified begin to consider how Wyre Forest District can ensure that its green infrastructure network delivers the benefits identified.

3.5 Establishing Strategic Green Infrastructure Guidelines

3.5.1 The Strategic green infrastructure guidelines set out within this study have been developed from the information gathered on the background to green infrastructure, the existing green infrastructure network within Wyre Forest District and the issues and opportunities that exist for green infrastructure within Wyre Forest District. The guidelines set out are strategic guidelines and as such are not specific to sites, areas or individual elements of the green infrastructure network. Further, more detailed green infrastructure guidelines will be developed as part of the Green Infrastructure Strategy.

The Context and Framework for Green Infrastructure Planning

4 The Context and Framework for Green Infrastructure Planning

4.0.1 There are a number of national, regional and local strategies, policies and guidance documents which provide a context for green infrastructure planning. Some of the most relevant are summarised in this chapter. Further detail on the policy context for the Green Infrastructure Study is set out at Appendix A.

4.1 National Policy

- **4.1.1** The most relevant national Planning Policy Guidance (PPG) Notes and Statements are Planning Policy Statement (PPS)1: Delivering Sustainable Development, and its Supplement: Planning and Climate Change, and PPG17: Planning for Open Space, Sport and Recreation. PPS1 and its supplement consider the wider role of green space in terms of addressing climate change, improved health, and rich biodiversity and require authorities to promote a mix of uses in new development including green spaces. It is here that the requirement is also set for planning authorities to consider better access to open spaces and conservation of biodiversity when drafting DPDs.
- **4.1.2** PPG17 sets the requirement for Authorities to undertake an audit of existing open space provision across a number of typologies and to set quality, quantity and accessibility targets for the various typologies. These standards should then be applied to identify deficiencies. The guidance recognises the role of open spaces as 'green lungs' improving air quality and playing a vital role for nature conservation. It also recognises the wider role of open space in promoting social cohesion, supporting urban renaissance and rural renewal, promoting health and well-being and promoting more sustainable development.
- **4.1.3** By Design: Urban Design in the Planning System places a strong emphasis on the incorporation of green spaces into new development. It strongly advocates integrating new development into the existing landscape

to reduce its impact on nature and reinforce local distinctiveness. Successful places require a system of accessible open and green spaces which respect natural features.

- **4.1.4** The Countryside Agency's publication, "The Countryside in and Around Towns" looks at the urban fringe and the rural fringe, this constitutes around 20% of the country's total land area and is considered to be an over-looked resource. This land will often coincide with the Green Belt, however, whilst the Green Belt keeps the countryside open for recreation, biodiversity, agriculture and landscape enhancement, it is not the role of the Green Belt to improve the management of land. Therefore, The Countryside Agency argue that greater emphasis needs to be put on the positive use of land within the Green Belt. The land is identified as a valuable resource for biodiversity, recreation and health and well-being.
- **4.1.5** Health, Place and Nature identifies that obesity and obesity-related illnesses are increasing. There are identified links between proximity to green spaces, which can include anything from informal green space to the open countryside, and improved health. For example, those people living in areas with high levels of greenery are three times more likely to be physically active and 40 per cent less likely to be overweight or obese than those living in areas with low levels of greenery.
- **4.1.6** PPS9 requires plan policies to maintain, and enhance, restore or add to biodiversity and geological conservation interests and requires that LDFs should indicate the location of designated sites of importance for biodiversity and geodiversity, and identify any areas or sites for the restoration or creation of new priority habitats which contribute to regional targets, and support this restoration or creation through appropriate policies. The statement also highlights the biodiversity value of previously developed land and the need to maximise the integration of biodiversity into new developments.

- **4.1.7** Guidance on implementing the NERC Act specifically refers to the importance on incorporating green infrastructure into development plans to help deliver many of the social, economic and environmental benefits which are central to the concept of sustainable communities. Biodiversity by Design identifies a number of ecological, quality of life and economic benefits which stem from enhanced biodiversity, these include; reducing climate change adaptation and mitigation, including reducing the impact of flooding; social cohesion and improved health and well-being; and increased property values and decreased management costs associated with a self-sustaining landscape. It highlights the disconnection between urban environments and the natural environment and sets out measures to help people connect with nature.
- **4.1.8** PPS12 emphasises the importance of green Infrastructure in delivering sustainable communities. This PPS sets the requirement for Core Strategies to be supported by evidence of what physical, social and green infrastructure is required to enable the amount of development proposed within the area. The PPS also emphasises the importance of integrating green infrastructure into new development.

4.2 Regional Policy

- **4.2.1** The importance of green infrastructure within the West Midlands region has been recognised by the publication of 'Green Infrastructure A Prospectus for the West Midlands'. This document sets out a methodology for mapping green infrastructure and establishes three case studies from within the region. The prospectus promotes the joining up of green spaces to create a green infrastructure network and identifies a number of benefits of this. The document identifies the need to embed green infrastructure policies into RSSs and LDF.
- **4.2.2** The RSS for the West Midlands is currently under-going a Revision in three phases. Phase Two has undergone an Examination in Public a Panel Report was published in September 2009. Proposed changes are expected

to be published during early 2010. Phase Two includes a number of draft policies relating to green infrastructure and biodiversity. Policy SR2 is perhaps the most significant, requiring planning authorities to make provision for the full range of spatial requirements needed to create sustainable communities including the requirement for:

'a comprehensive green infrastructure network that provides the full range of environmental services, including mitigation and adaptation to a changing climate, accessible greenspace for walking and cycling, sport and recreation, health and wellbeing and protects, consolidates and enhances biodiversity and geodiversity, especially the Region's European sites, and its historic assets and landscape character'.

4.2.3 Policy QE4 focuses on the provision of greenspaces and requires that development plan policies should create and enhance greenspace networks, making specific reference to the importance of parks, footpaths and cycleways, river valleys, canals and open spaces in doing so, as well as identifying potential new linkages and linking greenspaces to the wider countryside.

4.3 County Policy

4.3.1 A number of documents exist at County level which will influence the green infrastructure study. The Worcestershire Sustainable Community Strategy sets out the priorities for the County under six different themes. These are reflected in the District Sustainable Community Strategy which will be discussed under District policy. A Better Environment for Today and Tomorrow is perhaps the most relevant to green Infrastructure. Priorities here include enhancing Worcestershire's countryside and urban greenspace and appropriate access to them while protecting the natural and historic environment. This has been considered a priority because Worcestershire's varied habitats; with species-rich grasslands and wetlands of particular significance for the County; rich built heritage, and diverse landscape. Improving Health and Well-Being has a close relationship with green infrastructure because providing a comprehensive green infrastructure

The Context and Framework for Green Infrastructure Planning

network provides people with the opportunity to walk, cycle and partake in physical recreation. The presence of high quality green spaces also improves quality of life.

- **4.3.2** The Biodiversity Action Plan for the County identifies a number of habitats and species which are directly relevant to Wyre Forest District. The action plan aims to safeguard and enhance key sites and promotes the linking of sites to allow species migration. The Geodiversity Action Plan aims to increase awareness of geodiversity and to increase its contribution to the tourist economy. This can be achieved through promoting green corridors as walking and cycling routes. The Local Transport Plan for Worcestershire also supports the idea of using green corridors to increase walking and cycling and reduce dependence on the private car.
- **4.3.3** The Countryside Access and Recreation Strategy identifies a range of different recreational activities available within the Worcestershire countryside including managed sites such as country parks, picnic sites and visitor centres, long distance walking routes, and miles of public rights of way. The study aims to provide opportunities for all members of the community, in ways which minimise damage to the landscape, geodiversity, the built environment, biodiversity, archaeological remains and the special environmental qualities of the countryside. The strategy also aims to promote activities such as walking and cycling in order to improve health and well-being within the County.
- **4.3.4** The County Council Landscape Character Assessment covers the rural area of the county, including rural areas of Wyre Forest District. The study identifies and describes 22 different landscape types, some of which can be found within Wyre Forest District. This study highlights that there are a number of distinctive landscape types within the District including wooded areas, riverside meadows, and farmlands. This gives the District a variety of green infrastructure opportunities.

4.4 District Policy

- **4.4.1** At the District level, there are a number of different plans, policies and strategies which are relevant to green infrastructure promotion and delivery. The Wyre Forest District Sustainable Community Strategy sets out a vision for the district and priorities under six key themes. The environment theme is the most relevant to the provision of green infrastructure and the vision for this theme aspires to provide "an accessible, attractive, enjoyable, healthy and wildlife-rich place to be, now and in the future". Enhancing biodiversity, safeguarding the landscape ad historic assets, and minimising climate change are also key parts of the vision. Protecting and improving the District's natural environment is a key priority within this theme. The vision for the health and well-being theme includes the aspiration to increase opportunities to undertake physical activity and increase healthy lifestyles.
- **4.4.2** The Wyre Forest District Adopted Local Plan (2004) includes a number of policies which are relevant to green infrastructure. These cover issues ranging from the safeguarding of greenfield land, preventing inappropriate development in areas of flood risk, conserving the landscape, particularly the Severn and Stour valleys, safeguarding heritage assets, protecting areas of nature conservation, safeguarding open space and promoting walking and cycling. Cycling is supported through the Wyre Forest District Cycling Strategy which seeks to promote cycling as a means of sustainable transport by creating a network of safe cycle routes. These policies will influence the LDF for the District.
- **4.4.3** Conservation Area Character Appraisals have been prepared for the majority of the District's Conservation Areas. These identify specific aspects of green infrastructure which contribute to the character of each of the areas. Specifically, the River Stour corridor and the canal towpath are important features within the Gilgal Conservation Area; the Churchill and Blakedown valleys are important within the Churchill Conservation Area; and the wooded landscape and pasture surrounding Upper Arley Conservation Area contribute to the area's distinct character. The Staffordshire and Worcestershire Canal

is a Conservation Area itself and an important piece of green infrastructure for the District. The Conservation Area Character Appraisal identifies the canal tow-path as a valuable pedestrian and cycle link. Trees and hedgerows are also important within many of the Conservation Areas, making a valuable contribution to the character of a number of the areas.

- **4.4.4** The Wyre Forest District Open Space, Sport and Recreation Audit makes a number of recommendations which are relevant to green infrastructure. Perhaps the most significant is the recommendation that Wyre Forest DC undertake a green infrastructure study to maximise linkages between green spaces and create a multi-functional network of open spaces across the District serving as an extension to the PPG17 audit. The study highlights specific area where new linkages should be sought and identifies that the Wyre Forest District, because of its rural nature, lends itself to the provision of linear corridors which link open spaces and settlements together. Green corridors emerged as a popular typology through the study, and therefore, it is recommended that the District Council enhance and develop pathways along green corridors.
- **4.4.5** The other evidence base studies being undertaken to support the LDF will have an influence on the Green Infrastructure Study. The Strategic Flood Risk Assessment study categorises the District's flood zones according to PPS25. The study also looks at the impacts of climate change on the flood zones and anticipates where they will be in 80 years time. The Strategic Housing Land Availability Assessment looks at all of the sites which could potentially be used for residential development and assesses them against a number of sustainability criteria. The study also looks at the biodiversity value of sites, including brownfield sites. It is currently envisaged that most of the District's growth will be accommodated on brownfield sites.

Staffordshire and Worcestershire Canal and River Stour, Kidderminster



5 The Future Development of the District

5.0.1 This section sets out the levels of development which are expected to take place in Wyre Forest District up until 2026.

5.1 Regional Spatial Strategy

5.1.1 Phase Two of the RSS revision underwent an Examination in Public during Summer 2009. The Panel Report was published in September 2009. This RSS, once adopted, will identify the residential and employment targets for the District and retail and office development targets for Kidderminster, the District's strategic centre. The Preferred Option allocates Wyre Forest District 3,400 dwellings to be completed between 2006 and 2026; the Panel Report recommends increasing this to 4,000. The District will also be required to provide 33ha of employment land during this time. Within Kidderminster, 25,000 sq m of retail floor space will be required between 2006 and 2021, and a further 10,000 sq m will be required between 2021 and 2026. The scale of office development required is 40,000 sq m which is to be allocated within or on the edge of Kidderminster town centre.

5.2 Local Development Framework

5.2.1 The LDF is a series of documents which together will set out the planning policy for the District, eventually replacing the Adopted Local Plan (2004). The District Council is currently preparing three Development Plan Documents (DPDs): Core Strategy, Site Allocations and Policies and Kidderminster Central Area Action Plan. The Core Strategy will set out the strategic policy for the District and is considered in further detail below. The Site Allocations and Policies DPD will allocate specific areas of land for specific types of development and areas for environmental protection. The Kidderminster Central Area Action Plan DPD will deliver the regeneration of Kidderminster Town Centre and will allocate sites for particular uses within its boundary.

Core Strategy DPD

- **5.2.2** The Core Strategy DPD will set out the strategic development policy for the District up until 2026 and identify broad areas where growth will be located. The Publication Core Strategy sets out the spatial strategy for the District, directing residential growth to brownfield sites primarily within Kidderminster and Stourport-on-Severn. Limited growth will take place in Bewdley and the rural areas in order to meet local housing needs. Greenfield land will be safeguarded from development and the strategy will provide an opportunity to regenerate derelict sites within the towns. The biodiversity value of brownfield sites has been considered on a site-by-site basis through the Strategic Housing Land Availability Assessment.
- **5.2.3** The Publication Core Strategy sets out core policies for a number of other areas relevant to green infrastructure including sustainable transport, sustainable development standards, water management, landscape character, green infrastructure, biodiversity and geodiversity, and design quality/local distinctiveness. It is clear from this list that green infrastructure is a cross-cutting theme within the Core Strategy DPD and this Green Infrastructure Study has been used to inform the development of the Publication Core Strategy.
- **5.2.4** The Green Infrastructure Study will be developed into a Green Infrastructure Strategy and this will be used to inform the Site Allocations and Policies and Kidderminster Central Area Action Plan DPDs.

Broadwaters Park



Broadwaters Park



6 The Existing Green Infrastructure Resource

6.0.1 The existing green infrastructure resource of Wyre Forest District can be grouped into a number of categories:

- Landscape designations
- Biodiversity features
- Geodiverstiy features
- Historic Environment
- Derelict, vacant and unused land
- Strategic Open Space, Open Areas, and Recreational Areas
- Connectivity

6.1 Landscape

6.1.1 The District has a number landscape which designations are relevant green to infrastructure. The landscape designations which exist within the District are all discussed in greater detail within this section. The section includes classifications by Natural England and by Worcestershire County Council.



Churchill

Natural England Classifications

Natural Areas

6.1.2 The following is an extract from Natural England's website which provides a definition of Natural Areas:

Natural Areas - Definition (7)

Natural Areas are sub-divisions of England, each with a characteristic association of wildlife and natural features. They provide a way of interpreting the ecological variations of the country in terms of natural features, illustrating the distinctions between one area and another. Each Natural Area has a unique identity resulting from the interaction of wildlife, landforms, geology, land use and human impact.

Natural Areas have been formally defined as 'biogeographic zones' which reflect the geological foundation, the natural systems and processes and the wildlife in different parts of England, and provide a framework for setting objectives for nature conservation (8).

The purpose of this approach is to provide a wider context for nature conservation action. Natural Areas take into account not only the wildlife and natural features of the landscape, but also the views of the people who live and work there. Thus we have incorporated a sense of place into these areas and their descriptions. Natural Areas help us to set objectives, define national priorities and local targets, and decide where in England resources should be focused to best effect. A result of this is that national targets can be converted into local action, helping us and others to 'think globally and act locally'. The instigation of local action by local people is a key ambition of the Natural Area approach.

⁷ http://www.naturalareas.naturalengland.org.uk/Science/natural/role.htm

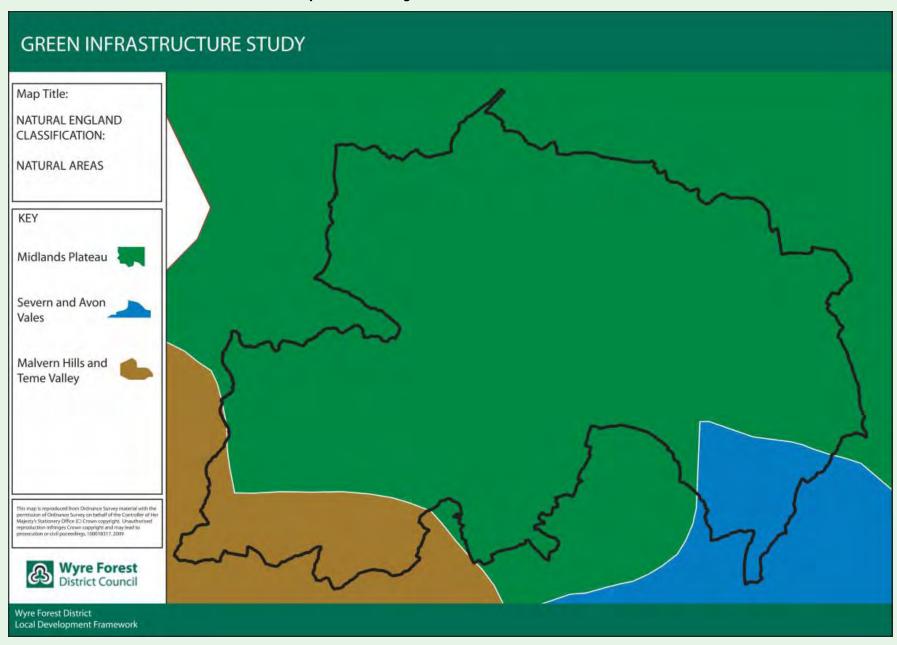
⁸ Biodiversity: The UK Steering Group Report, HMSO, 1995

The Existing Green Infrastructure Resource

Natural Areas provide a consistent, ecologically coherent countrywide framework to focus national targets to a level that can be used locally. Examples of their use include their role as a means to target the Countryside Stewardship scheme, administered by DEFRA, and the breakdown of national targets or priorities, such as those set out in the Biodiversity Action Plan and the Habitats Directive, to a more local Natural Area level.

- Natural Area. The area comprises three landscape character areas, with Wyre Forest lying within the Mid-Severn Sandstone Plateau. The Rivers Severn and Stour are key features of this area, they have carved deep valleys through an area which is otherwise open, rolling and wooded. The Forest of Wyre is another important landscape feature within this area. The major types of habitat present within the Midland Plateau are heathland, woodland and associated grassland. Heathland is specifically important within the District which has a significant amount of heathland habitats including Devil's Spittleful. Broadleaved woodland is also found within the District, particularly the Wyre Forest itself. Grassland is also present within the District, specifically acid grassland which can be found in the Sutton Park area of Kidderminster.
- **6.1.4** A large variety of habitats exist within the Midlands Plateau area. These include those found along canals, roads and rail lines, which provide corridors allowing wildlife to travel through urban areas; public open space; gardens, which can be very species rich; and redundant industrial sites. There are also a large number of smaller, niche habitats within the urban areas of the District. In the rural areas, there has been a shift towards large arable fields with crop monocultures which has probably been the biggest single factor in the decline of species and habitats.
- **6.1.5** Natural England have devised the following objectives for the Midlands Plateau Natural Area which will be important in green infrastructure planning across the District:

- To prevent further loss and degradation of all semi-natural habitats within the Natural Area, and to enhance and expand the most important and characteristic types such as rivers and streams, wetlands, heathland, woodland, and neutral and acidic grasslands.
- To enhance the nature conservation value of the wider countryside and urban areas to restore degraded areas whilst retaining the essential character of the Natural Area.
- To maintain and expand the populations of internationally and nationally important species, together with key species which are characteristic of the Natural Area
- To maintain the geological and geomorphological features of the Natural Area for future research and enjoyment.
- **6.1.6** These four objectives can be summarised into four conservation themes; the re-instatement of large tract wildlife sites; consolidation of a network of protected and acknowledged wildlife sites; multi-functional green networks; and incorporation of wildlife habitats into wider activities.
- **6.1.7** Four visions have been developed for the area to aid the implementation of the conservation themes. The first vision is specific to the Wyre Forest itself which contains a variety of wildlife and has the potential to further diversify. Further visions aim for every citizen within the Midlands Plateau to live within 300m of an accessible natural greenspace which forms part of a network allowing people and wildlife to travel freely through urban areas and into the countryside and to achieve sustainable development.
- **6.1.8** The other two Natural Areas that exist within the Wyre Forest District are the Malvern Hills and Teme Valley Natural Area and the Severn and Avon Vales Natural Area.



Map 6.1 Natural England - Natural Areas Classification

Green Infrastructure Study (January 2010) 19

Landscape Character Areas

6.1.9 Natural England have also split the country up into Landscape Character Areas. The background to these areas is explained further in the box below:

Landscape Character Areas - Definition

Put simply, landscape character is what makes an area unique. It is defined as a "distinct, recognisable and consistent pattern of elements, be it natural (soil, landform) and/or human (for example settlement and development) in the landscape that makes one landscape different from another, rather than better or worse".

Why is Landscape Character Important?

We can only make informed and responsible decisions on the management and planning of sustainable future landscapes if we pay proper regard to their existing character. By understanding how places differ we can also ensure that future development is well situated, sensitive to its location, and contributes to environmental, social and economic objectives.

- **6.1.10** The Landscape Character Area comprises four landscape divisions, of which the District falls predominantly into the Mid-Severn Sandstone Plateau. The key characteristics of this area are:
- Rolling landform with open, arable cultivation dominating an often weak hedgerow pattern.
- Prominent urban fringes.
- Contrasting areas of smaller fields, and mixed field pattern with more distinctive hedgerows in west.
- Parklands and estate conifer and deciduous woodlands.

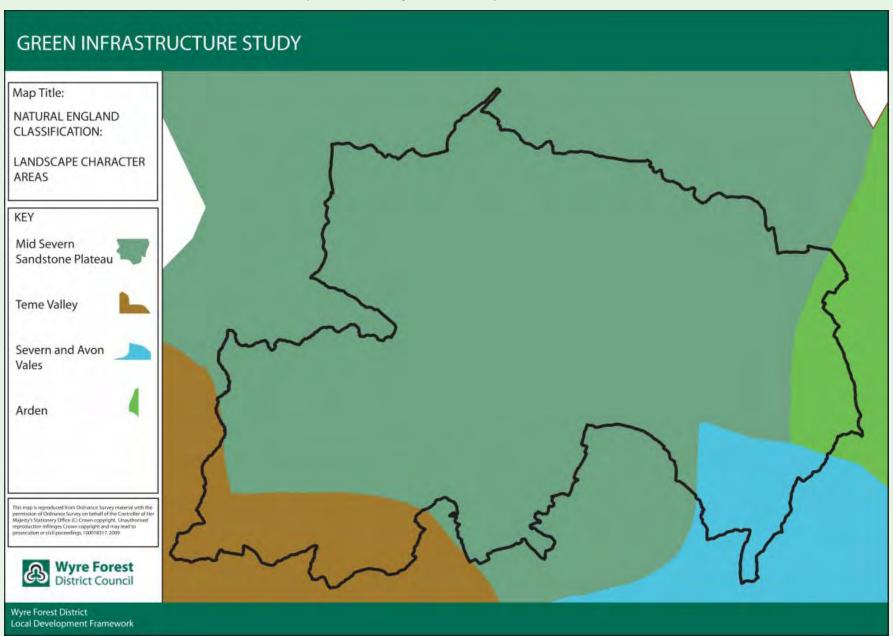
- Patches of heathland.
- Extensive mixed woodland together with scattered mining and forest edge housing forming distinctive Wyre Forest landscape.
- Stour and Severn valleys with frequent villages and historic bridging towns.
- Narrow, steep-sided wooded dingles found throughout the area.
- Steep, wooded gorges of the Severn Valley.
- Coalfield remnant landscape along the Severn Valley.
- The Staffordshire and Worcestershire canal an important man-made feature.

River Severn



- **6.1.11** The other Character Areas which exist within the District are the Teme Valley, Severn and Avon Vales, and Arden.
- **6.1.12** The map below shows Wyre Forest District and the Natural England Natural Area boundaries. Further information on the biodiversity characteristics of this resource is set out in the following 'biodiversity features' section.

Map 6.2 Natural England - Landscape Character Areas



Green Infrastructure Study (January 2010)

Worcestershire County Council Classifications

Regional Character Areas

6.1.13 The Regional Character Areas that exist within the County generally equate with those identified in the national programme of Countryside Character undertaken by the Countryside Agency. The greater degree of detail that can be gained from a county as opposed to a national character assessment enables the boundaries of these areas to be defined more accurately and, where appropriate, to further subdivide them. Regional Character Areas define areas of physiographic and cultural identity at a very broad brush level of detail, invariably transcending the administrative boundaries of local authorities and so creating a regional and national framework within which the finer scale of evaluation at County level can take place. The Regional Character Areas have been used primarily by the County Council to provide a simple geographical framework within which to present the range and distribution of Landscape Types in a comprehensive manner.

Landscape Character Assessment

6.1.14 Worcestershire County Council have undertaken a Landscape Character Assessment covering the rural areas of the County. Landscape Character Assessment is a tool for identifying the features that give a locality its 'sense of place' and is used to sub-divide the landscape into areas of similar character. At a county level the Worcestershire Landscape is further broken down into Landscape Description Units (LDUs). These are the building blocks of the landscape and are determined by analysing maps of geology, topography, soils, tree cover character, land use and settlement pattern. Nesting within these are the smallest units of landscape character - Land Cover Parcels (LCPs). These describe any local variation that is present within the LDUs.

6.1.15 The process of Landscape Character Assessment identifies commonalities in landscapes, recognising repeating patterns of natural and cultural attributes that reflect how geographically separate areas have evolved in a similar way. This allows this information to be classified into **Landscape Types.** Unlike the landscape units described above, which are all unique and describe specific areas, Landscape Types are generic and may occur anywhere in the country where the same combinations of physical and cultural landscape attributes occur. The Landscape Types that exist within the Wyre Forest District are discussed further below.

Landscape Character Types

6.1.16 The work undertaken by Worcestershire County Council identifies 22 different landscape types which occur across the County. The character types that exist within the Wyre Forest District are as follows:

- Principal Wooded Hills: Found around the Kingsford/Kinver area, these are wooded landscapes with a sloping, steeply undulating topography often on the edge of higher ground. The woodlands are large, irregularly shaped and of ancient character, and, in combination with wooded streamlines, form an interlocking pattern of tree cover. The steepness of the slope has prevented the land being used for agriculture. These areas have retained significant cover of ancient semi-natural woodland, where slight clearances have taken place, the fields tend to be pastoral.
- Wooded Forest: landscape type is represented by the Wyre Forest itself.
 It comprises of woodland of ancient character and has short distance
 views. The relative lack of settlement relates to there being no prolonged
 agricultural activity, there are scattered cottages which relate to
 occupations linked to the woodland. The woods are of ancient character,
 and the impoverished soils give rise to a heathy/acid grassland ground
 vegetation, the whole wooded landscape being one of notable nature
 conservation interest.
- **Forest Small Holdings and Dwellings:** Occurs solely around the fringes of the Wyre Forest, this is an intimate, densely settled landscape

The Existing Green Infrastructure Resource

- characterised by strings of wayside cottages and associated smallholdings. The hedgerows often have significant associated tree cover and provide an important structural element to the landscape.
- Timbered Plateau Farmlands: Located principally in the north-west of thecounty this is a varied agricultural landscape of hedged fields, scattered farms.

 Riverside Meadows, Stourport-on-Severn
 - scattered farms, woods and wooded valleys associated with upstanding areas of undulating relief. The undulating topography tends to bring the organic pattern of woodland and hedgerows into greater prominence.
- Principal Timbered
 Farmland: Covers
 only small areas
 within Wyre Forest.
 These are small to
 medium
 scale,wooded
 agricultural
 landscapes,
 characterised by
 filtered views
 through densely

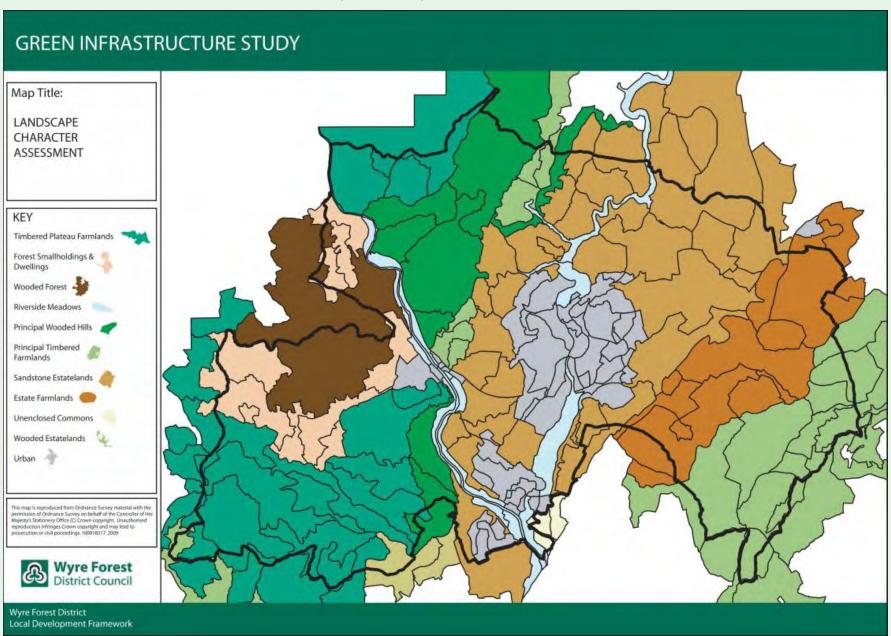


scattered hedgerow trees. The irregular outline of many of the woodlands and hedgerows, together with the winding pattern of lanes, contributes to the overall organic character of these landscapes.

- Sandstone Estatelands: Covers a large area of the District. These are open, rolling landscapes characterised by a strong, regular pattern of large, arable fields, straight roads and estate plantations. Fields are typically defined by straight, single species hedgerows, usually of thorn, reflecting the late enclosure of much of this landscape. The field pattern provides the overall unity of this landscape. These are areas of arable cultivation, the presence of gorse and bracken reflecting the sandy nature of the soils.
- **Estate Farmlands:** Similarities with Sandstone Estatelands, the landscape is dependent upon an ordered pattern of fields and woodlands to provide its structure and scale but lacks the strong geometric structure of Sandstone Estatelands. Specimen trees and other features provide distinctive visual punctuation to these landscapes.
- **Principal Settled Farmlands:** These lack a strongly defined nucleated settlement pattern. The field pattern tends to be of a sub-regular nature, suggesting early enclosure of the areas of open field.
- Riverside Meadows: These landscapes border the main rivers. They
 are linear landscapes associated with flat, generally well-defined alluvial
 floodplains, in places framed by steeply rising ground. These are
 secluded, pastoral landscapes, characterised by meandering, tree-lined
 rivers. These landscapes are often used for seasonal grazing which has
 provided a strong sense of visual and ecological unity.
- Unenclosed Commons: Exists within only a small pocket of the District to the east of Stourport -on-Severn. The area is categorised by a landscape offering tremendous variety of scale and size, the overriding characteristics being the lack of enclosure and, usually, a land use of rough grazing.

6.1.17 A map indicating all of the Landscape Character areas within the Wyre Forest District is available to view below

Map 6.3 Landscape Character Assessment



Green Infrastructure Landscape Condition Assessment

6.1.18 This Landscape Character Assessment work has been used to produce a Green Infrastructure Landscape Condition Assessment for the rural areas of the District which was based on three indicators: tree cover pattern, enclosure pattern and field boundaries. Each of the indicators has been assessed against the optimum state of that indicator for the relevant landscape type. The map below shows the Green Infrastructure Landscape Condition Assessment for Wyre Forest District. The map is displayed using a traffic light system: The condition assessment was then further refined by assessing the capacity of the landscape to accommodate builtdevelopment based on the settlement pattern of the landscape type. The map below show the Green Infrastructure Landscape Condition Assessment for Wyre Forest District. The maps are displayed using a traffic light system:

- Red for good condition (implying that development is most inappropriate here)
- Amber for moderate condition
- Green for poor condition

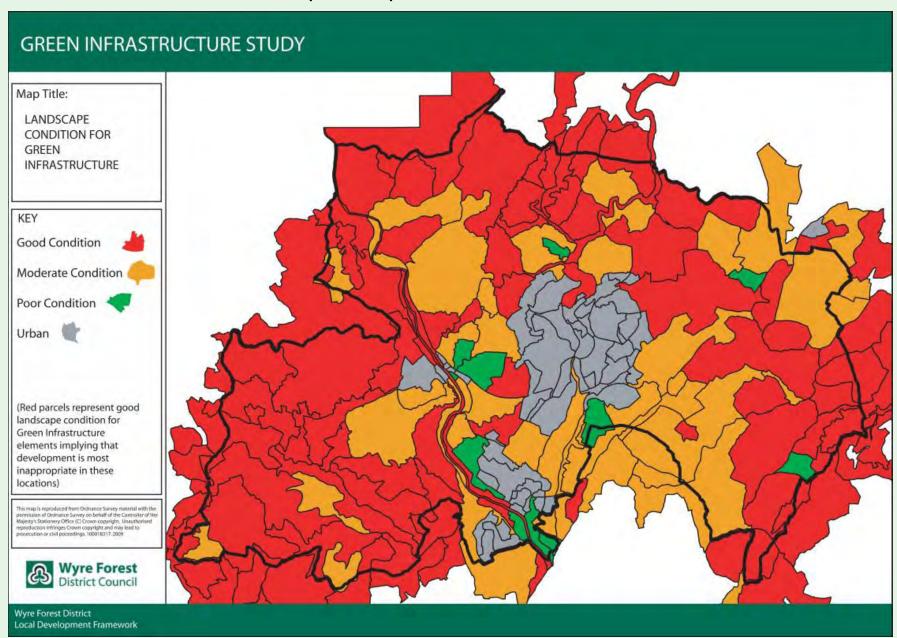
View from Churchill







Map 6.4 Landscape Condition for Green Infrastructure



Wyre Forest District Designations

Tree Preservation Orders

6.1.19 The District has a number of trees which are safeguarded by Tree Preservation Orders (TPOs). In addition to TPOs, all trees within Conservation Areas are offered a degree of protection by the Conservation Area status. The District's TPOs cover a wide range of both individual trees and groups of trees, ranging from Wassell Wood, Near Trimpley, to smaller groups of trees in residential gardens.

Green Belt

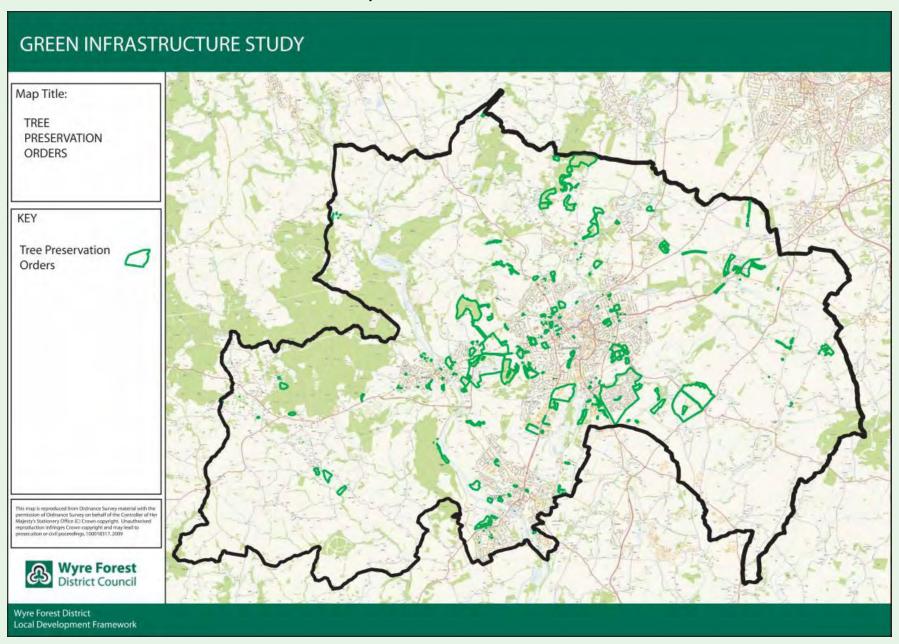
6.1.20 The West Midlands Green Belt separates the District from the Black Country conurbation. As such, approximately 56% of the District is covered by the Green Belt designation. In line with the purposes of Green Belt designations as set out within PPG2, it is possible to identify particularly important areas of Green Belt within the District. Kidderminster is surrounded by Green Belt. The areas of Green Belt which separate Kidderminster from Bewdley and Stourport-on-Severn, and the area which separates Stourport-on-Severn from Bewdley are particularly important in preventing the unrestricted sprawl of towns and in maintaining the unique character and identity of the three towns. A number of villages lie within the Green Belt to the east of Kidderminster, each having its own identity and character. The Green Belt designation prevents these villages from expanding and merging. The Green Belt designation also helps to increase access to the open countryside by safeguarding land from development.

- **6.1.21** The areas to the west of the River Severn were safeguarded through the Area of Great Landscape Value/Landscape Protection Area policies within the 2004 Adopted Local Plan. However, local landscape policies are being phased out and the LDF will therefore rely upon Landscape Character Assessments, as completed by Worcestershire County Council, to safeguard these areas from inappropriate development.
- **6.1.22** The maps below show the Tree Preservation Orders which exist within the District and the extent of Green Belt coverage within the District.

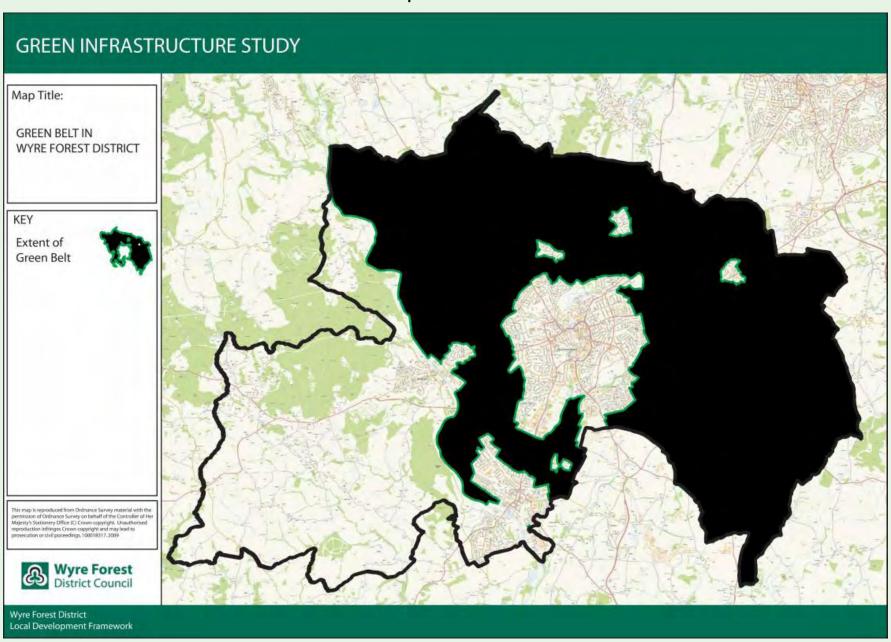
Green Belt at Broome



Map 6.5 Tree Preservation Orders



Map 6.6 Green Belt



Chaddesley Parish Design Statement

- **6.1.23** A village design statement has been prepared for the parish of Chaddesley Corbett which identifies the particular features about the area that contribute to its character and special attributes. The parish has a number of settlements, each of which retains its own identity and is surrounded by extensive open space. Chaddesley Woods represent an important feature of the parish. There are significant bodies of water within the parish which act as a haven for wildlife.
- **6.1.24** The parish is largely rural and the existing pattern of fields is a result of centuries of historical processes. The 1775 map of the parish shows a patchwork of relatively small fields, a number of greens and commons and woods. The enclosures that led to the development of these small fields probably took place over several centuries. The hedges which surround them rarely run in straight lines and are distinguished by the variety of trees contained within them. By 1838, the fields were relatively unchanged but the commons and greens have disappeared and a new range of fields characterised by straight hedges of quickthorn have replaced them. Dutch Elm disease caused the death of many hedgerow trees in the 1970s. The most significant change in the landscape in recent years has resulted from the loss of hedgerows caused by the demand for larger fields.
- **6.1.25** Up until the Second World War, many homesteads had their own orchards and these were an important landscape feature in the parish of Chaddesley Corbett, however, only one or two remains can now be seen. Further fruit orchards were established after 1945 but were neglected as they became uneconomic to maintain. More recently, further fruit orchards have been planted on a commercial basis on fresh sites.

- **6.1.26** There are a large number of public footpaths within the parish, covering varied terrain including meadows, woodland, agricultural and horticultural land, valleys and hills. Both Monarch's Way and The Royal Hunter's Way pass through the parish.
- **6.1.27** A series of ponds and brooks provide a natural habitat for amphibians, dragonflies and birds. They also create natural corridors for wildlife movement. Chaddesley Woods is a SSSI and an NNR and has its own unique and distinctive flora and fauna. The hedgerow networks provide a unique habitat for invertebrates and bird species and also provide a valuable wildlife corridor.

6.2 Historic Environment

Historic Landscape:

6.2.1 The District has a rich and varied historic landscape. At April 2006, there were six Grade I, twenty-five Grade II* and 661 Grade II lists entries on the statutory lists. This covers over 900 individual buildings and structures. These buildings and structures vary greatly in age and include cottages, farm buildings, country houses, carpet works, bridges and telephone kiosks. The district also has 9 Scheduled Ancient Monuments ranging from moated sites to hill forts. English Heritage also keeps a register of Parks and Gardens, which are considered to be of national importance. Arley House with its arboretum is the only registered park

St. George's Church



and garden in Wyre Forest District. The Hereford and Worcester Gardens Trust has also identified 31 other landscaped parks and gardens of interest within Wyre Forest District.

The Existing Green Infrastructure Resource

- **6.2.2** Worcestershire County Council are currently undertaking a County wide historic landscape characterisation study which aims to improve the understanding of the County's landscape. Historic landscape characterisation provides a clearer and more detailed understanding of how human activity has shaped the landscape. The project will map the historic landscape character for the whole of the County. The HLC project is staged and consists of data collection through mapping, analysis and interpretation, and the final report and dissemination of results. The HLC will reveal how Worcestershire has developed over time and how the past is present in today's landscape. The project will be completed during 2010.
- **6.2.3** The District has 16 Conservation Areas which cover the towns and a number of the rural settlements within the District. Greenspace is an important element within a number of conservation areas, including:
- Areley Kings Open fields, woodland, hedgerows and trees contribute significantly to the character of the Areley Kings Conservation Area.
 Woodland at Upper Arley



Upper Arley - The Conservation Area is surrounded by wooded landscape and pasture which adds to the character. Grass is important within the area. A number of open fields are important as are the park and gardens associated with Areley House. Trees are important within the area,

- notably at Arley Arboretum, the only Registered park and Garden within the District. The garden at Arley Station is also notable.
- Bewdley The River Severn is a key feature of the area and the town's rural setting is an important component to the character of the town and in turn the Conservation Area itself.
- Blakebrook This area contains an important area of open space and has a number of houses with large gardens often well-stocked with trees and hedges. The road is lined with mature lime tress which also adds to the character of the area.
- Church Street

 The banks of the River Stour provide a green element to the area.
- Gilgal Domestic gardens, the canal towpath and the River Stour have all been identified as having important trees within this area.
- Stourport-on-Severn No.1 The Conservation Area Character Appraisal identifies a number of open spaces which are important within Stourport-on-Severn. The canal basins are identified as being of particular importance to the historic character of the town.
- Stourport-on-Severn No.2 The two most important open spaces are Villeneuve-Le-Roi gardens and the War Memorial Gardens.
- Vicar Street The River Stour and its embankment are the only greenspace within the area.
- Staffordshire and Worcestershire Canal Trees are identified as a key component within the Conservation Area. The canal towpath is identified as being an important pedestrian and cycle link.
- Broome Greenspace is a particularly important feature of this conservation area, the area is centred around a green and a number of properties have large grounds.
- Chaddesley Corbett Trees are an important feature of this area.
- Churchill Trees are an important feature of this area, lining both banks of a stream passing through the area the banks of Forge Pool. The western boundary of the Conservation Area includes a small hill covered with a patchwork of fields, hedges and trees, and accessible via public footpaths, which forms an important backdrop to the hamlet.

The Existing Green Infrastructure Resource

- Harvington Trees are identified as a key component within the area.
 Open space associated with Harvington Hall is also considered to be important. Hedgerows are of importance within the area.
- Ribbesford The area includes some open fields which are important
 to its setting. An attractive avenue of horse chestnut trees lines the
 access road to the hamlet. The ground rises moderately steeply to the
 west of the area and is mainly wooded, providing an important green
 backdrop. The Worcestershire Way runs through the Conservation Area.
 Numerous trees add to the character of the area.
- Wolverley Trees and hedges are vitally important to the character of the area.





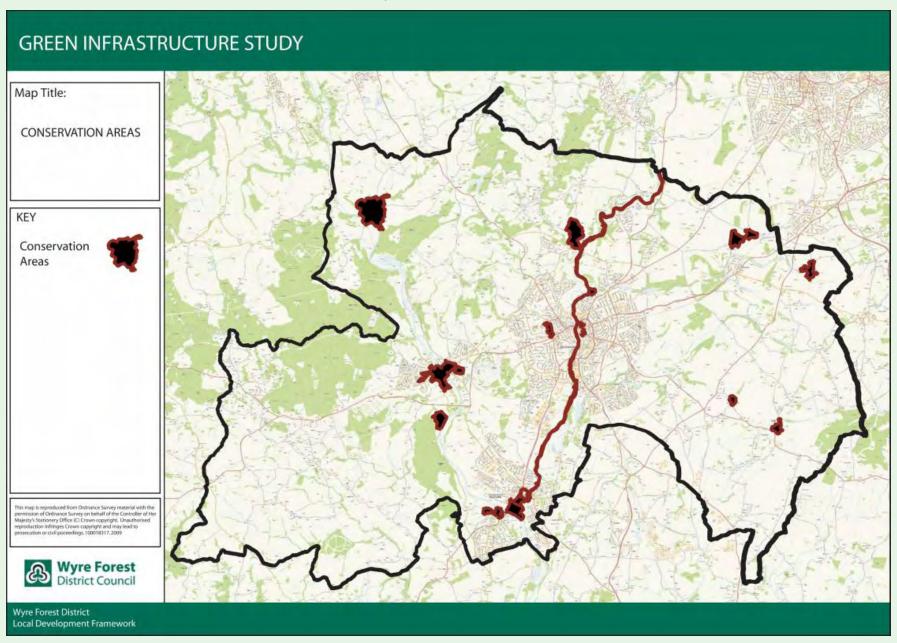
The garden attached to Wolverley House is significant. The following sites are within, adjacent or in close proximity to the Area and have been designated as Special Wildlife Sites: Gloucester Coppice, Wolverley Marsh, the River Stour and the Staffordshire and Worcestershire Canal. Bishop's Field a small marsh in the flood plain of the River Stour at Wolverley, is looked after by Worcestershire Wildlife Trust and hosts a variety of wetland flora and fauna.

6.2.4 The map below shows the District's Conservation Areas.

View into Chaddesley Corbett Conservation Area



Map 6.7 Conservation Areas



6.3 Biodiversity Features

Natural England Natural Areas

- **6.3.1** Natural England's Midlands Plateau Natural Area, as introduced in the landscape context chapter has been divided up into a number of sub-areas. Each has its own specific bio-diversity characteristics. Further information on these sub-areas is set out below:
- Freshwater features; rivers, streams, canals, reservoirs, pools, ponds and wetland: The River Severn is the District's largest river and the main water feature of the area. The section between Bridgnorth and Kidderminster has steep banks and tall herb communities on and above the banks which provide insect habitats. There are few natural habitats remaining within its floodplains with the typical land use being agriculture, leisure and tourism. The River itself is important for the BAP species otter and the club-tailed dragonfly. The River Stour has its confluence with the River Severn in Stourport-on-Severn and this major tributary supports some important wetland habitats of fen and marshes at Wilden Marsh, Puxton Marsh and Stour Vale. The canal system is the largest man-made water feature within the area. The canal further supports the wildlife value of the River Stour and here common species include: bur-reed, arrowhead, common water-plantain, flowering rush and gipsywort. A number of smaller tributaries flow into both the River Stour, including Hoo Brook and Blakedown Brook, the valleys of both support wet woodland habitats, the most important being the Hurcott and Podmore SSSI and woodland complex. Tributaries of the River Severn include Dick Brook, Gladder Brook and Dowles Brook which are important wetland corridors and are noted for supporting the white-clawed crayfish. Issues associated with water features include: water abstraction from rivers and groundwater, which threaten natural aguifers and the water table; wetland drainage and flood alleviation; restoration of natural floodplain, managed in an ecologically sensitive manner; recreation of wetlands; pollution of freshwater; construction of

surface water balancing lakes to aid storage of excessive flood waters reducing the need for extensive 'canalisation' and re-profiling of natural water courses; inappropriate river and wet grassland management detrimental to nature conservation; lack of appropriate management by neglect or over-intensification of riparian issues; recreational conflicts; restoration of navigable waterways, including threats to construct weirs on the Severn to provide recreational boating opportunities, and; the proliferation of non-native species to the detriment of native flora and fauna; loss of ponds.

Wildlife Shelter on the River Stour, Kidderminster



woodland within the Plateau include the Wyre Forest and Chaddesley Woods. The Wyre Forest itself is one of the three most important areas of ancient woodland within the country. The Wyre Forest is currently in the process of being reverted to 85% native broadleaf to increase the forest's biodiversity. Characteristic species include oak, ash, beech and birch and bluebell which epitomises the field layer. The dormouse is present in the Wyre Forest, as are adder, slow-worm, grass-snake, high

brown fritillary, pearl-bordered fritillary, and silver-washed fritillary. Some orchards remain along the boundaries if the Wyre Forest and these are important biodiversity resources for the District. Issues associated with broad–leaved woodlands include: fragmentation of woodlands; competing land uses; commercial forestry, nature conservation and recreation; neglect leading to unfavourable structure and the loss of open habitats and associated species; low demand for local timber products and the need to encourage the market for these commodities; best use of the opportunities presented by the forest creation initiatives; new planting, which can threaten other habitats, such as unimproved grassland and heathland, if carried out inappropriately; poor understanding of woodland and species management by some land/owners/managers with little or no concern for wildlife values; removal of shrub layer, under-sown with grass, followed by stock grazing; the control of invasive species, especially rhododendron and sycamore.

- for their ecological and landscape value. Heathlands were formerly the dominant landscape of the Plateau but have suffered a 90% loss over the last 200 years. Heather, bilberry, cowberry and common gorse, along with wavy-hair grass and purple moor-grass characterise the Midlands heaths. Heaths often support a number of species including the common lizard and adder frequent the heaths, as do birds, such as the skylark, tree pipit and linnet. Moths, grass-hoppers and dragonflies are also common. Issues associated with heaths include: uncontrolled burning of heather; restoration of heath and creation of secondary heathland; scrub and bracken encroachment; recreational pressures; development pressure; water level management on wet heaths, particularly water abstraction; fragmentation and isolation of heathland sites; atmospheric pollution; restriction of public access to the most sensitive sites.
- **Grassland:** Some of the most important areas of grassland within the Plateau are found in the Wyre Forest area, especially the grazed meadows along the River Severn. There are also important acid grassland habitats within the District. Issues associated with grasslands include: agricultural

improvement destroying the interest of old grassland; scrub encroachment; overgrazing, especially by horses; supplementary feeding of stock on species rich grassland; neglect and under-grazing, reducing diversity; decline of traditional management skills; small and isolated nature of important sites; development for agriculture, housing or industry and also planting up for forestry; tipping of refuse; drying-out through lowering of water table and direct drainage; greater recognition of the importance of species-rich road verges; issues related to common land, including the decline in traditional grazing and problems of public access.

• Farmland: The Midlands Plateau has a pastoral history and character, hedgerows are an important feature of the landscape. Hedges that remain are typically hawthorn or blackthorn and the best still retain their hedgerow trees which are typically oak or ash. These landscapes are also important to farmland birds. Issues for farmland include: opportunities for habitat diversification on farms; need for diversification and farm tourism; hedgerow protection; the impacts of pesticides, herbicides and fertilisers on wildlife.

Hedgerow in Harvington



- **Urban/Suburban Land:** The urban and suburban areas of the District include many gardens. Together these gardens form a large area of land. The ecological value of gardens varies but older gardens can support a rich wildlife population. Buildings can also support wildlife habitats, especially invertebrates and lichens. Species associated with urban/suburban areas include the fox, grey squirrel, a number of species of birds which fare well in gardens, frogs, bats and hedgehogs. Issues for urban/suburban land include: Lack of recognition of the wildlife and wider societal value of green spaces within urban areas; awareness raising of local communities to the natural green space or lack of it in their neighbourhood; need to balance the demands for brownfield development with those of wildlife. It should be noted that many of the District's heathland and wetland sites are situated adjacent to the urban areas. The urban environment can provide connectivity through gardens and green spaces as well as SuDS schemes. However, this close proximity does present a potential hazard to sites through inappropriate or damaging use by local communities. Education is therefore an important tool in protecting the District's biodiversity.
- Post-Industrial Sites: Many of the post-industrial sites across the Plateau
 have been colonised by important communities of flora and fauna.
 Issues for post-industrial sites include: such sites are frequently of
 ephemeral value, often as artificial soil pH is normalised and succession
 takes place; reclamation for various land uses, especially for housing and
 modern industry; development pressures, particularly on brownfield
 sites; recreational pressure; perceptions that these sites are of little or
 no value.

Worcestershire Biodiversity Action Plan

6.3.2 The Worcestershire Biodiversity Action Plan is a collection of Action Plans for each of the habitats and species which are identified as important within the County. A number of targets specific to individual habitats are relevant to this study:

- WFDC should also ensure local planning documents refer to the value of traditional orchards to wildlife, local landscape and public amenity and the need to protect and enhance them.
- Hurcott Pool and Woods is also identified as an important location for wet woodlands. WFDC should insure all wet woodland sites have a sustainable and achievable management plan in place and being implemented and use the development control system to secure, where possible and appropriate, section 106 agreements for the restoration or creation of wet woodland in suitable areas.
- Reedbeds also have a role to play in safeguarding the biodiversity of the
 District. WFDC should where appropriate demand the inclusion of
 Sustainable Drainage Systems within development plans that incorporate
 reedbeds as a component.
- In the urban Habitat Action Plan a target is set for WFDC to develop and publish a biodiversity SPD to include specific information on urban biodiversity and urban greenspace and to develop at least one demonstration site for best practice in urban biodiversity and or greenspace management / enhancement
- WFDC should also identify all priority / designated sites within urban areas within partnership organisation ownership or management and ensure appropriate management plans / strategies to promote and enhance biodiversity are prepared and implemented for each.
- Using the Urban Greenspace concept, identify priority areas for habitat restoration / creation in each urban area to maximise the connectivity of areas of semi-natural habitat across the urban landscape. Develop a strategy for each urban area for taking forward habitat creation/restoration on prioritised sites. Use the strategy to inform Greenspace work.
- Ensure the use of Sustainable Drainage Schemes in all new developments wherever practical and economic to do so.

The Existing Green Infrastructure Resource

- Where a culverted watercourse falls within the footprint of a development, the watercourse should be restored to a natural channel as part of the planning conditions.
- Include policies for the protection and enhancement of river corridors and floodplains in Local Planning Documents and Strategies and ensure these are implemented through the planning system.
- Species action plans set out action objectives relevant to individual species. Those relevant to this study include:
- Identify areas having the potential to link isolated Adder populations or buffer existing adder habitat.
- Hornet Robberfly; Twaite and Allis Shad; Black Poplar; Wood White; Grizzled Skipper - Ensure the species' requirements are included within appropriate local planning policy documents (e.g Biodiversity Supplementary Planning Document) and given due consideration during the development control decision-making process.

Biodiversity Designations

- **6.3.4** The District has a large number of biodiversity designations at a range of levels. SSSIs and NNRs are designated sites which are of national importance. Sites which lie within the District or straddle the boundary include:
- Chaddesley Woods NNR and Feckenham Forest SSSI This is a large semi-natural ancient woodland and species-rich unimproved grassland. Feckenham Forest is considered to be nationally important as an example of oak-dominated woodland. Chaddesley Woods NNR is a fine example of lowland English oakwood and includes species such as hazel, holly, ash and rowan
- Wyre Forest SSSI and NNR: This is one of the largest and most important ancient semi-natural woodlands in England and includes woodland, scrub, spring-line flushes, streams, grassland, and orchards. Wyre Forest

- is the most extensive area in England of lowland coppice oak comprised of the pedunculate oak-bracken-bramble and oak-birch-wavy hair-grass woodland types. The woodland flora contains elements of both southeast lowland and northwest upland woodlands; although predominantly acidic in character, it is modified by floristically rich base-rich flushes. The site is primarily drained by Dowles Brook and its tributaries flowing east into the River Severn. The soils are markedly acidic.
- Areley Wood SSSI: A large ancient semi-natural woodland which is the largest example of damp alder-oak woodland within the Midland Plateau Natural Area. The main drainage channel is Gladder Brook and its tributaries, flowing east into the River Severn. The soils are acidic to neutral.
- Devil's Spittleful and Rifle Range SSSIs: These are the County's most important lowland heaths. Lowland heathland is a nationally and internationally scarce habitat. These habitats support a number of species with very limited distribution within the County. Devil's Spittleful also contains small areas of unimproved acidic grassland.
- Hurcott and Podmore Pools SSSI: This site consists of two pools with adjoining woodland and contains the largest area of wet valley alder carr within the County. More than 30 species of bird breed on the site.
- Kinver Edge SSSI: The acidic soils of this area support heathland and woodland. The site is important for its exposures of Permian sandstone.
- Puxton Marshes, Stourvale Marshes, and Wilden Marsh and Meadows SSSIs: The County's most important marshlands adjoining the River Stour. Wilden Marsh is

Hurcott Pool and Woods

the richest and most diverse wetland habitat in Worcestershire and includes examples of fen, damp meadow, marshy grassland and carr. Stourvale marsh contains a number of plant species which are becoming less common within the County as more land is drained, including:

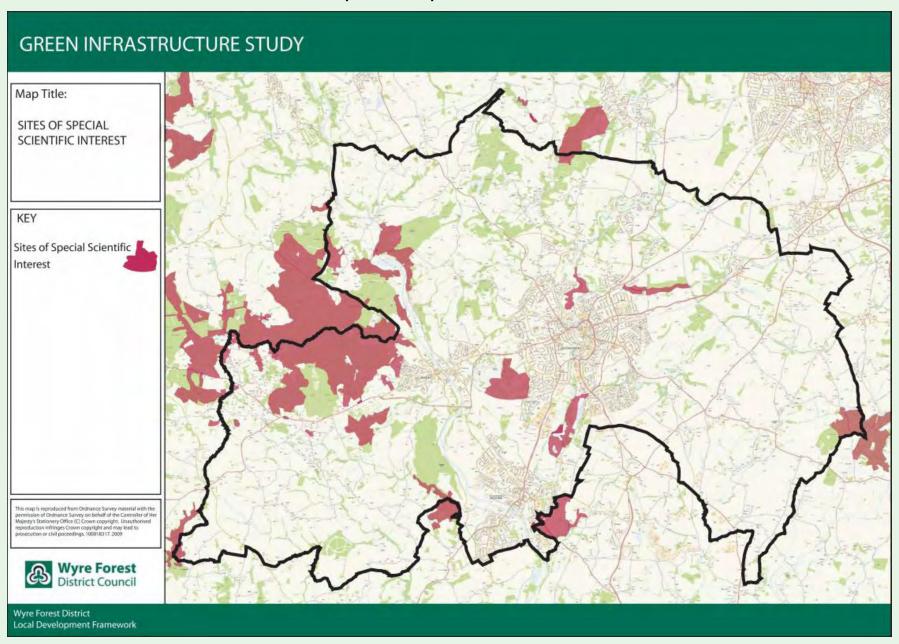
- narrow-leaved water parsnip, southern marsh orchid, hemp agrimony and great water dock. Puxton Marsh is a large area of unimproved grassland and is one of the largest and most important areas of marshland remaining in the county.
- Bliss Gate Pastures, Browns Close Meadow, Buckeridge Meadow and Showground Meadows SSSI: Bliss Gate Pastures has a diverse semi-natural grassland sward which has been maintained under traditional management by light grazing. Showground Meadows demonstrates the transition between the acidic grassland and neutral grassland. Sites supporting this transition are increasingly rare and this represents one of the best examples within Worcestershire.
- Ranters Bank Pastures SSSI: Ranters Bank Pasture is a diverse semi-natural grassland sward which has been maintained under traditional management by light grazing. The Southern pasture includes an old cherry orchard. Additionally, the field boundaries are defined by species rich hedges.
- Eymore Cutting and River Stour Flood Plain SSSIs: These sites are of geological interest. Eymore Railway cutting has the only available exposure of the fossiliferous Eymore Farm Marine Band and it supports a diverse range of fauna.
- **6.3.5** Local Nature Reserves are designated by Local Authorities. Wyre Forest District currently has the following Local Nature Reserves:
- Burlish Top, Rifle Range, Vicarage Farm Heath and Habberley Valley LNRs: These LNRs contain part of the County's most important complex of



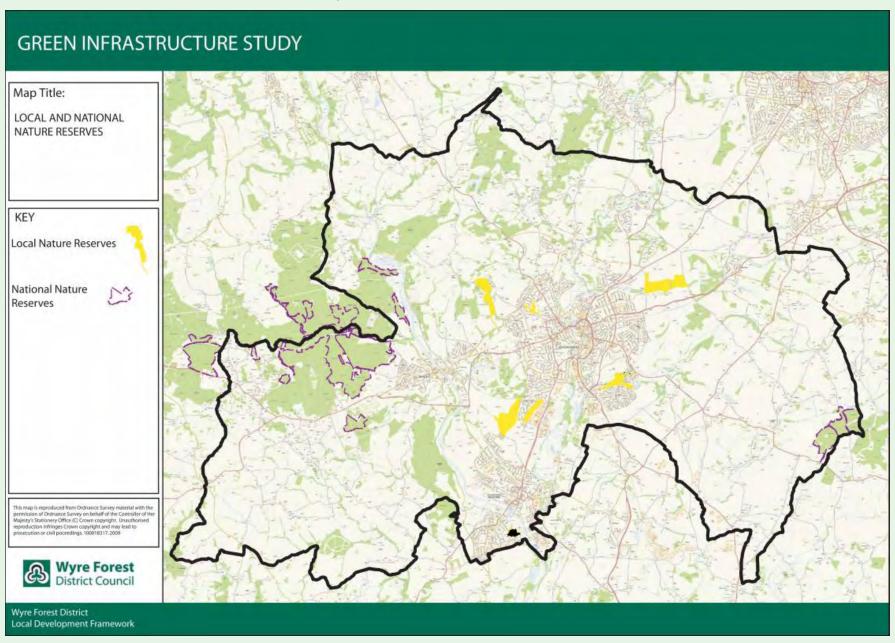


- lowland heaths, which is a nationally and internationally scarce habitat. Habberley Valley is a mosaic of heathland, acid grassland and woodland.
- Blake Marsh, Spennells Valley, Puxton Marsh, Hurcott Pool and Woods and Redstone LNRs: These sites are some of the County's most important wetland sites.
- Half Crown Wood: a small nature reserve only measuring 5 hectares in size. Although only small it has areas of dense woodland as well as patches of acid grassland.
- Hurcott Pool, Redstone Marsh and Moorhall Marsh: These sites are remnants of River Severn floodplain marshland.
- **6.3.6** In addition to these sites Worcestershire Wildlife Trust, the Woodland Trust and Forest Enterprise all manage a number of nature reserves within the District. Worcestershire Wildlife Trust also lead a Special Wildlife Site project which includes over 50 sites. Many of these sites are privately owned and managed by members of the landowning community. These sites include:
- River Severn: A major river and associated floodplain, that bisects the District. Importantly, the River Severn above Stourport-on-Severn and Bewdley, is characterised by shallows and deeps. Consequently, the River supports a particularly rich flora and fauna, including otter and dragonfly. The absence of man-made weirs and barrages assists with the retention of this interest.
- River Stour: A tributary of the River Severn, with gradually improving water quality, important wetlands and populations of water vole.
- A number of brooks and pool systems throughout the District.
- A number of wooded areas.
- **6.3.7** The maps below show the SSSIs, National and Local Nature Reserves, and Special Wildlife Sites within the District.

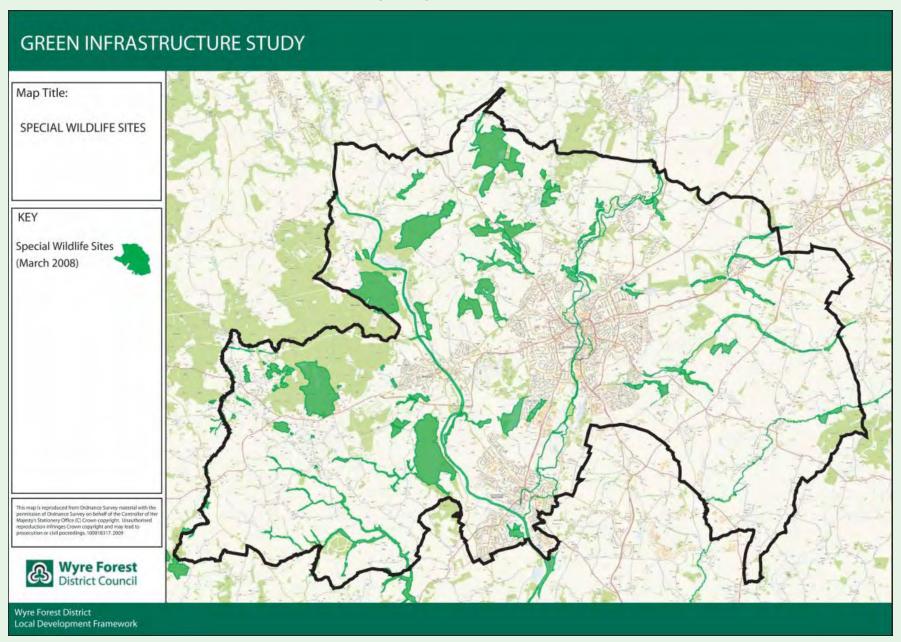
Map 6.8 Sites of Special Scientific Interest



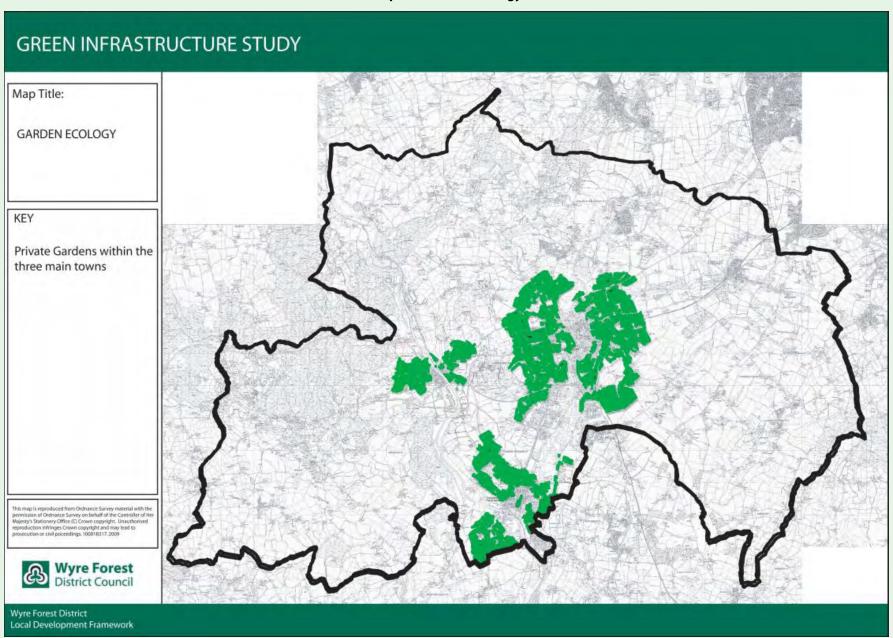
Map 6.9 Local and National Nature Reserves



Map 6.10 Special Wildlife Sites



Map 6.11 Garden Ecology



Garden Ecology

6.3.8 A large amount of space, particularly within the urban areas, is given over to private residential gardens. These gardens can provide opportunities for wildlife to settle and also can also aid species movement. This will be incorporated into the Green Infrastructure Strategy.

Worcestershire Habitat Inventory

6.3.9 The Worcestershire Habitat Inventory is a complete land use and habitat inventory for Worcestershire County using aerial photography and data analysis. The mapping work has been completed and includes suggested movement corridors for species. This will be incorporated into the Green Infrastructure Strategy.

6.4 Geodiversity Features

Geo-Diversity:

- **6.4.1** Hereford and Worcestershire Earth Heritage Trust have produced a Geodiversity Action Plan for Worcestershire which sets out a number of objectives for the County in relation to geodiversity. Those of relevance to Green Infrastructure include:
- Increase awareness, understanding and appreciation of the County's geodiversity.
- Ensure that geo-diversity is identified and included in regional and local strategies, plans and policies.
- Protect, conserve and enhance geodiversity resources.
- Improve and sustain the links between geodiversity, biodiversity, archaeology and the landscape.
- **6.4.2** This Green Infrastructure Study will help to increase awareness of geodiversity and the links it has with biodiversity, archaeology and the landscape.

- **6.4.3** The Abberley and Malvern Hills Geopark incorporates large parts of the west of the District. The Geopark designation was established by UNESCO in 1999 and the Abberley and Malvern Hills Geopark was accepted into the European network in October 2003. In order to be granted Geopark status, a region must exhibit a unique geological heritage of international importance and be comprised of sites that are significant for their quality, rarity, aesthetic appeal or educational value.
- **6.4.4** The Abberley and Malvern Hills Geopark illustrates almost 500 million years of earth history, with examples of almost all Geological periods. The park has a number of objectives which are relevant to the Green Infrastructure Study:





- To conserve and enhance, where appropriate, the geology, geomorphology and landscape of the District.
- To encourage visitors to the geopark at levels that it can sustain.
- To encourage the use of the geopark by all ages, and to provide a high quality range of educational information and services about the geopark.
- To ensure that the geopark and all its attributes will be used responsibly and safely.
- To contribute where and when possible to the local economy, and encourage involvement of the local community in geopark activities.
- To ensure that the Geopark plays a major role within the European Geoparks network.
- **6.4.5** The Recreational Strategy for the geopark contains a number of points which are relevant to, or supported by, planning for green infrastructure:
- Increase awareness of the Geopark and its designation.
- Development of 'key' sites.

The Existing Green Infrastructure Resource

- Ensure public safety concerns are met.
- Encourage best use of the transport network and contribute to sustainability objectives where possible and realistic.
- Attract longer-stay, off-peak visitors and extended visits by extending users.
- Develop a geopark discovery centre.
- Raise awareness of the influence of geology on landscape, wildlife and other facets of life including the industrial heritage of mining and quarrying.

6.5 Natural Processes

Flooding

- **6.5.1** River corridors and other watercourses and water bodies, both natural and man-made, are an important feature of the District's Green Infrastructure. The Rivers Severn and Stour both flow through the District and converge at Stourport-on-Severn. All three of the District's towns experience flooding issues. Kidderminster is located along the River Stour which flows through the town centre. The Staffordshire and Worcestershire Canal follows roughly the same line as the Stour and consequently, a large area of the town centre is at risk from flooding. A flood alleviation scheme has been developed to protect Kidderminster from flooding. The scheme operates by storing floodwater on Puxton marshes. Water is then released through a concrete culvert in the dam structure limiting the flow of water through the town centre.
- **6.5.2** Stourport-on-Severn is affected by a number of main watercourses. The River Stour and Staffordshire and Worcestershire Canal both flow into the River Severn at Stourport-on-Severn. As a result, a number of canal basins are located near to the town centre. The River Severn flows through Bewdley, and as a result, the town has historically suffered from significant flooding

events. However, Bewdley has benefited from major flood defence works at Severnside North and Severnside South, as well as Beales Corner. In addition to the canal and rivers, the District has a number of streams which present a potential flood risk.

Flood defences in Bewdley

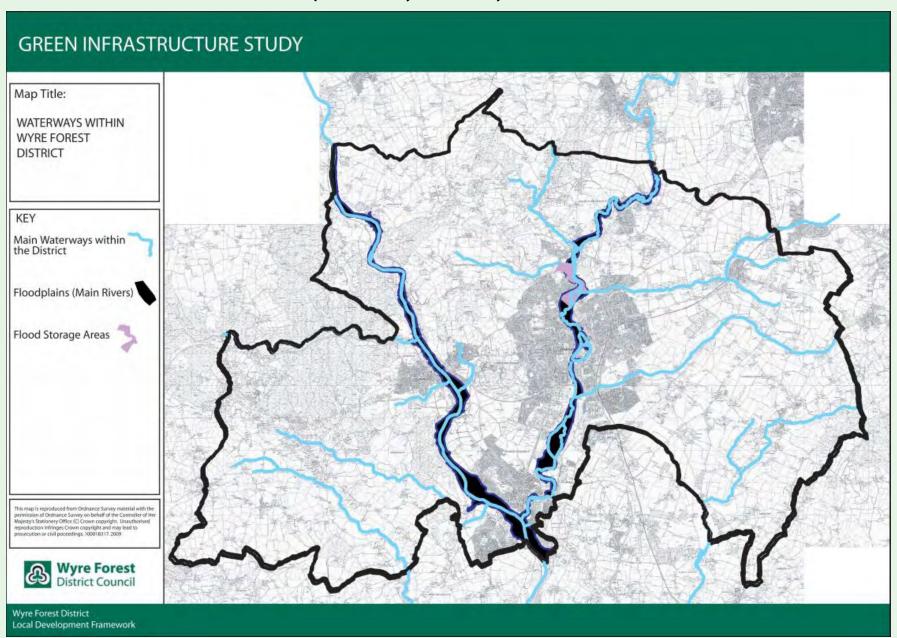


Drainage

- **6.5.3** Drainage is another important consideration within the District. Recent flooding episodes within the District have highlighted the importance of ensuring good drainage within the District.
- **6.5.4** The map below shows the watercourses within the District and areas at risk from flooding.

45

Map 6.12 Waterways within the Wyre Forest District



Green Infrastructure Study (January 2010)

6.6 Derelict, Vacant and Unused Land

6.6.1 The 2009 National Land Use Database return for Wyre Forest shows that there is around 65 hectares of land which is either vacant or derelict or which is available for redevelopment. In recent years, there has been a greater recognition of the importance of brownfield sites in providing for biodiversity, and as a result, it is now understood that some brownfield sites are home to a range of species of flora and fauna. This is particularly important within Wyre Forest District as the Core Strategy DPD looks to accommodate the majority of growth within the towns of Kidderminster and Stourport-on-Severn on brownfield sites. The biodiversity value of sites has been given consideration through the SHLAA process.

6.7 Strategic Open Space, Open Areas, and Recreational Areas

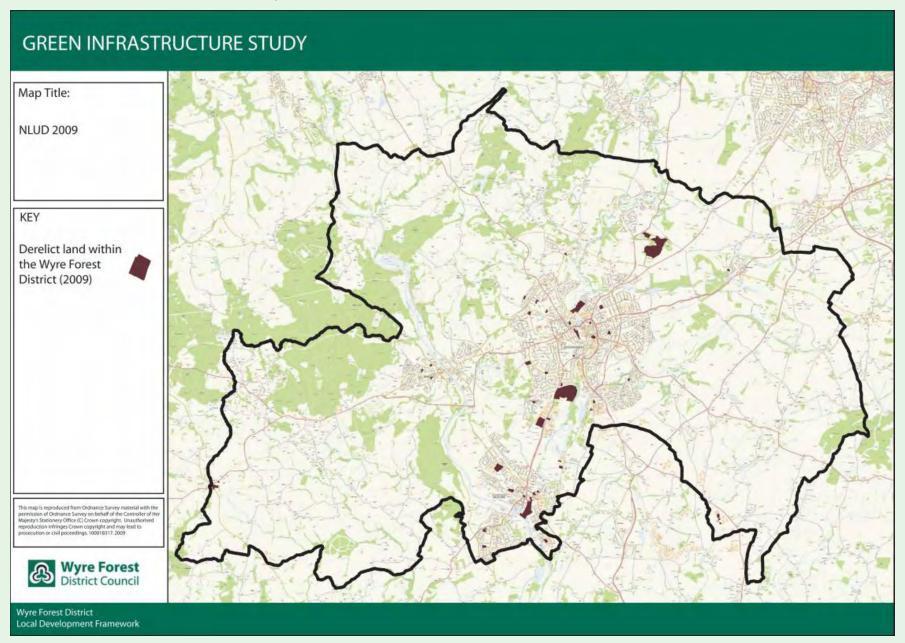
- **6.7.1** A District wide PPG17 compliant audit of open space, sport and recreation within the District was undertaken by Consultants PMP and was finalised in October 2008. The study provides a complete audit of public and private open spaces, to identify local needs and aspirations through consultation and to recommend local standards of provision, in accordance with the requirements of PPG17. It is envisaged that the recommendations from the study will be used to inform local open space standards and provision policies within the LDF. The study divided the District into 6 main areas and identified the open spaces under the following typologies:
- Town Parks
- Local Parks
- Natural and semi-natural green spaces
- Amenity green space
- Provision for children
- Outdoor sports facilities
- Allotments
- Cemeteries & Churchyards

- Green Corridors
- Civic Spaces
- **6.7.2** The study made a number of recommendations to enhance the overall provision of open space, sport and recreation facilities across the District. Some of the main conclusions from the study (not an exhaustive list) include:
- Seek to increase access to parks/natural and semi natural open spaces and existing young people's facilities
- Maximise biodiversity on natural and semi-natural open spaces
- Maximise linkages between open spaces through the development of green corridors and create a network of multi-functional open spaces
- Work in tandem with partners to maximise the use of green corridors
- Aspire to achieve the quality vision at all green corridor sites
- Enhancement of the links between open spaces will be instrumental in both maximising the benefits of the network of open space and also in achieving wider sustainable transport objectives.

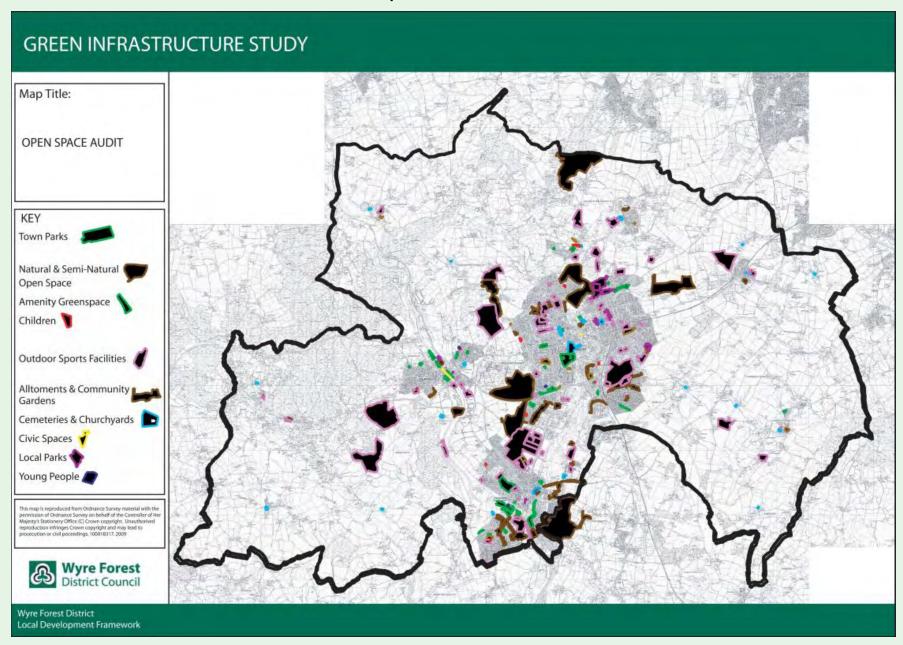
6.8 Connectivity

- **6.8.1** The District has a network of Public Rights of Way and cycling routes which can be used as recreational routes and as sustainable transport connections. Some of these routes form part of the Safe Routes to School network and can be used to encourage active lifestyles from an early age.
- **6.8.2** Ecological connectivity is a valuable aspect of green infrastructure. If green infrastructure is to deliver its full potential, it must be developed as an holistic network in order to aid species movement and migration.
- **6.8.3** The maps below show the derelict land within the District, the PPG17 audit sites and the public rights of way network within the District.

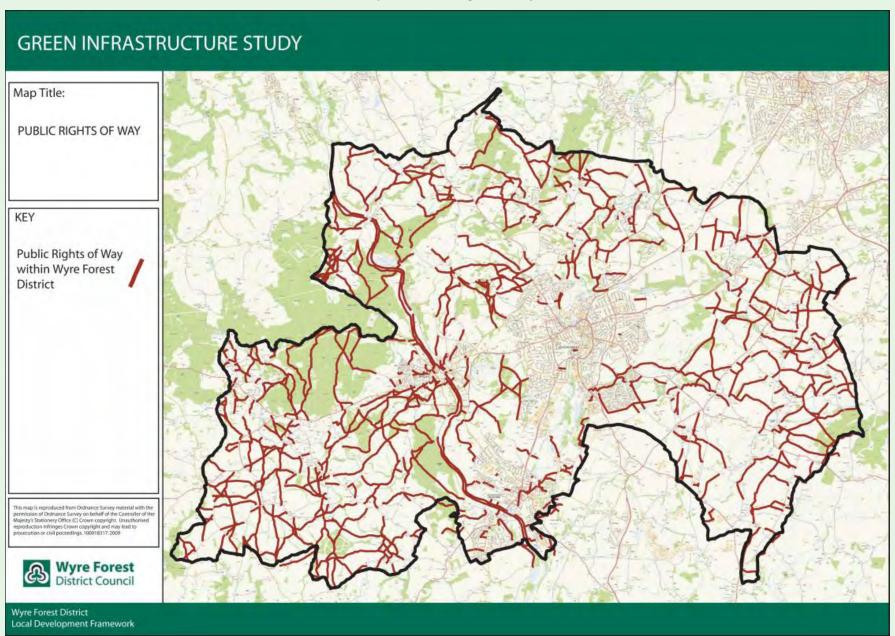
Map 6.13 Vacant and Derelict Land within the District (NLUD 2009)



Map 6.14 PPG17 Audit Sites



Map 6.15 Public Rights of Way



7 Issues and Opportunities

7.1 Landscape

7.1.1 The District has a rich and varied landscape. The three towns retain their individual identities and character and the District's rural areas provide a variety of different landscape types. However, the legacy of the carpet manufacturing industry is evident within both Kidderminster and Stourport-on-Severn. Whilst Bewdley and Stourport-on-Severn town centres have valuable open space assets, including the River Severn, which flows through both towns, the canal basins in Stourport-on-Severn and Jubilee Gardens in Bewdley, Kidderminster town centre lacks green infrastructure. The regeneration of the town centre provides the opportunity to utilise the River Stour,



the Staffordshire and Worcestershire Canal and to provide better links to open spaces around the edges of the town centre such as Brinton Park and Puxton Marsh. This will help to integrate the urban fabric into the wider green infrastructure network.

7.2 Historic Environment

7.2.1 Worcestershire County Council are undertaking a programme of Historic Landscape Character Assessment. This provides a valuable opportunity to link the Landscape Character Assessment and the Historic Environment Record together and identify historic landscape character areas. This work should be fed into the Green Infrastructure Strategy once available.

7.2.2 Historic environment assets have an important role to play in creating a sense of place and should therefore be conserved. The historic environment is an important aspect of green infrastructure and an important part of the setting of many Conservation Areas and Listed Buildings. Historic Parks and Gardens are also important features in terms of green infrastructure. All of these assets should be safeguarded.

7.3 Biodiversity

7.3.1 The District is home to four important habitat types: acid grassland, heathland, woodland and wetland. However, these habitats are often fragmented which impairs species movement. Species movement is particularly important in a changing climate as species will need to migrate as climatic conditions change, creating movement corridors and 'stepping stones' can aid this and help species to adapt to climate change. There is an opportunity to require new development to contribute towards the green infrastructure network, and also to ensure that an amount of any given development site is utilised for green infrastructure. Incorporating features such as SuDS, green roofs and street trees into new developments, as well as adequate garden space, including shared gardens for flatted developments, will also provide opportunities for biodiversity.

7.4 Climate Change

7.4.1 The implications of climate change need to be considered when planning for green infrastructure. Mean global temperatures are likely to rise between 1.1 and 6.4 degrees above 1990 levels by the end of the century depending on our emissions. Warmer, drier summers will have a particular impact on urban areas where the urban heat island effect will be exacerbated. This effect can be reduced by planting trees within the urban areas and by encouraging green roofs. Wetter winters and more intense periods of rainfall will exacerbate flooding issues within the District – flooding is forecast to be more intense and more frequent. Floodplains can provide high quality green space in dry periods whilst reducing risk to property when river levels rise.

- **7.4.2** Green corridors can provide opportunities for species to migrate and adjust to changing climates. Green corridors can also provide pedestrian and cycle routes for both recreation and travel, thus encouraging active lifestyles and reducing reliance on the private car. The Wyre Forest District Climate Change Strategy promotes sustainable transport as a mechanism to reduce emissions.
- **7.4.3** Land use can impact upon the levels of carbon released and stored in the environment. Different types of habitats and crops emit and retain different levels of carbon. The landscape of the Wyre Forest District includes the nationally important Wyre Forest in the west and predominantly lowland agricultural land to the east. Other notable landscape features include Chaddesley Woods and



SuDS Scheme at Anchor Way

the extensive lowland heathlands between Bewdley and Kidderminster and at Hartlebury Common. The way that land is used in the future will impact upon the District's carbon emissions. In the urban landscape, green infrastructure has a major role to play in both climate change adaptation and mitigation.

- **7.4.4** The green infrastructure network could support the development of biomass energy within the District. There are particular opportunities for the Wyre Forest itself to support biomass within Bewdley.
- **7.4.5** It is important to reduce the impact of the built environment on the natural environment. For example, incorporating SuDS into new development will reduce surface water run-off, thus reducing the likelihood of flooding,

and will also provide greenspace for recreation as well as natural habitats. Green roofs have a number of benefits including reducing surface water run-off, reducing the heat island effect and helping to support biodiversity. New developments provide the opportunity to incorporate green roofs.

7.4.6 Street trees can be a valuable addition to the green infrastructure network. They can significantly enhance the townscape and provide shade, as well as reducing the heat island effect. Trees can also help to support biodiversity.

7.5 Development

- **7.5.1** The Publication Core Strategy DPD identifies that future development within the District will be concentrated on urban Brownfield sites within Kidderminster and Stourport-on-Severn. The focus on Brownfield regeneration opportunities within the District provides the opportunity for the creation of new Green Infrastructure provision to complement, and link with, the existing provision in and around the towns. It is also recognised that brownfield sites may already have significant biodiversity value. It will be vital that sufficient new urban greenspace is created within new developments to strengthen and enhance the existing green infrastructure network and draw in these benefits into new developments.
- **7.5.2** The following potential regeneration sites are considered to offer particular potential for green infrastructure gain within the District. (9)

Churchfields Site, Kidderminster

7.5.3 This site is 13ha (approx) and lies just to the north of the town centre. The area includes the current Churchfields Business Park and the former Georgian and Tomkinson carpet factories site. This site is now being considered for residential-led regeneration through the emerging LDF. Should this site be identified for redevelopment then there are a number of potential

⁹ This list is not exhaustive and all new development sites should be considered in terms of their potential for contributing towards green infrastructure

Issues and Opportunities

opportunities for green infrastructure that could be explored. The site lies adjacent to the Staffordshire and Worcestershire Canal, which is an identified Conservation Area and Special Wildlife Site. The site is also located within close distance to Puxton Marsh SSSI and opportunities for enhancement in this location are also possible. Furthermore, due to the site's strategic location to the north of the Town Centre, and the size of the potential regeneration area, there may be scope to explore further opportunities for green infrastructure. It will be important that this is considered early in the master-planning of this site.



Former British Sugar Site, Stourport Road, Kidderminster

7.5.4 The former British Sugar site is a 24 ha site located to the south of Kidderminster Town Centre. The site, the former home of a sugar beet factory, is seen as having significant redevelopment potential that could be of great importance to both the town and the wider sub-region. The site could have a key role to play in providing more modern and efficient business premises. This could have the potential to provide space for Kidderminster's existing businesses as well as enticing new firms in to the area. Furthermore, due to

the strategic importance of this site and its location it is considered that it could have a large beneficial impact in providing green infrastructure improvements and opportunities. A concept that is currently being explored is the potential to turn this area into an Industry, Science and Nature Park known as KISP (Kidderminster Science and Nature Park). This would help to build on a number of important key green infrastructure elements that exist within the locality including:

- Staffordshire and Worcestershire Canal
- River Stour
- Wilden Marsh and Meadows SSSI
- Existing Playing Field
- Location of the Green Belt
- **7.5.5** It will be important that any development within this location safeguards and, where possible, enhances the existing features within the vicinity. Furthermore, due to the large scale size of the site, and the current land uses, there is great



Former British Sugar Site

potential to create new areas of green infrastructure, taking into account all of the elements discussed within this Green Infrastructure Study.

7.5.6 These two regeneration sites are the biggest strategic sites that are expected to come forward for development through the LDF. These two sites offer the potential to create new, as well as enhance existing, green infrastructure within the District on a large strategic scale. However, it is equally important that all sites, small or large, should contribute to green infrastructure wherever possible. It may be that some development opportunities may be best suited to off-site contributions towards green infrastructure, where sites are restrictive and a greater benefit may be gained in supporting adjacent features.

Kidderminster Central Area Regeneration

7.5.7 A large focus of future development within the District is being directed towards Kidderminster Central Area. This has been recognised by the Council as a priority area through the development of a Kidderminster Regeneration Prospectus, known as 'Connecting Kidderminster' and also through the commitment to produce a Central Area Action Plan to form part of the Local Development Framework. The focus on regeneration of the District's strategic centre presents the opportunity to achieve significant 'greening' of the current urban environment and also to extend the existing Green Infrastructure into the town. There is a great deal of Green Infrastructure assets located in close proximity to the town and future development proposals present the opportunity to maximise the benefits of this and include new areas within the predominantly urban setting. Some suggestions of potential Green Infrastructure improvements within the urban area could include the following:

Green Roofs (10)

- **7.5.8** Construction of new buildings within the town centre (and the wider areas of the District) offers the opportunity to include green roofs within their design. There are a number of benefits of including green roofs within any developments:
- They can help to reduce dust and carbon dioxide within the environment, improving the air quality of urban areas
- They can help to insulate buildings against extremes of heat and cold
- They can act as temporary 'sponges' in periods of heavy rainfall and thus reduce the pressure on drainage systems and therefore reduce peak storm water flows

- They can add additional usable space for relaxation, informal meetings, events and games (And maybe act as a smoking area for non-smoking buildings)
- They can provide a softer perspective when viewed from higher buildings/ground and help to disguise a building's presence
- They can provide a habitat and 'stopping off' places for birds and insects
- They can extend the roof life as the green roof protects the roof's waterproofing membrane almost doubling its life expectancy

7.5.9 As well as providing green infrastructure benefits green roofs can also create wider social, economic and environmental benefits. Green roofs provide a cheap way of alleviating flooding, combatting global warming and improving air quality, as well as contributing to the green infrastructure network. These benefits connect with a number of the themes included within this study (most noticeably biodiversity and flooding) and therefore have the potential to contribute positively towards the green infrastructure resource in the District. Implementation of green roofs within an urban setting could form important wildlife connections and bridges through the urban setting to allow wildlife to move successfully from one green infrastructure node to another.

River Stour

7.5.10 The River Stour presents an opportunity within Kidderminster Town Centre to provide green infrastructure improvements. The Stour acts as a corridor running north to south through the town. There is the opportunity to develop the river into a 'Green Corridor' through the town. Recent developments in the town, most noticeably, the Morrisons development, have opened up the once hidden waterway. This builds on previous work within the town centre, where development has sought to expose the river along stretches in the town. However, the Stour still remains culverted through a large part of Kidderminster and therefore does not add any benefit.

Sources: (www.greenroofs.co.uk, Climate Change Adaptation by Design - a guide for sustainable communities (TCPA, 2007))

Issues and Opportunities

The continued regeneration of Kidderminster presents the opportunity to re-open stretches of the River Stour to act as an attractive feature which surrounding buildings could relate to in their design.

Staffordshire and Worcestershire Canal

7.5.11 Like the River Stour, the Staffordshire and Worcestershire Canal follows a linear north - south path through Kidderminster. The canal presents a similar opportunity to provide a green infrastructure corridor through the town centre. There are a number of potential regeneration sites that lie adjacent to the Canal which could offer improvements to the waterway as well as creating an improved urban environment. Early consultation with British Waterways will be key in achieving an attractive environment.

Rural Regeneration Zone (RRZ)

7.5.12 Although the majority of new growth will be targeted towards the urban areas of the District, the rural areas will also play a key role in the future sustainable development of the District. One of the opportunities for enhancements in the rural area is the Advantage West Midlands programme - the Rural Regeneration Zone (RRZ). This zone is identified as an area for the focus of a wide range of measures targeting unemployment, low income, deprivation and social exclusion, with the vision of achieving "a connected rural area with a strong, rural economy, a healthy environment and a rich quality of life for all" by 2020. Advantage West Midlands support the rural economy that exists within the zone in a number of ways. There is therefore, the opportunity for green infrastructure to be included as part of any scheme that is funded through the RRZ. In fact, two of the RRZ's four objectives reflect green infrastructure principals:

- To develop a strong, diverse and sustainable rural economy
- To develop a thriving economy through environmental excellence

7.5.13 It is clear that these objectives sit comfortably with the rationale behind green infrastructure, which seeks to improve the environment of the District and develop it in a sustainable way. Therefore opportunities may arise in the future for investment in the green infrastructure of the District.

7.5.14 The RRZ covers part of the District to the west, and there may be opportunities for further green infrastructure improvements as part of any scheme that materialises within this area. The boundary of the RRZ is indicated on the adjacent map. (11)

Rural Regeneration Zone



¹¹ Source: www.ruralregenerationzone.co.uk

7.5.15 The RRZ is underpinned by policy RR2 in the West Midlands RSS, which identifies the policies and objectives to be pursued within the RRZ area. This includes policies pertinent to green infrastructure provision, specifically point vi, which identifies that within the RRZ emphasis should be given to: "maintaining and enhancing the landscape, natural, built and historic environment and distinctive character of the Zone and particular areas within it, and minimising the negative effects of any new development." This particular policy gives weight to the pursuit of green infrastructure ambitions within the RRZ, and offers the opportunity for schemes to be included in upcoming initiatives.

7.6 Strategic Open Spaces and Recreational Areas

7.6.1 The three towns within the District are each surrounded by open countryside providing opportunities for recreational access to greenspace. It is important to link these spaces, and spaces identified through the PPG17 audit, to residential communities in a way which enables people to walk or cycle to greenspace. The PPG17 audit found that some parts of the District have deficiencies in access to some types of open space. It is important to develop new facilities and better links to existing facilities in order that all households have adequate access to recreational opportunities. This accessibility should extend to new developments and when allocating sites for development, the measures required to secure adequate access to green infrastructure should be considered.

7.7 Connectivity

7.7.1 The District already has a well-developed network of walking and cycling routes which are a valuable part of the green infrastructure network. Opportunities to enhance or extend these routes, as well as to develop new ones should be explored, particularly in conjunction with new developments or in areas which are poorly served.

7.8 Strategic Green Infrastructure

- **7.8.1** The key green infrastructure sites within the District are considered to be:
- The Forest of Wyre which occupies a large area to the west of the District and crosses the boundary into Shropshire. This provides a recreational opportunity for local people but also attracts visitors from further afield.
- Parks: The District has a number of important parks including Brinton
 Park in Kidderminster, Jubilee Gardens in Bewdley and Riverside
 Meadows in Stourport-on-Severn. These parks are well used and
 regularly host events during the summer season. Riverside Meadows is
 particularly popular with day visitors.
- Protected Wildlife Sites: The District has a large number of protected wildlife sites. These provide the opportunity for people to access open space and nature close to their homes. Many of the spaces also have information boards which encourage people to take an interest in the natural environment and learn more about species and habitats.
- Waterways: Both the Rivers Severn and Stour flow through the three main towns are all on the banks of at least one of these rivers. This provides opportunities to soften the landscape within the town centres and also to bring people closer to green infrastructure and nature. The Staffordshire and Worcestershire Canal flows through Kidderminster and on to Stourport-on-Severn.
- Major footpaths and cycleways such as the Worcestershire Way, the Geopark Way and SUSTRANS Route 45 provide opportunities to link communities to green infrastructure.
- **7.8.2** Consideration needs to be given to where new green infrastructure needs to be developed in order to take pressure off the existing network and to ensure that existing biodiversity features are not adversely affected by recreational pressures. This is particularly important in relation to protected

sites and it is vital that biodiversity is protected from inappropriate levels of visitor pressures and that it is recognised that not all sites will be appropriate for public access.

7.8.3 The 'Grow with Wyre' project is a £4 million Landscape Partnership Scheme made up of 18 projects, including orchard restorations, butterfly surveys and wildlife habitat improvements designed to breathe new life into the area. A Heritage Lottery Fund grant of £2 million will drive the scheme forward with other funding totalling nearly £294,000 from GrantScape, a further £74,000 from SITA Trust and funding from the 'Grow with Wyre' partners. The Forestry Commission is the lead partner in the Grow With Wyre Landscape Partnership Scheme, joined by Natural England, Shropshire County Council, Bewdley Development Trust, Butterfly Conservation, Worcestershire County Council, Wyre Forest Study Group, Wyre Community Land Trust, Wyre Forest District Council and the National Trust.

7.9 Healthy Lifestyles

7.9.1 Green infrastructure provision has a valuable role to play in promoting healthier lifestyles. Green infrastructure canprovide opportunities for walking and cycling and for active recreation. Natural England have termed greenspace our 'Natural Health Service' and have identified a difference in levels of health and life expectancy which correlates to open space provision. There are differences in levels of health across the District and it may be possible to improve this in some way by increasing levels of open space provision and encouraging residents in areas with poorer levels of health to engage in new outdoor activities.

Cycle parking, Kidderminster



7.9.2 The District has an ageing population and this is an important consideration. Ensuring that access is available to all, and providing specialist facilities for older people to access green infrastructure will be a key consideration for the District.

7.10 Flood Relief

7.10.1 The three main towns, as well as other parts of the District, all have a history of flooding. Although flood defences now protect Bewdley and Kidderminster, the River Stour remains culverted through much of Kidderminster Town Centre. Opening up the River will help to reduce the risk of flooding within the town centre. This is beginning to happen as new development takes place in the town. Restoring the natural floodplains of the District's watercourses will help to alleviate the threat of flooding.

Sustainable Drainage Systems

- **7.10.2** Historically, surface water drainage systems have been designed to remove surface water from a site as quickly as possible by means of underground piped systems. This has the potential to increase flooding problems downstream and does not contribute to the natural recharge of groundwater levels. Such systems contribute to the transport of pollutants from urban areas to watercourses and groundwater.
- **7.10.3** Sustainable Drainage Systems (SuDS) can help to address this by allowing areas to drain more naturally. There are a number of benefits in implementing SuDS and there are a number of different approaches that can be taken to incorporate SuDS into developments. The potential multi-functional role of SuDS provides a great opportunity for increasing Green Infrastructure, especially within the more urban areas. The different types of SuDS that are available to include within developments include the following (not an exhaustive list):
- Green Roofs Discussed in more detail in section 7.5.8

- **Permeable Paving:** Allows rainwater to infiltrate through the surface into the ground beneath.
- Rainwater Harvesting: There are many types of systems to harvest rainwater. Notable systems are for runoff rainwater (eg hillside run-off) and rooftop rainwater harvesting systems. The type used depends greatly on the purpose (domestic or industrial use).
- **Swales:**Broad, shallow channels covered by grass or other suitable vegetation. They are designed to convey and/or store runoff, and can infiltrate the water into the ground (if ground conditions allow)
- **Detention Basins:** These are stormwater management facilities installed on, or adjacent to, tributaries of rivers, streams, lakes or bays that are designed to protect against flooding and, in some cases, downstream erosion by storing water for a limited period of a time. These basins are also called "dry ponds", "holding ponds" or "dry detention basins" if no permanent pool of water exists. Some detention ponds are also "wet ponds" in that they are designed to permanently retain some volume of water at all times. In its basic form a detention basin is used to manage water quantity whilst having a limited effect in protecting water quality, unless it includes a permanent pool feature.
- **Enhancing Wetlands:** In some cases, the most appropriate SuDS option will be to allow water to run-off into existing or potential wetlands, helping to fulfil the objectives in the BAP.
- **7.10.4** As well as providing flood relief benefits, SuDS offer multi-functional opportunities that could contribute to green infrastructure within the District. Due to the adaptable nature of the SuDS available, different schemes could easily suit different types of developments.
- **7.10.5** Some of the wider environmental benefits of including SuDS within developments are as follows ⁽¹²⁾:

Table 7.10.1 Some Environmental Benefits of SuDS

| Feature | Environmental Benefit |
|-------------------------------|---|
| Green Roofs | Attenuated run-off, improved aesthetics. Climate change adaptation |
| Water Butts | Attenuate run-off, water conservation |
| Porous and Pervious Paving | Infiltration to promote attenuation and groundwater recharge, treatment by detention, treatment by filtration |
| Rainwater Harvesting | Attenuated run-off, water conservation |
| Filter Strips | Green links/corridors through a development, run-off attenuation, filtering of contaminants |
| Swales | Can be planted with trees and shrubs, provides green links/corridors, improved visual amenity, conveyance of storm water |
| Infiltration Basins | Potentially compatible with dual use e.g. Sports pitches, play areas, wildlife habitat. Can be any shape - curving or irregular - with scope for improved visual amenity. Treatment by detention and filtration |
| Detention Basins | Can be designed as an amenity or wildlife habitat. Treatment by detention |
| Retention Ponds | Open water bodies which can significantly enhance the visual amenity of a development. Treatment by detention. Wildlife habitat. Fishing, boating and other water sports. Can abstract water for re-use e.g. irrigation |
| Wetlands | Provide a range of habitats for plants and wildlife. Biological treatment linear wetlands can also provide green corridors. |

¹² Source: DCLG, 2007, Development and Flood Risk: A Practice Guide Companion to PPS 25 'Living Draft', p.77

7.11 Existing Plans and Strategies

7.11.1 The Green Infrastructure Strategy represents an holistic approach to planning for green infrastructure. The Green Infrastructure Strategy will set out a comprehensive network of green infrastructure to be achieved within the District and a delivery plan for achieving this. This brings together and builds upon a number of other plans and programmes and will also inform the development of the LDF. The LDF provides the opportunity to ensure that policies are in place to develop a comprehensive network of green infrastructure throughout the District and to safeguard key sites for the delivery of this. The LDF also provides the opportunity to secure developer contributions towards the delivery of green infrastructure and to ensure that new developments are integrated into the green infrastructure network.

7.12 Promoting healthier Lifestyles and Sustainable Travel

- **7.12.1** Access to greenspace and the wider countryside is a key element of the Green Infrastructure Study. The Worcestershire Countryside Access and Recreation Strategy identifies a number of different recreational activities which are available within Worcestershire including:
- Managed countryside sites which offer facilities and services to users such as those at country parks, picnic sites, and countryside visitor centres:
- Long-distance walking routes such as the Worcestershire Way;
- Miles of Public Rights of Way.
- **7.12.2** Improving these facilities holds valuable economic, environmental and health and well-being benefits. The revenue brought in by visitors is important to the District's economy, and encouraging greater contact with the countryside can enhance people's understanding of the need to protect it, as well as improving health through higher levels of physical activity. Enhancing walking and cycling routes can also help to encourage people to

walk and cycle for transport purposes, thus reducing reliance on the private car. Safe Routes to School can have an important impact by encouraging children to adopt healthy, sustainable lifestyles from an early age.

The strategy aims to deliver high quality countryside recreation 7.12.3 facilities within Worcestershire, and to develop a culture of countryside recreation amongst its residents and visitors, whilst protecting environmental interests.

7.13 Tourism

The District's economy has a strong tourism Severn Valley Railway 7.13.1 element. Both the Severn Valley Railway and the West Midlands Safari and Leisure Park attract large numbers of visitors each year. The Wyre Forest itself is also a popular visitor destination. Recently a 'Go Ape' attraction has been established within the forest, helping to increase visitor numbers.



7.13.2 The District has a number of static caravans, a large number of these have become permanent residences, however, a number still provide tourist

accommodation. Many of the District's caravans provide second homes for people who live within the conurbation.

7.13.3 The Grow with Wyre project will help to increase tourism within the Forest itself. The delivery of 18 projects will facilitate the restoration of ancient forest landscapes and woodland habitats, many of which have been lost over the last century. The Scheme will also encourage more people to engage with the landscape and improve the quality of information that is available, so everyone can get more out of their visit and gain a better understanding of its environmental importance. Plans include a new community discovery centre next to the existing visitor centre in Callow Hill.

8 Developing Strategic Green Infrastructure

8.0.1 This Study has sought to identify and collate the wide spectrum of areas which combine to form the 'Green Infrastructure' of the District. It will be important that these strategic and current ideas are developed into a Green Infrastructure Strategy which will help to add detail to the strategic vision, aims and objectives identified within this study. This section of the study seeks to bring together the key headlines of Green Infrastructure within the Wyre Forest and make some broad recommendations as to how these overarching, strategic ambitions for the future development of Green Infrastructure could be realised in the future.

8.1 Identification of Priorities

- **8.1.1** It is important to outline the strategic priorities for green infrastructure into the future, in order to define the principals for the future, more detailed development of a Green Infrastructure Strategy. The emerging strategic priorities for green infrastructure within the District are:
- Protection and enhancement of the existing green infrastructure within the District and particularly within the three main settlements, where the resource is often more scarce and at greater risk of adverse affects.
- Creation of new or extension of existing green infrastructure to help fill gaps in provision.
- The development of a District wide network of green infrastructure which will link existing and proposed new spaces focusing on connectivity and accessibility.

Protection and Enhancement

8.1.2 In order to achieve the aims and objectives of the green infrastructure of the District it is vital to ensure that existing features are protected, and where possible, enhanced. The District has a wide variety of green

infrastructure features which have been discussed throughout this report. Many of these features already benefit from statutory protection. However, a number of areas are not afforded this protection and therefore it is important that where these features form part of the network of green infrastructure they are safeguarded from inappropriate development.

Extension and Creation

8.1.3 This study, together with the more detailed findings of the PPG17 audit, has identified that there are gaps within the provision of all types of green infrastructure within the District. The Green Infrastructure Strategy will identify these gaps in more detail and highlight priority areas for the delivery of new and extended green infrastructure. New development within the District will increase the demand for high quality green infrastructure and as such, new development within the District should make a contribution towards the development of the green infrastructure network.

Connectivity

- **8.1.4** In order for green infrastructure networks to succeed they need to be connected. Achieving a well-connected green infrastructure network is one of the biggest challenges for the Dsitrict. As with any other form of infrastructure, features in isolation deliver relatively little value compared to when they are fully connected to other areas to provide an accessible and coherent network. Connectivity is important for recreation, using the green infrastructure network for sustainable transport, and for enhancing the biodiversity value of the green infrastructure network.
- **8.1.5** There are some good examples of existing connecting corridors within the District, with the watercourse providing significant green infrastructure corridors through the District. Recent developments within Kidderminster alongside the River Stour have sought to improve connectivity and linkages along the River Stour. It will be important that future development activity along any watercourse corridor seeks to build on these recent successes and builds upon the expanding network. However, when

considering connectivity, regard must be had to the type of habitat. For example, two dry acid sites may appear to be biologically connected by a wetland site, however, in reality this wetland site may form a barrier for some species.

- **8.1.6** The District's rights of way, bridleways and cycle routes also provide some connectivity between the different elements of the green infrastructure network. However, this needs to be much more comprehensively developed. The main objective in doing this should be to connect the District's three towns to each other and to the wider countryside.
- **8.1.7** It is therefore important that all new greenspace created within the urban areas as a result of new development is properly connected to form accessible greenspace networks. These linkages could take various forms such as access routes, sustainable drainage features or retained existing features such as hedgerows and belts of trees. It will be vital that any new links connect with existing networks of footpaths, cycleways and other green corridors within the urban areas.

8.2 Green Infrastructure Guidelines

Net Gain in Green Infrastructure Provision

8.2.1 New green infrastructure development should result in a net gain in green infrastructure and should lead to an improvement in the overall quality of provision. The Green Infrastructure Strategy will identify those areas which should be

Duck on Staffordshire and Worcestershire Canal



prioritised for improvements in both the quantity and quality of green infrastructure. New development should support the delivery of the Green Infrastructure Strategy and where losses are necessary, compensatory provision will be required.

Multi-functional Green Infrastructure

- **8.2.2** Green infrastructure provision should aim to be multi-functional a range of benefits should be provided from the same area of land. Some key benefits include:
- Recreation and amenity
- Flood prevention
- Provision of areas for wildlife and biodiversity
- Sustainable energy
- Education opportunities
- Landscape enhancement
- Enhancing the setting of Listed Buildings
- **8.2.3** The development of new green infrastructure and the enhancement of existing resources should aim to increase the multi-functionality of spaces.

Enhancement of Landscape Character and the Historic Environment

8.2.4 Green infrastructure provision should enhance the landscape character and where appropriate, should contribute to the setting of historic environment features. Provision should be informed by the Worcestershire County Council Landscape Character Assessment.

Biodiversity enhancement

8.2.5 New green infrastructure provision should seek to counter the erosion and fragmentation of existing habitats. The Green Infrastructure Strategy will identify the areas where habitats should be connected through movement corridors to allow for species migration. North-south movement corridors

are increasingly important in allowing species to migrate as part of their adaptation to climate change. In terms of biological connectivity, it is important to ensure that the District is not viewed in isolation, and that connectivity to sites outside of the District Council's boundaries is achieved and maintained. New development should also seek to enhance the overall biodiversity value of the site and should not detract from any existing biodiversity value. Many of the development opportunities within the District are on brownfield land which can have biodiversity value. A number of sites have been assessed as part of the SHLAA process and the findings should be considered should sites come forward for development in the future. All work should be completed in accordance with the NERC Act, there should be no harm to biodiversity and where appropriate there should be enhancements.

Connectivity

- **8.2.6** The District's green infrastructure network includes the Staffordshire and Worcestershire Canal and the River Severn which provide opportunities to walk between the three towns. These routes should be enhanced and promoted as sustainable transport corridors. Further to this, the District offers a number of walking and cycling routes and theses should be enhanced and expanded where appropriate to encourage walking and cycling as both leisure activities and as sustainable modes of transport.
- **8.2.7** The district is made up of a triangle of three towns surrounded by countryside. It is considered particularly important to connect the town centres and major residential areas.

Sustainable Development

8.2.8 All green infrastructure provision in the District should make a contribution towards sustainable development and should help the District to both adapt to, and mitigate against, climate change. Green infrastructure can play a key role in flood alleviation and can contribute to urban cooling.

All major new developments should have green infrastructure at their heart and innovative ways of greening the urban environment should be considered, for example, green roofs and sustainable drainage.

Community Involvement and Ownership

8.2.9 It is important that communities feel a sense of ownership towards green spaces as this can promote social inclusion and cohesive communities. Green infrastructure should be planned in consultation with the community and this consultation should continue into the development and management stages.

8.3 The Strategic Green Infrastructure Network

- **8.3.1** The Strategic Green Infrastructure Network is a strategic network of multi-functional areas and corridors, linking and creating publicly accessible greenspace and semi-natural habitats and natural greenspaces. The linkages are of functional and recreational value for people as well as providing corridors of strategic importance for biodiversity. The current corridors include the watercourses, public footpaths and cycle routes that exist within the District.
- **8.3.2** Where gaps in the connectivity of the network exist, new linkages will be required to enhance links between existing and new green infrastructure areas. The Strategic Green Infrastructure Network will embody a mix of areas some of which require creation of new green infrastructure assets and some of which will require the enhancement of existing sites and assets.

Implementation Plan

9 Implementation Plan

Introduction

- **9.0.1** It is of vital importance that green infrastructure, as well as being properly planned for, is effective in its delivery. This section of the document seeks to highlight the important stakeholders involved in ensuring that green infrastructure is delivered. Green infrastructure could be developed by a wide number of individual bodies, including the following:
- Local Authorities
- Developers
- Government Agencies
- Non-Government Agencies
- Community Groups
- Private Individuals/Landowners
- **9.0.2** It is often important that a number of these groups enter into partnerships in order to ensure the effective delivery, and continued maintenance, of green infrastructure.
- **9.0.3** Within the Wyre Forest District, it is considered that the following organisations will play a critical role in ensuring that green infrastructure is implemented and managed into the future.

Wyre Forest District Council

9.0.4 The Council is likely to be the lead organisation in ensuring that green infrastructure is developed, through the medium of the LDF. Furthermore, as a large owner and occupier of a number of key open spaces throughout the District, the Council is central to the ongoing management and maintenance of a large part of the green infrastructure network. It will be important that the Council uses its powers through the development control system to ensure that green infrastructure is properly planned for and

implemented within future development schemes in the District. It will also be important to include green infrastructure opportunities within any masterplanning of potential new development sites.

9.0.5 The District Council also owns and manages elements of the green infrastructure network such as parks and play areas, playing pitches, allotments, nature reserves and amenity open spaces. The District Council will develop strategies to improve specific elements of the green infrastructure network and these should be informed by the overall Green Infrastructure Strategy.

Worcestershire County Council

9.0.6 Wyre Forest District Council will work in partnership with Worcestershire County Council to develop mechanisms which will help deliver the works necessary to enhance the biodiversity of the District's Special Wildlife Sites (SWSs) in order to help fulfil the requirements of NI197.

Worcestershire Wildlife Trust

9.0.7 The Trust is a key organisation and has a keen interest in the green infrastructure of the District, especially with regard to its role as the management organisation for a number of significant nature reserves across the District. The Trust has the potential to be a key partner in any future green infrastructure developments through providing important evidence base and habitat expertise.

Developers

9.0.8 Developers have the potential to be key players in the future delivery of green infrastructure within the District. It will be important to ensure that developers are engaged early in the process to understand the requirements for the delivery of green infrastructure.

'Grow with Wyre' Landscape Partnership Scheme

9.0.9 Further details of the Partnership have been set out at paragraph 7.8.3. This type of partnership will help to deliver some of the aims and objectives for green infrastructure within the District.

Rural Regeneration Zone

9.0.10 The Rural Regeneration Zone (RRZ) is an area designated by Advantage West Midlands. The zone covers parts of the rural areas of Worcestershire, Herefordshire and Shropshire. The area is characterised by agriculture, market towns and villages and is rich in landscape, historic buildings and traditional crafts. The RRZ only covers a small area of the west of the District, however, it does provide the opportunity for green infrastructure to be included with any future initiatives within this area.



| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|---|---|
| | National | |
| Planning Policy Statement 1: Delivering Sustainable Development | Promotes the inclusion of a mix of uses in new development, including green space. Sets the requirement for development plan policies to take account of environmental issues such as the protection of the wider countryside and the provision of high quality open spaces. Sets the requirement for authorities to consider improved access to open spaces when drafting DPDs. Requires local authorities, when producing local development documents to enhance and protect biodiversity and natural habitats. Requires development plans to take into account the conservation and enhancement of wildlife species and habitats and the promotion of biodiversity. | The Green Infrastructure Study will promote the inclusion of greenspace and measures to safeguard and enhance biodiversity in new developments. |
| Planning Policy Statement: Planning and Climate Change: Supplement to Planning Policy Statement 1 | Sets the requirement for authorities to consider, when determining development, the contribution to be made from existing and new opportunities for open space and green infrastructure to urban cooling, sustainable drainage systems, and conserving and enhancing biodiversity. Sets the requirement for authorities to expect new development to provide public and private open space as appropriate so that it offers accessible choice of shade and shelter, recognising the opportunities for flood storage, wildlife and people provided by multifunctional greenspaces. Requires development plan documents to conserve and enhance biodiversity, recognising that the distribution of habitats and species will be affected by climate change. | The Green Infrastructure Study will identify possible new green spaces and linkages. These could be implemented through developer contributions where appropriate. The Green Infrastructure Study will look at the biodiversity value of sites and protect any important brownfield sites from development which could have an adverse impact on their biodiversity. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|---|--|
| | In allocating sites for development, local authorities should consider the effect of development on biodiversity and its capacity to adapt to likely changes in the climate. | |
| Planning Policy Statement 9: Biodiversity and Geological Conservation | Plan policies should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests. Location specific policies should take a strategic approach to the conservation, enhancement and restoration of biodiversity and geology, and recognise the contributions that sites, areas and features, both individually and in combination, make to conserving these resources. The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Local development frameworks should: indicate the location of designated sites of importance for biodiversity and geodiversity, making clear distinctions between the hierarchy of international, national, regional and locally designated sites; and identify any areas or sites for the restoration or creation of new priority habitats which contribute to regional targets, and support this restoration or creation through appropriate policies. Highlights the possible biodiversity and geodiversity value of previously developed land and the need to maximise the integration of biodiversity into new developments. | The Green Infrastructure Study will look at the biodiversity value of sites and will influence the preparation of the LDF. |
| Planning Policy Statement 12: Creating Strong and Prosperous Communities through Local Spatial Planning | Emphasises the importance of integrating green infrastructure into new development. | |
| | Requires Core Strategies to be supported by evidence of what physical, social, and green infrastructure is needed to enable the amount of development proposed within the area. | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|---|--|
| Planning Policy Guidance Note 17: Planning for Open Space, Sport and Recreation | Open spaces can act as 'green lungs', improving air quality and playing a vital role in nature conservation and for biodiversity. Open spaces have a positive role to play in promoting social cohesion, supporting urban renaissance and rural renewal, promoting health and well-being and promoting more sustainable development. Highlights the need for new developments to incorporate open space. | The Green Infrastructure Study will promote the concept and benefits of green infrastructure, ensuring that this is fully recognised within the LDF. It will identify potential future green linkages. |
| The Countryside Agency: The Countryside in and around Towns | Presents a new vision for an often overlooked resource – the countryside in and around towns. Land at the urban fringe is often characterised by new development, derelict and brownfield sites, retail and industrial parks, landfill sites and reservoirs. Once it becomes the rural fringe it is characterised by a mix of farms, horticulture businesses, horse paddocks and country parks. Estimate that the countryside in and around towns makes up more than 20% of total land area. Local Development Frameworks provide the key to unlocking the potential of the countryside in and around towns. The countryside in and around towns will often coincide with the green belt. Whilst the green Belt keeps the countryside open for recreation, biodiversity, agriculture and landscape enhancement, it is not the role of the green Belt to improve the management of land. Greater emphasis needs to be place don the positive use of land within Green Belts through landscape enhancement and habitat creation. The countryside in and around towns can: be made readily accessible to most people; contribute to the health, wealth and well being of urban and rural communities; underpin more sustainable living; strengthen biodiversity in both town and country. | The Green Infrastructure Study will focus particularly on the green space within and between the three towns and the green links from the towns into the wider countryside. The Local Development Framework will play a role in the delivery of the recommendations of the Green Infrastructure study. The LDF will also seek to address issues such as horsiculture and caravans which have a particular impact on the rural areas of Wyre Forest District. Access to the countryside is being promoted through Natural England's stewardship schemes. A number of Local Nature Reserves surround the District's towns and these are important for improving access to the countryside as well as for improving fitness through walking projects and offering opportunities for environmental education. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|---|--|
| | Provide a bridge to the country. Provide a gateway to towns. Provide opportunities to pursue active lifestyles, thus improving health and well-being. Provide learning opportunities. Provide opportunities for recycling and renewable energy. Provide food for sale in supermarkets and at Farmers markets. Provide a cultural legacy. A place for sustainable living where existing natural features can be incorporated into new developments. To provide regeneration opportunities by offering community involvement in managing recreational spaces, allotments, and community gardens. To provide a nature reserve. Many aspects of the vision will already exist but need to be better linked and managed. | |
| DEFRA Guidance on Implementing the Biodiversity Duty | Sets out the following benefits of conserving biodiversity: It plays an important role in tackling climate change: Wildlife habitats can act carbon sinks and natural floodplains can reduce the impact of flooding. Natural habitats can facilitate the movement of species It is an indicator of the wider health of our environment: Environments with a rich biodiversity are likely to have better air and water quality and to provide attractive living environments. It helps to sustain local economies: Conserving biodiversity helps to support jobs and incomes in conservation management and also increases tourism. It supports other vital services that sustain life on earth (Ecosystem services): Human life and economic activity depend on vital services provided by ecosystems, such as the provision of clean air and water, defence against floods and storms, and the management of waste and pollution. It contributes to our health and well-being: Biodiversity plays an important role in enhancing and encouraging outdoor recreation by increasing the variety, attractiveness and interest of the landscape. Biodiversity also plays an important role in educating us about the world around us. It is an important part of our cultural heritage and identity: Biodiversity is important in defining local character and local distinctiveness. | Biodiversity will be an important consideration within the Green Infrastructure Study. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|--|---|
| | It offers opportunities for community engagement and volunteering. It provides us with essential products and materials: Biodiversity is a source of many foods, medicines and building materials. | |
| Health, place and nature: How outdoor environments influence health and well-being Sustainable Development Commission | Obesity related illness is increasing. Exposure to natural spaces – everything from parks and open countryside to gardens and other greenspace – is good for health. Contact with natural spaces can improve health directly and indirectly (by, for example, encouraging physical activity and social contact). People living in areas with high levels of greenery are three times more likely to be physically active and 40 per cent less likely to be overweight or obese than those living in areas with low levels of greenery. | The Green Infrastructure Study will highlight the health benefits of having a comprehensive network of connected open spaces. |
| Natural England – The State of the Natural Environment 2008 | This Report is the first in-depth compilation of the evidence on the state of, threats to, and actions taken to secure England's natural environment. It brings together the available evidence base in order to inform the integrated delivery of measures to secure our natural environment both now and for the future. The purposes of the Report are therefore: • to describe the current state of the natural • environment, as a baseline for comparisons in the • future; • to make this information widely available; and • to inform policy, decision makers and future research priorities. The report sets out a large amount of information relating to the natural environment and designations on a national scale. | |
| Natural England Natural Areas | Natural England have divided the country up into 120 Natural Areas. These natural areas represent biogeographic zones that provide a framework for setting nature conservation objectives. Their borders do not follow existing administrative boundaries, but are defined by their wildlife, natural features, land use and human history. In many cases they also share similar landscapes. The Natural Areas are identified by their unique combination of physical attributes, habitats and wildlife. | |

69

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|--|--|
| | They are based on areas with a distinct cultural, land use history and nature conservation interest, it is therefore hoped that they will encourage wide participation and reflect local distinctiveness. Wyre Forest District lies within the Midlands Plateau Natural Area. The area comprises three landscape character areas, with Wyre Forest lying within the Mid Severn Sandstone Plateau. The Rivers Severn and Stour are key features of this area, they have carved deep valleys through an area which is otherwise open, rolling and wooded. The Forest of Wyre is another important landscape feature within this area. The major types of habitat present within the Midland Plateau are heathland, woodland and associated grassland. Heathland is specifically important within the District which has a significant amount of heathland habitats including Devil's Spittleful. Broadleaved woodland is also found within the District, particularly the Wyre Forest itself. Grassland is also present within the District, specifically acid grassland which can be found in the Sutton Park area of Kidderminster. A large variety of habitats exist within the Midland Plateau area. These include those found along canals, roads and rail lines, which provide corridors allowing wildlife to travel through urban areas; public open space; gardens, which can be very species rich; and redundant industrial sites. There are also a large number of smaller, niche habitats within the urban areas of the District. In the rural areas, there has been a shift towards large arable fields with crop monocultures which has probably been the biggest single factor in the decline of species and habitats. Natural England have devised the following objectives for the Midland Plateau Natural Area which will be important in developing a comprehensive network of green infrastructure across the District: To prevent further loss and degradation of all semi-natural habitats within the Natural Area, and to enhance and expand the most important and characteristic types such as river | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|---|--|
| | To maintain and expand the populations of internationally and nationally important species, together with key species which are characteristic of the Natural Area To maintain the geological and geomorphological features of the Natural Area for future research and enjoyment. These four objectives can be summarised into four conservation themes; the re-instatement of large tract wildlife sites; consolidation of a network of protected and acknowledged wildlife sites; multi-functional green networks; and incorporation of wildlife habitats into wider activities. Four visions have been developed for the area to aid the implementation of the conservation themes. The first vision is specific to the Wyre Forest itself which contains a variety of wildlife and has the potential to further diversify. Further visions aim for every citizen within the Midlands Plateau to live within 300m of an accessible natural greenspace which forms part of a network allowing people and wildlife to travel freely through urban areas and into the countryside and to achieve sustainable development. Freshwater features; rivers, streams, canals, reservoirs, pools, ponds and wetland: The River Severn is the main water feature of the area, the section between Bridgnorth and Kidderminster has steep banks and tall herb communities on and above the banks which provide insect habitats. Within the River course the characteristic species include: water crowfoot, water milfoil and pondweeds. The canal system is the largest man-made water feature within the area and here, common species include: water abstraction from rivers and groundwater, which threaten natural aquifers and the water table; wetland drainage and flood alleviation; restoration of natural floodplain, managed in an ecologically sensitive manner; recreation of wetlands; pollution of freshwater; construction of surface water balancing lakes to aid storage of excessive flood waters reducing the need for extensive 'canalisation' | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|--|--|
| | conflicts; restoration of navigable waterways, including threats to construct weirs on the Severn to provide recreational boating opportunities, and; the proliferation of non-native species to the detriment of native flora and fauna; loss of ponds. | |
| | A number of objectives are set out for freshwater features. Those specifically relevant to the District are: maintaining and enhancing existing freshwater habitats; restoring degraded freshwater habitats; and creating new freshwater habitats through the planning system; creating new reedbed opportunities where this would not damage features of greater importance; maintaining and improving water quality and where appropriate restoring water levels and reducing abstraction where this is detrimental to ecosystems; de-culverting streams and brooks where feasible; using selected lengths of canal to demonstrate excellence in nature conservation and supporting British Waterways in its aim to increase nature conservation; encouraging sympathetic access to river and stream corridors. | |
| | relating to flooding, land drainage and abstraction. Also of significance is the restoration of navigation to the River Severn. This would have significant implications for the landscape of the District and would impact upon the bio-diversity of the River Severn. The River Stour which passes through Kidderminster and Stourport-on-Severn is culverted in a number of places. | |
| | • Broad Leaved Woodland: The significant sites for broad-leaved woodland within the Plateau include the Wyre Forest and Chaddesley Woods. Characteristic species include oak, ash, beach and birch and bluebell which epitomises the field layer. The dormouse is present in the Wyre Forest, as are adder, slow-worm, and grass-snake. Issues associated with broad –leaved woodlands include: fragmentation of woodlands; competing land uses; commercial forestry, nature conservation and recreation; neglect leading to unfavourable structure and the loss of open habitats and associated species; low demand for local timber products and the need to encourage the market for these commodities; best use of the opportunities presented by the forest creation initiatives; new planting, which can threaten other habitats, such as unimproved grassland and heathland, if carried out inappropriately; poor understanding of woodland and species | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|---|--|
| | management by some land/owners/managers with little or no concern for wildlife values; removal of shrub layer, under-sown with grass, followed by stock grazing; the control of invasive species, especially rhododendron and sycamore. | |
| | A number of objectives are set out for broad-leaved woodlands, those which are relevant to the District are: maintain and enhance the existing areas of ancient woodland; reduce the effects of fragmentation and isolation by restoring and creating a matrix of semi-natural habitats in key areas eg by joining up existing woodland as well as making good use of hedgerows, field margins and corners; re-introduce coppicing in appropriate areas. | |
| | • Heathland: Once regarded as wasteland, heathlands are now recognised for their ecological and landscape value. Heathlands were formerly the dominant landscape of the Plateau but have suffered a 90% loss over the last 200 years. Heather, bilberry, cowberry and common gorse, along with wavy-hair grass and purple moor-grass characterise the Midlands heaths. Heaths often support a number of species including the common lizard and adder, frequent the heaths, as do birds, such as the skylark, tree pipit and linnet. Moths, grass-hoppers and dragonflies are also common. Issues associated with heaths include: uncontrolled burning of heather; restoration of heath and creation of secondary heathland; scrub and bracken encroachment; recreational pressures; development pressure; water level management on wet heaths, particularly water abstraction; fragmentation and isolation of heathland sites; atmospheric pollution; restriction of public access to the most sensitive sites. | |
| | Objectives for heathland include: maintaining and enhancing existing lowland heathland and restoring degraded areas; re-create, or promote the natural regeneration of, lowland heathland in areas traditionally occupied by this habitat, and not currently supporting vegetation of greater importance. | |
| | Grassland: Some of the most important areas of grassland within the Plateau are found in the Wyre Forest area, especially the grazed meadows along the River Severn. There are also important acid grassland habitats within the District. Issues associated with grasslands include: agricultural improvement destroying the | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|---|--|
| | interest of old grassland; scrub encroachment; overgrazing, especially by horses; supplementary feeding of stock on species rich grassland; neglect and under-grazing, reducing diversity; decline of traditional management skills; small and isolated nature of important sites; development for agriculture, housing or industry and also planting up for forestry; tipping of refuse; drying-out through lowering of water table and direct drainage; greater recognition of the importance of species-rich road verges; issues related to common land, including the decline in traditional grazing and problems of public access. | |
| | Objectives for grassland include: Maintain and enhance the existing areas of species-rich grassland and restore degraded areas; re-create, or promote the natural regeneration of, grassland in areas traditionally occupied by this habitat, and not currently supporting vegetation of greater importance, in order to expand and link the existing resource. | |
| | • Farmland: The Midlands Plateau has a pastoral history and character, hedgerows are an important feature of the landscape. Hedges that remain are typically hawthorn or blackthorn and the best still retain their hedgerow trees which are typically oak or ash. Issues for farmland include: opportunities for habitat diversification on farms; need for diversification and farm tourism; hedgerow protection; the impacts of pesticides, herbicides and fertilisers on wildlife. | |
| | Objectives for farmland include: A return to seasonally based agriculture; wider buffer zones; the modification of set-aside to benefit nature conservation; protection of remaining hedges, and the creation of new hedges where appropriate; more species rich grassland and; promoting the restoration of farm ponds where this would not damage existing wetland habitats. | |
| | Urban/Suburban Land: The urban and sub-urban areas of the District include many gardens, together these gardens form a large area of land. The ecological value of gardens varies but older gardens can support a rich wildlife population. Buildings can also support wildlife habitats, especially invertebrates and lichens. Species associated with urban/sub-urban areas include the fox, grey squirrel, a number of species of birds which fare well in gardens, frogs, bats and hedgehogs. | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|--|--|
| | Issues for urban/suburban land include: Lack of recognition of the wildlife and wider societal value of green spaces within urban areas; awareness raising of local communities to the natural green space or lack of it in their neighbourhood; need to balance the demands for brownfield development with those of wildlife. The objectives for urban/suburban land include: Recognition of the biodiversity and rarity of urban sites and species and the importance of access to nature to the quality of life of local people; Green spaces within easy walking distance (less than 300 m from the home) where consideration is afforded to the needs of both people and wildlife and sympathetic management prevails. Statutory Local Nature Reserves (LNRs) provided at a minimum level of one hectare per thousand population; Green webs linking urban green areas to each other and to the countryside underpinned by the concept of multi-functional green corridors featuring LNRs; Recognition of the value of urban green space for raising awareness and educating the public, especially children and decision-makers, of the value of wildlife. Post-Industrial Sites: Many of the post-industrial sites across the Plateau have been colonised by important communities of flora and fauna. Issues for post-industrial sites include: such sites are frequently of ephemeral value, often as artificial soil pH is normalised and succession takes place; reclamation for various land uses, especially for housing and modern industry; development pressures, particularly on brownfield sites; recreational pressure; perceptions that these sites are of little or no value. Objectives for post-industrial sites include: Increase awareness of the importance of these sites; encouraging a stock of post-industrial habitat to be maintained by allowing habitats to develop on unused land on a temporary basis prior to its turnover for development; recognition of rural post-industrial sites. | |
| TCPA – Biodiversity by Design – A Guide for Sustainable Communities | Identifies ecological, quality of life and economic benefits which stem from enhanced biodiversity: | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|--|---|
| (2004) | reducing climate change adaptation and mitigation, including reducing the impact of flooding; social cohesion and improved health and well-being; and increased property values and decreased management costs associated with a self-sustaining landscape. It highlights the disconnection between urban environments and the natural environment and sets out measures to help people connect with nature. | |
| | Regional | |
| Regional Spatial Strategy Phase Two Revision - Draft Preferred Option (December 2007) | Provide opportunities to improve quality of life. Distinctive, high quality natural and built environment. One of the key issues identified for the West Midlands is the growing impacts of climate change. Policy SR1: Climate Change - Clause B sets out the need to "link and extend natural habitats so that opportunities for species migration are not precluded and biodiversity can adapt to climate change and hence help to mitigate its effects by reducing 'heat islands', acting as carbon 'sinks', absorbing flood water and providing renewable energy. Policy SR2: Creating Sustainable Communities – Requires LPAs to make provision of the full range of spatial requirements needed to create sustainable communities. Clause E sets out the requirement for 'a comprehensive green infrastructure network that provides the full range of environmental services, including mitigation and adaptation to a changing climate, accessible greenspace for walking and cycling, sport and recreation, health and wellbeing and protects, consolidates and enhances biodiversity and geodiversity, especially the Region's European sites, and its historic assets and landscape character'. Policy QE1: Conserving and Enhancing the Environment – Sets out the requirement for LPAs to protect and enhance other irreplaceable assets and those of limited or declining quality which are of fundamental | The Green Infrastructure study will help to improve quality of life by providing improved access to greenspace and safeguarding the distinctive natural environment of the District. Safeguarding and enhancing the District's green infrastructure will help to address climate change. The Green Infrastructure Study will identify potential green linkages, creating corridors for biodiversity. It will also safeguard green infrastructure and identify opportunities to expand the network, this will help to reduce the 'heat island' effect. The study will also look to safeguard natural floodplains as green space. Sustainable management of the Forest of Wyre could lead to biomass production. The Green Infrastructure Study will identify existing green infrastructure within the District and identify linkages between sites and how these can be enhanced. The study will also identify the links between green infrastructure and climate change, encouraging walking and cycling and improving health and wellbeing. The study will also consider the biodiversity value of green infrastructure and possible biodiversity corridors. The Green Infrastructure Study will identify areas of green infrastructure throughout the District and identify where opportunities might exist to provide further green infrastructure and green linkages. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|--|--|
| | importance to the Region's overall environmental quality, such as specific wildlife habitats, historic landscape features and built heritage, river environments and groundwater aquifers; And; | The Green Infrastructure study will draw on information within the County Landscape Character Assessment and the Historic Landscape Character Assessment. |
| | Protect and enhance the distinctive character of different parts of the region as recognised by the natural and character areas and associated local landscape character assessments and through historic landscape characterisation. | The Green Infrastructure Study will identify green infrastructure including all of the sites identified through the PPG17 audit. The Green Infrastructure Study will also consider potential new linkages between greenspaces. |
| | Policy QE4: Greenery, Urban Greenspace and Public Spaces: Local authorities and other agencies should undertake assessments of local | The Green Infrastructure Study will consider linkages between green spaces via green corridors and identify where such linkages can be strengthened. Green linkages will act as vital biodiversity corridors. |
| | need and audits of provision, and develop appropriate strategies for greenspace to ensure that there is adequate provision of accessible, high quality urban greenspace with an emphasis on: significantly improving the overall quality of public space, | The Green Infrastructure Study will look at protecting historic rural landscapes and enhancing river corridors. The potential of using the canal network to provide valuable green linkages will be explored through the study. |
| | especially in city and town centres enhancing the setting of local residential neighbourhoods in built-up areas increasing the overall stock of urban trees improved accessibility and community safety | The Green Infrastructure Study will consider the biodiversity value of sites and will incorporate information from the Worcestershire Habitat Inventory. The study will also look at green linkages which provide valuable biodiversity corridors. |
| | and maintaining and enhancing sports, playing fields and recreation grounds. Development plan policies should create and | The Forest of Wyre is an important green infrastructure site within the District. The Green Infrastructure Study will incorporate information from the Grow the Wyre project which will enhance the Forest. The study will also identify opportunities to increase |
| | enhance urban greenspace networks by: ensuring adequate protection is given to key features such as | tree planting within the District. The study will look at green linkages and how these can be |
| | parks, footpaths and cycleways, river valleys, canals and open spaces identifying the areas where new physical linkages between these | improved to provide walking and cycling links. |
| | areas need to be forged and linking new urban greenspace to the wider countryside to encourage the spread of species. | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|--|---|
| | Policy QE5: Protection and Enhancement of the Historic Environment - this includes protecting the historic rural landscapes and their settlement patterns, and strategic river corridors, including the River Severn. Attention is also drawn to the need to explore the regeneration potential of the canal network. Policy QE7: Protecting, Managing and Enhancing the Region's Biodiversity and Nature Conservation Resources – Sets out the requirement for plans and programmes to encourage the maintenance and enhancement of the Region's wider biodiversity resources. Policy QE8: Forestry and Woodlands – Sets out the requirement for policies and programmes to encourage tree cover in the Region to be increased, where it is appropriate to the character of the area. Transport and Accessibility Chapter – sets out a number of policies aimed at reducing the need to travel and increasing walking and cycling. Policy T3 specifically recognises the need to make the moist effective use of canal towpaths for walking and cycling. | |
| Green Infrastructure – A Prospectus for the West Midlands | Sets out definitions of green infrastructure and background information. Sets out three case studies from within the West Midlands region. Sets out a brief methodology for mapping green infrastructure. Promotes the joining up of green infrastructure resources to create a green infrastructure network and highlights the following benefits: Promoting sustainable transport Creating, restoring and linking green routes Promoting and preserving heritage and culture Ameliorating flood risk Encouraging social and sporting engagement Protecting existing green corridors Linking urban and rural areas. Sets out how green infrastructure needs to be planned for from the strategic scale to the local scale. Green infrastructure policies must be embedded in a wide range of plans and strategies including | The Green Infrastructure Study will highlight the benefits of green infrastructure, including those set out within this document. The study will also map existing green infrastructure and will provide an evidence base for the LDF, ensuring that green infrastructure is embedded within the future planning policy for the District. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study | |
|---|---|--|--|
| County | | | |
| Worcestershire Geodiversity Action Plan (April 2009) | The Geodiversity Action Plan sets out a number of objectives for the County in relation to geodiversity. Those of relevance to Green Infrastructure include: Increase awareness, understanding and appreciation of the County's geodiversity. Ensure that geo-diversity is identified and included in regional and local strategies, plans and policies. Protect, conserve and enhance geodiversity resources. Improve and sustain the links between geodiversity, biodiversity, archaeology and the landscape. | Geodiversity is an important aspect of green infrastructure. Geological sites are important for sustainable tourism and play an important role in environmental education. The delivery of the Geodiversity Action Plan will be supported through the Green Infrastructure Study. | |
| Worcestershire Biodiversity Action Plan (July 2008) | The Biodiversity Action Plan sets out a number of actions which are directly relevant to Wyre Forest District Council. Ensure all SSSI and SWS grasslands are included in appropriate site protection policies and supporting text in Local Development Documents and Supplementary Planning Documents. Where ecological surveys undertaken as part of a development proposal identify the presence of SSSI, SWS or other grasslands of nature conservation importance, appropriate site protection policies and / or mitigation should be applied. Continue vetting of forestry grant applications to ensure important grassland sites are not planted up. A number of target specific to individual habitats are relevant to this study: WFDC should also ensure local planning documents refer to the value of traditional orchards to wildlife, local landscape and public amenity and the need to protect and enhance them. Hurcott Pool and Woods is also identified as an important location for wet woodlands. WFDC should insure all wet woodland sites have a sustainable and achievable management plan in place and being implemented and Use the development control system to secure, where possible and appropriate, section 106 agreements for the restoration or creation of wet woodland in suitable areas. | The Green Infrastructure Study will identify all nationally and locally important sites which contain BAP quality habitat as identified through the Worcestershire Habitat Inventory, consultation with local experts and some ground surveying. This information will be used to produce a biodiversity opportunities map for inclusion within the Green Infrastructure Strategy. The preparation of the Green Infrastructure Study and subsequent strategy reinforces the District's commitment to both the NERC Act and PPS9. It is important that the Green Infrastructure Study identifies all SSIs and SWSs and that these designations feed into the LDF. It is also important that the Green Infrastructure Study identifies areas of important grassland in order to protect these into the future. A requirement to incorporate SUDS where viable should be included within the LDF Core Strategy. A Local Landscape Character and Biodiversity SPD is programmed within the LDS. The Green Infrastructure study will form part of the evidence base for this SPD. The Green Infrastructure Study will identify designated sites within the urban areas and will help to safeguard them. | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|--|--|
| | Reedbeds also have a role to play in safeguarding the biodiversity of the District. WFDC should where appropriate demand the inclusion of Sustainable Drainage Systems within development plans that incorporate reedbeds as a component. In the urban Habitat Action Plan a target is set for WFDC to develop and publish biodiversity SPD to include specific information on urban biodiversity and urban greenspace and to develop at least one demonstration site for best practice in urban biodiversity and or greenspace management / enhancement WFDC should also identify all priority / designated sites within urban areas within partnership organisation ownership or management and ensure appropriate management plans / strategies to promote and enhance biodiversity are prepared and implemented for each. Using Urban Greenspace concept, identify priority areas for habitat restoration / creation in each urban area to maximise the connectivity of areas of semi-natural habitat across the urban landscape. Develop strategy for each urban area for taking forward habitat creation/restoration on prioritised sites. Use strategy to inform Greenspace work. Ensure the use of Sustainable Drainage Schemes in all new developments wherever practical and economic to do so. Where a culverted watercourse falls within the footprint of a development, the watercourse should be restored to a natural channel as part of the planning conditions. Include policies for the protection and enhancement of river corridors and floodplains in Local Planning Documents and Strategies and ensure these are implemented through the planning system. Species Action Plans: Identify areas having the potential to link isolated Adder populations or buffer existing adder habitat. Hornet Robberfly; Twaite and Allis Shad; Black Poplar; Wood White; Grizzled Skipper - Ensure the species' requirements are included within appropriate local planning Docume | The Green Infrastructure Study will identify opportunities to maximise connectivity between green spaces, including maximising the use of green corridors leading from urban areas into the surrounding rural areas. The Core Strategy should incorporate a policy to encourage SUDS. The Green Infrastructure Study will identify opportunities to expand green corridors, including opportunities to open up the waterways. The Green Infrastructure Study will consider opportunities to safeguard river corridors and natural floodplains for use as open space. General opportunities to link greenspaces will be identified through the Green Infrastructure Study. The needs of these species will be incorporated into the Local Landscape Character and Biodiversity SPD for which the Green Infrastructure Study will form part of the evidence base. |

| Worcestershire Habitat Inventory Commenced in April 2008, analysis is underway. The data from this survey will be used to i of a biodiversity opportunities map for the within the Green Infrastructure Strategy. | nform the development |
|--|---------------------------|
| | he District for inclusion |
| Worcestershire Local Transport Plan 2006-2011 Places an emphasis on improving walking and cycling infrastructure as a means of reducing reliance on the private car. The Green Infrastructure Study will look linkages and using them as walking and | |
| Worcestershire Landscape Character Assessment Landscape character has been defined as 'a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse'. The Worcester shire Landscape Character Assessment covers the whole of the rural area of the County, it will be extended to urban areas in the future. The soils in the north of the County are the most impoverished, this includes the hard sandstone rocks of the Wyre Forest. Sets out 22 landscape type, some of which are found within Wyre Forest District: | |
| Principal Wooded Hills: Founds around the Kingsford/Kinver area, these are wooded landscapes with a sloping, steeply undulating topography often on the edge of higher ground. The woodlands are large, irregularly shaped and of ancient character, and, in combination with wooded streamlines, forma n interlocking pattern of tree cover. The steepness of the slope has prevented the land being used for agriculture. These areas have retained significant cover of ancient semi-natural woodland, where slight clearances have taken place, the fields tend to be pastoral. Wooded Forest: landscape type is represented by the Wyre Forest itself. It comprises of woodland of ancient character and has short distance views. The relative lack of settlement relates to there being no prolonged agricultural activity, there are scattered cottages which relate to occupations linked to the woodland. The woods are of ancient character, and the impoverished soils give rise to a heathy/acid grassland ground vegetation, the whole wooded landscape being one of notable nature conservation interest. Forest Small Holdings and Dwellings: Occurs solely around the | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|---|--|
| | landscape characterised by strings of wayside cottages and associated smallholdings. The hedgerows often have significant associated tree cover and provide an important structural element to the landscape. Timbered Plateau Farmlands: Located principally in the north-west of the county this is a varied agricultural landscape of hedged fields, scattered farms, woods and wooded valleys associated with upstanding areas of undulating relief. The undulating topography tends to bring the organic pattern of woodland and hedgerows into greater prominence. | |
| | Principal Timbered Farmland: Covers only small areas within Wyre Forest. These are small to medium scale, wooded agricultural landscapes, characterised by filtered views through densely scattered hedgerow trees. The irregular outline of many of the woodlands and hedgerows, together with the winding pattern of lanes, contributes to the overall organic character of these landscapes. | |
| | • Sandstone Estatelands: Covers a large area of the District. These are open, rolling landscapes characterised by a strong, regular pattern of large, arable fields, straight roads and estate plantations. Fields are typically defined by straight, single species hedgerows, usually of thorn, reflecting the late enclosure of much of this landscape. The field pattern provides the overall unity of this landscape. These are areas of arable cultivation, the presence of gorse and bracken reflecting the sandy nature of the soils. | |
| | • Estate Farmlands: Similarities with Sandstone Estatelands, the landscape is dependent upon an ordered patter of fields and woodlands to provide its structure and scale but lacks the strong geometric structure of Sandstone Estatelands. Specimen trees and other features provide distinctive visual punctuation to these landscapes. | |
| | Principal Settled Farmlands: These lack a strongly defined nucleated settlement pattern. The field pattern tends to be of a sub-regular nature, suggesting early enclosure of the areas of open field. | |
| | • Riverside Meadows: These landscapes border the main rivers. They are linear landscapes associated with flat, generally well-defined alluvial floodplains, in places framed by steeply rising ground. These are secluded, pastoral landscapes, characterised by meandering, tree-lined rivers. These landscapes are often used for seasonal grazing which has provided a strong sense of visual and ecological unity. | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|---|---|
| Plan/Policy/Programme Countryside Access and Recreation Strategy (March 2004) | This Strategy provides the strategic management framework of issues relating to countryside access and recreation within Worcestershire during the period from 2003-2013. Identifies a range of different recreational activities which are available within Worcestershire including: Managed countryside sites which offer facilities and services to users such as those at country parks, picnic sites, and countryside visitor centres; Long-distance walking routes such as the Worcestershire Way; Miles of Public Rights of Way. Identifies the following benefits of improving countryside access and recreation: Economy: The revenue brought in by visitors is an important source of income. Health and Well-Being: Participation in physical activity can improve health, reducing heart disease, diabetes and obesity. Environment: Contact with the countryside can enhance people's understanding of its role and the need to protect it. The Strategy identifies a number of key issues which are relevant to green infrastructure planning: Providing opportunities to all members of the community to enjoy the countryside. Enabling the enjoyment of the countryside in ways that minimise damage to the landscape, geodiversity, the built environment, biodiversity, archaeological remains and the special environmental qualities of the countryside. The need to actively involve local communities in projects and support 'community generated' projects. How to provide further countryside recreation opportunities and support the regeneration of the rural economy through tourism and visitor spend. Integrating public transportation routes with recreation sites and countryside access gateways. Where and how to make available additional access opportunities. | The Green Infrastructure Study should be informed by the Countryside Access and Recreation Strategy. The Green Infrastructure Study will identify recreational routes and Public Rights of Way within the Wyre Forest District. The Green Infrastructure Study will recognise and promote the wider role which green infrastructure plays in delivering economic, |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|--|--|
| | The promotion of activities such as walking and cycling to contribute to a healthier lifestyle and the feeling of 'well-being' for people. To develop a countryside recreation culture in Worcestershire in which residents and visitors alike benefit from the opportunity to access a range of high quality countryside recreation opportunities. This will be planned and implemented having respect for the wishes of both landowners and the local community and ensuring the utmost protection of environmental interests | |
| The Abberley and Malvern Hills Geopark Recreational Strategy | Geopark designation was created by UNESCO in 1999. | |
| (2009) | The Abberley and Malvern Hills Geopark was accepted into the European network in October 2003. The park has a number of objectives: To conserve and enhance, where appropriate, the geology, geomorphology and landscape of the District. To encourage visitors to the geopark at levels that it can sustain. To encourage the use of the geopark by all ages, and to provide a high quality range of educational information and services about the geopark. To ensure that the geopark and all its attributes will be used responsibly and safely. To contribute where and when possible to the local economy, and encourage involvement of the local community in geopark activities. To ensure that the Geopark plays a major role within the European Geoparks network. To be granted European Geopark status, a region must exhibit a unique geological heritage of international importance and be comprised of sites that are significant for their quality, rarity, aesthetic appeal or educational value. The area in which the park is located illustrates almost 500 million years of earth history, with examples of almost all Geological periods. The Role Of Quarrying | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|---|---|
| Grow the Wyre Project | Grow the Wyre is a Landscape Partnership Scheme made up of twenty two projects. The projects seek to restore the special landscape and celebrate its rich working history. The projects will commence in Autumn 2008. The project is currently valued at £3.8million. The result of a £1.8million HLF grant application will be announced in Summer 2008. Many improvements to the landscape can be expected, including encouraging people to interact more with the wooded landscape and to find out more about the story of the woodlands in the area; the restoration of hedgerows; creating better habitat for butterflies and restoring orchards. Other changes will be subtler, such as the new skills learnt by locals and visitors improving the sense of understanding and ownership of the forest. Much of the Wyre is designated as a Site of Special Scientific Interest (SSSI) and many rare species of flora and fauna can be found there. The landscape consists of rolling hills, woodland, orchards and open water with picturesque valleys. It is an area that is rich in geological interest. A partnership of organisations, led by the Forestry Commission in England, has recently been successful in securing a development grant from the Heritage Lottery Fund, plus additional funding from other sources, for the Grow with Wyre project. This will implement a series of 22 projects within the forest covering habitat management and restoration work, education, awareness and training, rural economy and public access. Within the first of these categories six projects are being developed including the SITA Trust-funded 'Back to Orange' initiative, which will implement habitat management and monitoring work for several butterfly and moth species, a sustainable deer management programme and other projects focused on traditional orchards, hedgerows and ancient trees. | of Green Infrastructure with Wyre Forest District. The project will |
| Wyre Forest Matters Sustainable Community Strategy – Making a Real Difference (2008 - 2014) | The community strategy sets out an overall vision for the District and then sets out visions and priorities under 6 themes. The theme most relevant to green infrastructure is 'A Better Environment for Today and Tomorrow'. The vision for the environment theme is: | The Green Infrastructure Study will help to contribute to the achievement of the overall vision through meeting some of the key priorities set out within the environment theme. The study will play a role in the preservation of the natural environment by identifying green infrastructure sites and safeguarding them. The study will incorporate information on the biodiversity value of green infrastructure and will look at ways |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|---|--|
| | 'The built and natural environment of the Wyre Forest District provides an accessible, attractive, enjoyable, healthy and wildlife-rich place to be, now and in the future. Biodiversity and heritage assets are protected and enhanced. Our varied natural habitats and diverse landscapes are thriving, offering a range of outdoor interests, contributing to local educational opportunities and sustainable tourism. Residents and businesses contribute to minimising climate change, through greater use of renewable energy sources and reducing waste'. The relevant key priorities are: To have cleaner, greener and safer public spaces. To reduce greenhouse gas emissions and adapt to the impacts of climate change. To protect and improve Wyre forest District's natural environment. Health and Well-Being is also relevant to green infrastructure. The vision for this theme includes reference to urban and rural residents having healthier lifestyles with good access to green open spaces and opportunities for physical activity. | in which new linkages between sites can be formed. Green infrastructure has a role to play in adapting to climate change by reducing the 'heat island;' effect and reducing the levels of CO_2 in the atmosphere as well as helping to alleviate flooding. |
| Core Strategy Revised Issues and Options Paper (January 2008) | Two of the Spatial Objectives are particularly relevant to green infrastructure: Safeguard and enhance the District's unique landscape character, Green Belt and Historic Environment; and Protect and enhance the District's rich and varied biodiversity, geodiversity and water resources, including within the three town centres. Green Infrastructure also plays an important role in achieving some key elements of the Core Strategy Draft Objectives, including: providing high quality residential environments; promoting sustainable tourism; adapting to and mitigating the effects of climate change; improving air quality; providing sustainable transport choices; and fostering community pride and healthy lifestyles. Key Issues: Safeguarding and enhancing the District's unique historic character. Addressing increasing traffic congestion within the District's three towns and reducing the need to travel. | The Green Infrastructure Study will provide a valuable part of the evidence base to underpin the objectives and policies within the Core Strategy. The Core Strategy, along with other LDF documents will act as the main delivery vehicle for any proposals set out within the Green Infrastructure Study. Green Infrastructure should be provided in order to create high quality residential environments. Accessibility is a key issue. Green Infrastructure, especially the Forest of Wyre, is considered to be an important part of the District's historic character which the Core Strategy seeks to safeguard. Providing appropriate and attractive green linkages can reduce the need to travel by car and therefore reduce traffic congestion. Green Infrastructure can also contribute to flood risk management by safeguarding areas prone to flooding for use as greenspace. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|---|--|
| | The need to balance regeneration with flood risk and mitigation for climate change. Safeguarding the District's diverse landscape character and the greenbelt. Maximising opportunities to safeguard and improve biodiversity within new development. Providing the environment to offer residents the choice of healthier lifestyles. | Green infrastructure can help to mitigate against climate change by absorbing CO ₂ from the atmosphere and providing carbon sinks. The active management of woodlands can provide renewable energy (biomass). The Grow the Wyre project includes a renewable energy scheme within the Forest of Wyre. The green infrastructure study will help to safeguard the District's diverse landscape character The Green Infrastructure Study will incorporate findings from the Worcestershire Habitat Inventory and the Worcestershire Biodiversity Action Plan, identifying sites which have a high biodiversity value and should be protected from development. A strategic network of green infrastructure will offer people the opportunity to lead healthier lifestyles including providing opportunities for walking and cycling as a means of transport and providing opportunities for active recreation. |
| Wyre Forest Adopted Local Plan 2004-2011 | The overall vision of the Local Plan includes reference to "the conservation of the diverse character of the area's built and natural environments". Policy NR.1 – States that greenfield development will only be permitted where it can be demonstrated that there are no suitable alternative brownfield sites available. Policy NR.5 – Sets out policy on developing in flood risk areas. Policy LA.1 – Sets out the requirement for development to safeguard, restore or enhance the character of the surrounding landscape. Policy LA.2 – States that development which would have a significant adverse effect on the quality or character of a Landscape Protection Area will not be permitted. LA.3 – States that particular attention will be paid to the conservation of the natural beauty and environment of the Severn Valley. | The Green Infrastructure Study will help to achieve this objective. The Green Infrastructure Study will help to safeguard greenfield sites from development. The Green Infrastructure Study will help to safeguard natural floodplains from development. The study will help to safeguard landscape character. The study will help to safeguard landscape character. The study will identify the Severn Valley as a key landscape feature and seek to improve pedestrian/cycling linkages. The green Infrastructure study should consider how these stream and pool systems can form part of a wider network of green infrastructure. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|-----------------------|---|---|
| | LA.4 - States that particular attention will be paid to the conservation of the natural beauty and environment of the Stour Valley. | The study should help to safeguard the greenbelt and identify ways of improving access from the towns into the surrounding greenbelt. |
| | LA.5 – States that special attention will be paid to the protection of the stream and pool systems at Churchill, Blakedown and Hurcott, together with the Hoo Brook, Barnett Brook and the Hockley Brook / Elmley Brook system. | |
| | | The study will help to safeguard the historic landscape. |
| | GB.1 – Sets out that development will only be permitted within the greenbelt where there are very special circumstances which are set out within the policy. | The study will identify sites important to nature conservation. |
| | LB.4 – States that parks and gardens associated with statutorily and non-statutorily listed buildings should be retained substantially | The study will identify existing wildlife corridors and stepping stones and identify opportunities to create further green links. |
| | undeveloped, and their special features conserved. HL.1 – State that historic landscapes should be conserved and | The study will include information from the Worcestershire Habitat Inventory and will look at the biodiversity value of sites. The study should identify ways in which developer contributions can be |
| | development that would have a direct or indirect adverse effect on a feature or area of particular significance to the historic landscape, its | used to achieve this policy. |
| | setting or view to it, will not be permitted. | The study should identify areas where public access could be increased/encouraged. |
| | NC.1/NC.2 – Protects areas of national importance to nature conservation from inappropriate development. | The study will identify opportunities for expanding the walking |
| | NC.3 – Safeguards wildlife corridors and stepping stones from inappropriate development. | and cycling network throughout the District using off-road greenways. |
| | NC.5 – Sets out the requirement for development to retain, enhance, manage and reintroduce the District's indigenous biodiversity. | The study will incorporate sites identified through the PPG17 audit and will help to safeguard them. The study should also identify opportunities to enhance pedestrian linkages to sites. |
| | NC.8 – Promotes increased public access to nature conservation sites. | This site will be identified within the study. |
| | TR.6 – Cycling Infrastructure | Public Rights of Way will be identified within the study; this will help to safeguard them. |
| | TR.7 – Provision for Pedestrians | |
| | LR.1 – Protects parks, public open spaces and other open spaces from, development. | |
| | LR.6 – Safeguards land for the development of the Stour Valley Country Park. | |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|--|--|---|
| | LR.8 – Safeguards Public Rights of Way. | |
| Wyre Forest District Open Space, Sport and Recreation Audit (2008) | The study makes a number of recommendations which are relevant to the Green Infrastructure Study: Maximise the role that parks can play in improving health across the District. Increase access to existing parks through green linkages, especially Jubilee Gardens in Bewdley, Memorial Park in Stourport-on-Severn, Brinton Park in Kidderminster and improved green linkages between spaces in Kidderminster East. Prioritise the development of new parks at Spennells, Areley Kings and in the South of Kidderminster West analysis area. Opportunities for new provision should be seized across the District. Protect Natural and semi-natural open spaces from development and explore the possibility of providing new spaces. Improve access to existing NSN sites through a series of green linkages between open spaces Develop green linkages, especially to Memorial Park from areas of deficiency and in Franche and Habberley and between rural settlements and the surrounding countryside. Stakeholders should recognise and promote the nature conservation value of closed cemeteries and churchyards and consider working towards developing more awareness of ecological management of cemeteries and churchyards. The rural nature of Wyre Forest lends itself to the provision of linear corridors which link open spaces (and settlements) together. The District contains a wide variety of canals and towpaths that form the basis of the green infrastructure. The Council should work in tandem with Worcestershire County Council, the PCT and other key partners to help maximise the use of green corridors and Public Rights of Way in the District. Building on the popularity of green corridors, the Council should look to enhance and develop pathways along the rivers and canals. Linking existing green corridors with open spaces in the District should be a key priority for the Council. Investigate the feasibility of a green infrastructure st | focussing particularly on green linkages within and between the towns and from the towns to the surrounding rural areas. Green linkages will be strongly focussed around existing features such as rivers and canals. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|--|---|
| Strategic Flood Risk Assessment Level 1 | The principal output from the study is a set of maps, which categorises the District into Flood Zones according to PPS25. It depicts the presence of flood defences where they exist. These maps have been produced adopting a robust assessment to give the Council sufficient information so as to have an overall view of flood risk areas for strategic planning purposes. The Level 1 SFRA evaluates the present-day (year 2007) situation and the situation after 80 years time (year 2087) with increased peak flood flows to allow for projected climate change. | The Green Infrastructure Study should identify natural floodplains using information from the SFRA and safeguard them for use as green space. |
| Strategic Housing Land Availability Assessment | The study looks at all land which is potentially available for residential development and assesses sites against a number of sustainability criteria. This will inform the Site Allocations Development Plan Document. Currently, it is envisaged that growth will be accommodated on brownfield sites principally within the urban areas of Kidderminster and Stourport-on-Severn. | The Green Infrastructure Study should consider the biodiversity value of brownfield sites and this should inform the SHLAA and help to determine the most appropriate and sustainable sites for future residential development within the District. |
| Bewdley Conservation Area Appraisal (2002) | The Conservation Area Appraisal identifies a number of open spaces which are important within Bewdley. | The Green Infrastructure Study should consider the Conservation Area Appraisal when identifying potential new linkages and other changes and ensure that they fit the character of the conservation area. |
| Gilgal Conservation Area Appraisal (2001) | Domestic gardens, the canal towpath and the River Stour have all been identified as having important trees within this area. | The Green Infrastructure Study should identify private gardens as they important in maintaining the openness of areas. |
| Stourport-on-Severn No.2 Conservation Area Appraisal (2001) | The Conservation Area Appraisal identifies a number of open spaces which are important within Stourport-on-Severn. The canal basins are identified as being of particular importance to the historic character of the town. | The Green Infrastructure Study should consider the Conservation Area Appraisal when identifying potential new linkages and other changes and ensure that they fit the character of the conservation area. |
| Vicar Street and Exchange Street Conservation Area Appraisal (2003) | The River Stour and its embankment are the only greenspace within the area. | The Green Infrastructure Study should pay particular attention to the River Stour as a key waterway within the District. Opportunities to restore the natural floodplain and enhance the provision of green space within the town centre should be considered. |
| Stourport-on-Severn No.1 Conservation Area Appraisal (2001) | The Conservation Area Appraisal identifies a number of open spaces which are important within Stourport-on-Severn. Villeneuve-Le-Roi Garden and the War Memorial Gardens are considered to be of importance. | The Green Infrastructure Study should consider the Conservation Area Appraisal when identifying potential new linkages and other changes and ensure that they fit the character of the conservation area. The study should also identify opportunities to enhance the walking and suding potential of the constant without boxing. |
| | | walking and cycling potential of the canal towpath without having a detrimental impact upon the conservation area. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|---|--|
| Chaddesley Corbett Conservation Area Appraisal (2005) | There are a number of trees within the conservation area, which are important to its character. None are protected by TPOs but are afforded protection through the designation of the conservation area. | The Green Infrastructure Study will consider the importance of street trees within the District. Any proposals for further planting should not have a detrimental impact on the conservation area. |
| Churchill Conservation Area Appraisal (April 2008) | The conservation area and its surroundings include fields, hedges and trees. The Area also contains the Churchill and Blakedown Valleys Special Wildlife Sites which covers the brook and lake. Trees and high hedges are an important component of the character and appearance of the Area. | The Green Infrastructure Study should pay particular attention to safeguarding sites which are of importance to the character of conservation areas. |
| Harvington Conservation Area Appraisal (2008) | Trees are identified as a key component within the area. Open space associated with Harvington hall are also considered to be important. Hedgerows are of importance within the area. | Hedgerows should be recognised within the Green Infrastructure Study as they are part of the character of rural areas and play a vital role for biodiversity. |
| Upper Arley Conservation Area Appraisal (2007) | The Conservation Area is surrounded by wooded landscape and pasture which adds to the character. Grass is important within the area. The main greenspaces within the area are open fields between the River and the railway station, between the River and Arley House, and on either sides of the lanes leading into the settlement, together with the park and garden associated with Arley House. Trees are also important within the area, notably at Arley Arboretum, the only Registered park and Garden within the District. The garden at Arley Station is also notable. The River Severn has been designated a SSSI. | The Green Infrastructure Study should pay particular attention to safeguarding sites which are of importance to the character of conservation areas. The River Severn will be an important consideration within the Green Infrastructure Study, particularly in terms of enhancing its potential as a green corridor. |
| Wolverley Conservation Area Appraisal (2007) | Trees and hedges are vitally important to the character of the area. The garden attached to Wolverley House is significant. The following sites are within, adjacent or in close proximity to the Area and have been designated as Special Wildlife Sites: Gloucester Coppice, Wolverley Marsh, the River Stour and the Staffordshire and Worcestershire Canal. Bishop's Field a small (1.5 hectare) marsh in the flood plain of the River Stour at Wolverley, is looked after by Worcestershire Wildlife Trust and | The Green Infrastructure Study should pay particular attention to safeguarding sites which are of importance to the character of conservation areas. SWSs will be identified as part of the study. |

| Plan/Policy/Programme | Green Infrastructure Objectives | Relevance to Wyre Forest District Green Infrastructure Study |
|---|--|---|
| The Staffordshire and Worcestershire Canal Conservation Area Appraisal (2007) | Trees are identified as a key component within the Conservation Area. The combination of deciduous and coniferous trees provides a variety of changing colours throughout the year. Identifies the canal tow-path as being an important pedestrian and cycle link. | The study will look to promote pedestrian and cycle linkages along the Staffordshire and Worcestershire Canal, however, this should not have a detrimental impact on the Conservation Area. |
| Wyre Forest Cycle Strategy (2002) | The overall aim of the Strategy is to promote cycling as a sustainable form of transport and to provide a comprehensive framework of measures by which this can be achieved. There are two relevant objectives: To create safe cycle routes for local people to utilise. To implement the Sustrans Route 45 network within the District in partnership with Sustrans and WCC. | The Green Infrastructure study should identify green linkages which are appropriate for cycling. This will help to achieve the overall aim and the two highlighted objectives as Route 45 utilises the canal towpath. |